

#### **AGENDA**

Greater Asheville Regional Airport Authority Regular Meeting Friday, February 17, 2017, 8:30 a.m. Conference Room at Administrative Offices

NOTICE TO THE PUBLIC: The Airport Authority welcomes comments from the public on any agenda item. Comments are received prior to the Board's discussion of the agenda item. Comments are limited to five minutes. If you wish to comment on an agenda item, please deliver a request card (available in the meeting room) to the Clerk to the Board prior to the agenda item being called by the Chair.

- I. CALL TO ORDER
- II. SERVICE AWARD PRESENTATIONS:
  - A. Jeremy Arthur 15 Years
  - B. Roy Whitaker 10 Years
- III. PRESENTATIONS: None
- IV. FINANCIAL REPORT (document)
- V. CONSENT ITEMS:
  - A. Approval of the Greater Asheville Regional Airport Authority December 9, 2016 Regular Meeting Minutes (document)
  - B. Approval of the Greater Asheville Regional Airport Authority December 9, 2016 Closed Session Minutes
  - C. Approval of Amendment to the FY16/17 Budget (document)
  - D. Approval of Audit Contract with Gould Killian CPA Group, P.A. for Fiscal Year Ending June 30, 2017 (document)
  - E. Approve Charges for Credit Card Fees (document)



#### VI. OLD BUSINESS:

A. Public Hearing and Final Adoption of the Ordinance Establishing Rules and Regulations of the Asheville Regional Airport (document)

#### VII. NEW BUSINESS:

- A. Approval to Unseal Closed Session Minutes (document)
- B. Approval of Property Purchase (document)
- C. Approval of Resolution Authorizing the Submission of the Draft Airport Assignment & Assumption Agreement to the Federal Aviation Administration for Purposes of Coordinated Review (document)
- D. Approve Contract for Construction of Airfield Re-development Project Phase IV (document)
- E. Approve Scope of Work and Fee for Expansion of Terminal Aircraft Parking Apron (document)
- F. Approve Installation of Glass Panels in the Federal Aviation Administration Control Tower (document)

#### VIII. DIRECTOR'S REPORT:

- A. Contingency Transfers
- B. North Carolina Legislative Advocacy
- C. Update on Short Term Parking Rate
- D. Preliminary Fiscal Year 2017/2018 Budget
- E. Airfield Re-development Change Order No. 2
- F. Garage Change Order No. 3
- G. Time Lapse of Garage Project

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#### IX. INFORMATION SECTION:

(Staff presentations will not be made on these items. Staff will be available to address questions from the Board.)

- A. December 2016 Traffic Report (document)
- B. December 2016 Monthly Financial Report (document)
- C. February 2017 Development/Project Status Report (document)
- D. Airport Facilities Review for 4<sup>th</sup> Quarter (**document**)
- E. Potential Board Items for the Next Regular Meeting:
  - FY2017/2018 Budget Presentation
- X. PUBLIC AND TENANTS' COMMENTS
- XI. CALL FOR NEXT MEETING

#### XII. CLOSED SESSION:

Pursuant to Subsections 143-318.11 (a) (3) and (4) of the General Statutes of North Carolina to Consult with Legal Counsel in Order to Preserve the Attorney-Client Privilege, to Discuss Matters Relating to the Location and/or Expansion of Industries or Other Businesses in the Area Served by the Authority, Including Agreement on a Tentative List of Economic Development Incentives that may be Offered by the Authority in Negotiations.

#### XIII. AUTHORITY MEMBER REPORTS:

- A. 2016 Board Review (document)
- B. Key Strategic Elements

#### XIV. ADJOURNMENT

This agenda of the Greater Asheville Regional Airport Authority is provided as a matter of convenience to the public. It is not the official agenda. Although every effort is made to provide complete and accurate information in this agenda, the Greater Asheville Regional Airport Authority does not warrant or guarantee its accuracy or completeness for any purpose. The agenda is subject to change before and/or during the Board meeting.

# Asheville Regional Airport Executive Summary

-		tive Sum cember-				
		ORT ACTIV				
			Variance to		Calendar	Variance t
Descender Englanements		/lonth	Prior Year	<u>Y</u>	ear to Date	Prior Yea
Passenger Enplanements		33,076	19.0%		414,606	5.6%
Aircraft Operations			, · ·			
Commercial		877	(27.9%)		16,374	2.3%
Scheduled Flights Flight Cancellations		527 1	1.3%			
Seats		40,574	5.6%		502,980	(0.1%)
Load Factor		81.5%	12.7%		82.4%	5.6%
General Aviation		3,011	0.5%		43,389	4.5%
Military		240	(30.2%)		4,214	(25.4%)
	FINAN	CIAL RES	ULTS			
			Variance		Fiscal	Variance
	N	lonth	to Budget	Y	ear to Date	to Budge
Operating Revenues	\$	457,472	(38.0%)	\$	5,256,544	7.3%
Operating Expenses		734,910	(11.3%)		4,046,994	(15.2%)
Net Operating Revenues before Depreciation	\$	(277,438)	(207.5%)	\$	1,209,550	851.4%
Net Non-Operating Revenues	\$	240,512	83.9%	\$	1,617,475	0.8%
	Ψ	240,312	03.770	Ψ	1,017,475	0.070
<u>Grants:</u> FAA AIP Grants	\$	488,071		\$	7,332,120	
NC Dept of Transportation Grants	Ф	400,071		Ф	7,332,120	
Total	\$	488,071		\$	7,332,120	
		CASH				
Restricted		0/10/1		\$	27,229,281	
Designated for O&M Reserve				Ψ	4,290,100	
Designated for Emergency Repair					650,000	
Unrestricted, Undesignated					13,011,951	
Total				\$	45,181,332	
RI	ECEIV	ABLES PAS	ST DUE			
		Total	1-30 Days	3	1-60 Days	Over 60 Da
Advertising Customers		10,438	4,67		2,038	3,
Allegiant		770	8	31	-	
American		3,290	-		-	3,
Avis		257	25		-	_
Delta Airlines		26,168	22,88	34	650	2,
Enterprise		422	-		422	-
FAA/TSA		25,449	9,60		9,920 11,217	5,
FAA Signatura		46,189	12,86	70	11,217	22,
Signature Skywest		2,070 294	,	70	-	2,
Vanguard		1,072	-		1,072	
Worldwide		620	-	13	43	
Miscellaneous Total	\$	6,068	\$ 54,14		1,733 27,095	\$ 41,
	φ	123,107	φ 34,12	<u> </u>	21,090	ψ 41,
% of Total Receivables		<u>27.59%</u>				
Note: Excludes balances paid subsequent to month-end						
RE	VENUE	BONDS F				
			Original Amount		rrent Balance	
Parking Garage Revenue Bond, Series 2016A			\$ 15,750,00		15,750,000	
Parking Garage Taxable Revenue Bond, Series 2016B			5,250,00		5,250,000	
			\$ 21,000,00	00 \$	21,000,000	
CA	APITAL	EXPEND	ITURES			
Annual Budget				\$	64,921,337	
Year-to-Date Spending				\$	13,152,866	

# REGULAR MEETING GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY December 9, 2016

The Greater Asheville Regional Airport Authority ("Authority") met on Friday, December 9, 2016 at 8:30 a.m. in the Conference Room at the Authority's Administrative Offices, Asheville Regional Airport ("Airport"), 61 Terminal Drive, Suite 1, Asheville, NC 28732.

**MEMBERS PRESENT**: Robert C. Roberts, Chair; Matthew C. Burril, Vice-Chair; K. Ray Bailey; William L. Moyer; Stephanie Pace Brown; and David Gantt

**MEMBERS ABSENT**: Andrew T. Tate

STAFF AND LEGAL COUNSEL PRESENT: Cindy Rice, Authority Legal Counsel; Lew Bleiweis, Executive Director; Michael Reisman, Deputy Executive Director of Development and Operations; Kevan Smith, Chief of Public Safety; Suzie Baker, Director of Administration; Tina Kinsey, Director of Marketing and Public Relations; Janet Burnette, Director of Finance and Accounting; Shane Stockman, IT Director; John Coon, Director of Operations; Sam Sales, Public Safety Captain; and Ellen Heywood, Clerk to the Board

<u>ALSO PRESENT</u>: James Seadler, American Airlines; James Moose, Avcon; Amira Trebincevic, Delta Airlines; Cecil Bothwell, Asheville City Council; Ken Moody, Delta Airport Consultants; Mike Darcangelo, Avcon; Tonya Marshall, Gould Killian CPA Group; Eric Rysdon, RS&H

**CALL TO ORDER**: The Chair called the meeting to order at 8:30 a.m.

**FINANCIAL REPORT:** The Director reported on the airport activity for October which included enplanements, aircraft operations, and general aviation activity. Mrs. Burnette reported on the financial activity for the month of October.

**CONSENT ITEMS:** The Director advised the Board that staff had hoped to have the grant agreement from Duke Energy for the electric vehicle charging stations in time for the Board meeting. However, staff has learned that Duke Energy will not have the agreement ready until later in the month or early next month. The Director will need to execute the agreement before the next Board meeting and is seeking approval of the agreement without the actual document.

A. <u>Approval of the Greater Asheville Regional Airport Authority October 14, 2016 Regular Meeting Minutes</u>:

B.	<u> Approve Funding Grant Agreement with Duke Energy for Electric Vehicle</u>
Charc	ng Stations:

# C. <u>Approval of First Amendment to American Tower Corporation Space/Use Permit:</u>

## D. Approval of Amendment to the FY16/17 Budget for Bond Payment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2017:

Section 1. To amend the app	ropriations as follows:	
EXPENDITURES:		
Debt Service Totals	<u>Decrease</u>	<u>Increase</u> \$155,144 \$155,144
This will result in a net increase of \$7 revised as follows:	155,144 in the appropria	ations. Revenues will be
REVENUES:		
Transfer from GARAA Cash Totals	<u>Decrease</u>	<u>Increase</u> \$155,144 \$155,144
Section 2. Copies of this budg the Greater Asheville Regional Airpor Finance Officer for their direction. Adopted this 9th day of Decer	t Authority, and to the I	
Robert C. Roberts, Chair  Attested by:		
Ellen Heywood, Clerk to the B	 oard	

## E. Approval of Amendment to the FY16/17 Budget for Capital Carry-Over:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2017:

Section 1. To amend the appropriations as follows:

### **EXPENDITURES**:

<u>LAI LINDITURES</u> .		
	<u>Decrease</u>	<u>Increase</u>
Carry-over Capital Expenditures		\$1,144,839
Totals		\$1,144,839
This will result in a net increase of \$ revised as follows:	1,144,839 in the appropriations	s. Revenues will be
REVENUES:		
	<u>Decrease</u>	<u>Increase</u>
Federal Funds – AIP		\$575,990
Transfer from GARAA Cash		\$568,849
Totals		\$1,144,839
Section 2. Copies of this budgethe Greater Asheville Regional Airport Finance Officer for their direction.  Adopted this 9th day of December 1.	, c	
raspisa tile 7th day of 2000.		
Robert C. Roberts, Chair		
Attested by:		

Mr. Moyer moved to approve Consent Items A through E. Mr. Bailey seconded the motion and it carried unanimously.

Ellen Heywood, Clerk to the Board

#### **OLD BUSINESS:**

A. <u>Public Hearing and Final Adoption of the Authority's Schedule of Airline</u>

<u>Rates, Fees and Charges for the Asheville Regional Airport</u>: The Chair opened the floor to public comments at 8:42 a.m.

James Seadler with American Airlines appeared before the Board and stated that at the Board Meeting in October, the Board tasked the four airlines to meet to further negotiate the rates and methods for the airfield. Mr. Seadler informed the Board that the airlines have met and also planned for three other meetings. The airlines have requested the return of the non-signatory fees, but felt those were being withheld because the previous negotiations had not been in good faith and that more negotiations needed to take place. Mr. Seadler stated that the Board had asked the airlines to hold that as a carrot or incentive for the airlines to come back to the table. Mr. Seadler advised the board that the airlines are very interested in pursuing future negotiations and felt that the airlines have met the commitment by appearing at the meetings and proposing changes outside what was originally discussed. Mr. Seadler pointed out that without the return of the non-signatory fees there is still an incentive for the legacy carriers to meet and come to some agreement as there is a proposal in front of the airline that is not believed to be fair and reasonable. Mr. Seadler did not feel that withholding the non-signatory fees should be a carrot in front of the airlines. What is happening in Asheville is unprecedented and this is not in the spirit of negotiation. Mr. Seadler again requested the airlines receive a refund of the non-signatory fees dating back to July of 2015.

Amira Trebincevic requested the Board's thoughtful consideration of the return of the non-signatory fees to the airlines. Ms. Trebincevic felt that there is incentive to further negotiate and believes the negotiations are headed in the right direction. Ms. Trebincevic commented that it would be a good measure and positive step toward repairing relationships and adding that momentum to the good discussions.

There being no further public comments, the Chair closed the floor at 8:44 a.m.

The Chair stated that the topic at hand was the adoption of the ordinance as contained in the agenda package.

Mr. Burril asked for the current situation and questioned if the fees were still being paid. The Director stated that the meeting held with the airlines went very well, but there is still progress to be made and the airlines have a lot of work ahead of them. There is still the issue of the legacy carriers wanting one thing and the low-cost carrier wanting something different. The Director stated that Mr. Seadler requested that the 25% premium be returned. The Director informed the Board that the 25% premium was not put out as a carrot to get the airlines to negotiate. The premiums were set aside until the Authority sees how the negotiations go. The Director's recommendation would be to refund the premium back to October when the ordinance was first brought to the Board

for approval. At a minimum, staff would refund November's premium that was paid if not going back to October. Staff would only go back to October unless the Board takes action at a future date to rebate all of the premium.

Mr. Gantt questioned how much the refund of the non-signatory fees back to July of 2015 would amount to. The Director responded that it amounted to approximately half a million dollars.

Mr. Moyer felt that the return of the non-signatory fees was a subject for a future Board meeting.

Mr. Bailey moved to adopt Ordinance No. 201601 to Implement a Schedule of Airline Rates, Fees and Charges for the Asheville Regional Airport effective December 9, 2016. Mr. Moyer seconded the motion and it carried unanimously.

The Chair stated that the non-signatory fees would be refunded back to October of 2016 and the refund for the other months would be addressed at a future meeting. Mr. Burril commented that he had issue with the carrot comment. Mr. Burril felt the negotiations on the airlines' part were valid and credible and the Board would like to see them continue, but wanted the airlines to know that the Authority Board was in good faith also.

#### **NEW BUSINESS:**

A. <u>Presentation of the Annual Audited Financial Report for Fiscal Year 2015/2016</u>: Janet Burnette advised the Board that the annual audit for fiscal year ended June 30, 2016 was performed by the auditing firm Gould Killian CPA Group, P.A., and the findings were submitted to the Board in the agenda package for review and acceptance. The audited financial statements have been submitted to the Local Government Commission. Mrs. Burnette introduced Tonya Marshall from Gould Killian.

Ms. Marshall informed the Board that Gould Killian issued a clean opinion and that there were no material weaknesses in internal control nor was there any material noncompliance with laws and regulations. Ms. Marshall briefly reviewed the key statistics that included cash investments, operating loss, depreciation, debt service and non-operating revenues. A summary of key comparisons was highlighted as well as a review of capital projects.

Mr. Moyer inquired about the change in net position going up \$3 million. Ms. Marshall stated that the total change in net position is the operating income and loss as well as the non-operating, capital contributions which are mostly from federal and state grants received for the construction project.

Ms. Brown moved to accept the 2015/2016 Audit Report as presented. Mr. Gantt seconded the motion and it carried unanimously.

**B.** Adoption of the Asheville Regional Airport Five-Year Capital Improvement Plan (CIP): Mike Reisman reported that the Federal Aviation Administration (FAA) requires all airports to submit a five-year CIP to be eligible for federal funding and the CIP requires approval by the Authority Board. Mr. Reisman stated that the CIP provides for funding of projects and equipment that go beyond the current airfield re-development and garage projects and the items are consistent with improvements identified in the Master Plan. Mr. Reisman provided a high-level summary of the CIP that included extension of the terminal apron, security system improvements, Wright Brothers Way extension and roadway improvements. Mr. Reisman stated that overall the five-year CIP is a \$78.9 million program that includes information on how funding is expected to be provided for the projects.

Mr. Moyer suggested that staff start thinking about a terminal improvement plan. The Director stated that the Master Plan is the guideline staff uses to make these determinations and it is completed every 10 years. The FAA approves the projection numbers used in the Master Plan. The Director further stated that the Master Plan shows short-term, mid-term, and long-term planning for development over 20 years and projects a 2% growth in enplanements. The existing terminal is suitable for the 10 year planning process that the Master Plan shows going out 20 years. Staff could look at the Master Plan to provide some projections of what the Authority will need to do with the terminal if staff feels it is going to fall outside of the 10 year Master Plan process. Staff would then report back to the Board with some recommendations.

Mr. Burril inquired if there was a timeline for a new FAA tower. Mr. Reisman stated that there were no plans on the horizon for the FAA to do anything about the tower. Mr. Burril thought that it would be an opportune time for staff to coordinate with the FAA to build a new terminal or develop another piece of the terminal around a new control tower at the appropriate time.

Mr. Bailey moved to adopt the Asheville Regional Airport Five-Year Capital Improvement Plan. Mr. Gantt seconded the motion and it carried unanimously.

C. Approval of Change Order Nos. 1 and 2 to Agreement with GLF Construction Corporation for Airfield Redevelopment Project — Bid Package 3: Mike Reisman reminded the Board that a contract with GLF Construction Corporation for Bid Package 3 was approved on March 11, 2016. Mr. Reisman reviewed the work that was to be included with Change Order No. 1 and stated that the change order amounts to \$74,717.86 and increases the contract with GLF to \$14,082,226.76. Mr. Reisman summarized the items for Change Order No. 2 which reduces the contract amount by \$3,684.01 for a total contact amount of \$14,078,542.75. The overall additional amount from the change order is within the allowance set by the Board when the contract was awarded. Mr. Reisman stated that the bulk of Change Order No 1. was due to some changes on the south end with the fencing. There were dual fence lines on the south

end and a decision was made to eliminate approximately 1,000 feet of the interior fence which required an upgrade to a portion of the outer fence that was being replaced. Staff also decided to upgrade the rusted fence on the south end that runs along Ferncliff Park Drive.

Mr. Moyer moved to approve Change Order Nos. 1 and 2 to the Agreement with GLF Construction Corporation and to authorize the Executive Director to sign the necessary documents. Ms. Brown seconded the motion and it carried unanimously.

**D.** Approval of Ordinance Establishing Rules and Regulations of the Asheville Regional Airport: Mike Reisman advised the Board that the Authority, through Session Law 2012-121, has the ability to make all reasonable rules, regulations and policies necessary for the proper operation of the airport. Staff has previously discussed with the Board the need to adopt by ordinance the airport's rules and regulations, and to establish penalties for their violation, in order to properly and sufficiently manage and govern the airport in accordance with applicable law. Mr. Reisman stated that the proposed ordinance contains rules and regulations similar to those previously approved by the Board and are consistent with those used by most public airports. Without approval of the ordinance, it would be difficult for staff to enforce the rules and regulations of the airport.

Mr. Gantt inquired if the district attorney was onboard with helping the Authority enforce these rules and regulations. Chief Smith responded that District Attorney Williams was very supportive of the airport's public safety department and of the actions the organization was taking.

Mr. Moyer moved to approve the proposed Ordinance No. 201701 Rules and Regulations of the Asheville Regional Airport, to schedule a public hearing and accept public comment on the proposed Rules and Regulations of the Asheville Regional Airport and following the minimum ten day period for public comment and the public hearing, adopt the Ordinance establishing the Rules and Regulations for the Asheville Regional Airport. Mr. Burril seconded the motion and it carried unanimously.

**<u>DIRECTOR'S REPORT</u>**: The Director advised the Board that he had a few additional items to include that were not on the agenda.

- **A.** <u>Contingency Transfer</u>: The Director reported that \$23,239.00 was transferred from contingency to equipment and small capital outlay for terminal seating. Due to the cost of the shipping, staff decided to purchase all the chairs that were needed rather than to purchase a portion of the chairs that were included in the current fiscal year budget and the remainder under the following year's budget.
- **B.** Parking for Commuter Pilots: The Director advised the Board that 16 individuals that have no type of tenancy relationship with the airport have been receiving

extremely reduced commuter parking rates over the years. These individuals are corporate pilots and crew members from cargo and charter companies. Due to the shortage of available parking, effective January 1<sup>st</sup> this benefit will no longer be available to these individuals and letters to this effect will be sent out. Once the garage is open, staff will look at other options to see if something can be done to accommodate the commuter parkers. Ms. Brown asked for the capacity of the parking lot that was being used. Mr. Reisman responded that there are 65 parking spaces in that lot and it is crammed full and can't always accommodate employees. The Director stated that an internal directive regarding parking will be established for future reference.

- **C.** <u>Wings for Autism</u>: In conjunction with ARC of Buncombe County, a second event is planned for Saturday, February 11<sup>th</sup> from 9 to 11:00 a.m. This event was well received last year and staff is anticipating a similar response.
- **D.** Change Order for Garage Project: The Director reported change order no. 2 in the amount of \$30,967.00 to divert passengers parking in the north end to Loop Road to provide access to the toll booth. A conduit for AT&T lines was also added as well as a general transfer switch for power switch over in the event of a future power failure. This change order was approved as it was within the Director's spending authority and within the budget for the garage project.
- **E.** <u>Conservation Easement:</u> The Director reported that staff has been working with CMLC for several years to establish an easement along the French Broad River. The Authority received \$42,712 for the 11.99 acres in the easement and the funds were applied to the airfield re-development project.
- **F.** <u>United Way</u>: The Authority's annual United Way campaign was held recently and employees pledged \$9,670 which well surpassed the Authority's goal of \$8,001.
- G. <u>Taxi Cabs</u>: The Director reported that issues with passengers waiting for taxi cabs at night have resolved itself. The number of taxi cabs have decreased due to Uber and now Lyft. Staff will continue to monitor and will advise the Board if any problems arise. Mr. Moyer requested an approximate number of passengers that were not able to get taxi cabs late at night. The Director stated that this information would be sent to the Board via e-mail.

#### **INFORMATION SECTION**: No comments

<u>AUTHORITY MEMBER REPORTS</u>: The Chair stated that he would like to have some dedicated time at the February Board meeting for planning and discussion of the administrative policies.

Mr. Gantt mentioned that he would like to attend the ACI Commissioners Conference in April. The Director highly encouraged all Board Members to attend.

#### **PUBLIC AND TENANTS COMMENTS: None**

<u>CALL FOR NEXT MEETING</u>: The Authority Board on January 13, 2017 is not anticipated, therefore, the next regular meeting of the Board will be on February 17, 2017.

CLOSED SESSION: At 9:41 a.m. Mr. Bailey moved to go into Closed Session pursuant to Subsections 143-318.11 (a) (3) and (4) of the General Statutes of North Carolina to Consult with Legal Counsel Regarding, Among Other Things, that Lawsuit Entitled Tricor Construction, Inc. vs. RS&H Architects-Engineers-Planners, Inc., Greater Asheville Regional Airport Authority, Thalle Construction Co., Inc. and Liberty Mutual Insurance Company; and in Order to Preserve the Attorney-Client Privilege; and to Discuss Matters Relating to the Location and/or Expansion of Industries or Other Businesses in the Area Served by the Authority, Including Agreement on a Tentative List of Economic Development Incentives that may be Offered by the Authority in Negotiations. Mr. Moyer seconded the motion and it carried unanimously.

The Chair indicated they would break until 9:50 a.m. at which time the Board would resume in closed session. Following closed session, the Board will resume in open session for any additional business that may need discussion.

Open Session resumed at 10:46 a.m.

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY DECEMBER 9, 2016 CLOSED SESSION MINUTES: Mr. Bailey moved to seal the minutes for the Closed Session just completed and to withhold such Closed Session minutes from public inspection so long as public inspection would frustrate the purpose or purposes thereof. Mr. Moyer seconded the motion and it carried unanimously.

**DECEMBER 27**<sup>TH</sup> **HOLIDAY**: The Chair remarked that the Director would like to align the Authority's holiday schedule with the holiday calendars of Buncombe County and the State this year. The Director stated that as a reward to employees for a good year, he would like to provide an extra holiday on December 27<sup>th</sup>. This would be a one-time event. For those that have to work that day, the direct cost for the holiday pay would be approximately \$1,000.

Mr. Burril inquired if employees would have to work in the event of an emergency such as snow. The Director responded that employees needed for snow removal would have to work.

Mr. Moyer stated that he was opposed to this and felt the Board needed to follow set policy or it could cause problems.

Mr. Burril moved to approve December 27, 2016 as a holiday for employees. Ms. Brown seconded the motion and it carried by a 5 to 1 vote with Mr. Moyer voting against the motion.

<u>ADJOURNMENT</u>: Mr. Bailey moved to adjourn the meeting at 10:59 a.m. Mr. Burril seconded the motion and it carried unanimously.

Respectfully submitted,

Ellen Heywood Clerk to the Board

Approved:

Robert C. Roberts Chair



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Janet Burnette, Director of Finance and Accounting

DATE: February 17, 2017

#### ITEM DESCRIPTION - Consent Item C

Approval of Amendment to the FY16/17 Budget

#### **BACKGROUND**

The Public Safety department works in conjunction with the Department of Homeland Security Investigations/DEA to identify and confiscate illegally obtained assets. These assets, or forfeiture funds, are delivered to Homeland Security, then a portion of these funds is returned to the Authority to be used to enhance the operations within the Public Safety department.

The Authority has received Federal forfeiture funds this year in the amount of \$93. We also have unexpended funds remaining from last year in the amount of \$31,503. Therefore, a budget amendment is now necessary to increase the current year Public Safety budget by the amount of \$31,596, the total of this funding.

We recommend that the Greater Asheville Regional Airport Authority Board amend the FY16/17 budget as outlined below.

#### **ISSUES**

None.

#### **ALTERNATIVES**

None.

#### FISCAL IMPACT

The budget amendment will increase both FY16/17 budgeted revenues and expenditures by \$31,596 to provide for the change outlined above. The net increase in Transfers from GARAA Cash is \$31,596.



GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY Consent Item C Approval of Amendment to the FY16/17 Budget Page 2

#### **RECOMMENDED ACTION**

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to amend the FY16/17 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2017:

Section 1. To amend the appropriations as follows:

Section 1. To amend the app	propriations as follows.	
EXPENDITURES:		
Public Safety Department Totals	<u>Decrease</u>	<u>Increase</u> \$31,596 \$31,596
This will result in a net increase of strevised as follows:	\$31,596 in the appropriations.	Revenues will be
REVENUES:		
Transfer from GARAA Cash Totals  Section 2. Copies of this but the Greater Asheville Regional Airpo Finance Officer for their direction.  Adopted this 17th day of Feb		
Robert C. Roberts, Chair  Attested by:		
Ellen Heywood, Clerk to the I	Board	



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Janet Burnette, Director of Finance and Accounting

DATE: February 17, 2017

#### ITEM DESCRIPTION - Consent Item D

Approval of Audit Contract with Gould Killian CPA Group, P.A. for Fiscal Year Ending June 30, 2017

#### **BACKGROUND**

Last year, Authority staff issued a Request for Proposal for audit services, for up to five years, and the Board chose Gould Killian CPA Group, P.A. as the Authority's auditors. We have been pleased with their services and would now like to engage them for a second year. We are presenting a contract for auditing services with Gould Killian for the annual audit for the fiscal year ended June 30, 2017.

#### **ISSUES**

None

#### **ALTERNATIVES**

The Board could elect to reject the current contract being presented by Gould Killian CPA Group, P.A. and request staff to seek alternate firms to conduct the fiscal year end audit.

#### FISCAL IMPACT

The contract fee for services rendered by Gould Killian is \$16,200. The expense for audit services was anticipated and included in the budget for FY 2017 as presented by Authority staff.



GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY
Consent Item D
Approval of Audit Contract with Gould Killian CPA Group, P.A. for Fiscal Year Ending June 30, 2017
Page 2

#### **RECOMMENDED ACTION**

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to (1) approve the contract for audit services with Gould Killian CPA Group, P.A. in the amount of \$16,200, and (2) authorize the Board Chair to execute the necessary documents.

Attachment

service fund type, and the fiduciary fund types).

#### CONTRACT TO AUDIT ACCOUNTS

# Greater Asheville Regional Airport Authority Of Primary Governmental Unit N/A Discretely Presented Component Unit (DPCU) if applicable On this 11th day of Gould Killian CPA Group, P.A. Auditor Mailing Address: 100 Coxe Avenue Auditor: Asheville, NC 28801 Hereinafter referred to as The Auditor and Board of Directors (Governing Board(s)) of Greater Asheville Regional Airport Authority (Primary Government) N/A : hereinafter referred to as the Governmental Unit(s), agree as follows: (Discretely Presented Component Unit) and The Auditor shall audit all statements and disclosures required by generally accepted accounting principles (GAAP) and additional required legal statements and disclosures of all funds and/or divisions of the Governmental Unit (s) for the period beginning July 1, 2016, and ending June 30, 2017. The non-major combining, and individual fund statements and schedules shall be subjected to the auditing procedures

2. At a minimum, the Auditor shall conduct his/her audit and render his/her report in accordance with generally accepted auditing standards. The Auditor shall perform the audit in accordance with Government Auditing Standards if required by the State Single Audit Implementation Act, as codified in G.S. 159-34. If required by OMB Uniform Administration Requirements, Cost Principles, and Audit Requirements for Federal Awards, (Uniform Guidance) and the State Single Audit Implementation Act, the Auditor shall perform a Single Audit. This audit and all associated audit documentation may be subject to review by Federal and State agencies in accordance with Federal and State laws, including the staffs of the Office of State Auditor (OSA) and the Local Government Commission (LGC). If the audit and auditor communication are found in this review to be substandard, the results of the review may be forwarded to the North Carolina State Board of CPA Examiners (NC CPA Board).

applied in the audit of the basic financial statements and an opinion will be rendered in relation to (as applicable) the governmental activities, the business-type activities, the aggregate DPCUs, each major governmental and enterprise fund, and the aggregate remaining fund information (non-major government and enterprise funds, the internal

- County and Multi-County Health Departments: The Office of State Auditor will designate certain programs that have eligibility requirements to be considered major programs in accordance with OMB Uniform Guidance for the State of North Carolina. The LGC will notify the auditor and the County and Multi-Health Department of these programs. A County or a Multi-County Health Department may be selected to audit any of these programs as major.
- 3. If an entity is determined to be a component of another government as defined by the group audit standards the entity's auditor will make a good faith effort to comply in a timely manner with the requests of the group auditor in accordance with AU-6 §600.41 §600.42.
- 4. This contract contemplates an unqualified opinion being rendered. The audit shall include such tests of the accounting records and such other auditing procedures as are considered by the Auditor to be necessary in the circumstances. Any limitations or restrictions in scope which would lead to a qualification should be fully explained in an attachment to this contract.
- 5. If this audit engagement is subject to the standards for audit as defined in *Government Auditing Standards*, 2011 revisions, issued by the Comptroller General of the United States, then by accepting this engagement, the Auditor warrants that he has met the requirements for a peer review and continuing education as specified in *Government*

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Greater Asheville Regional Airport Authority

Primary Governmental Unit

N/A

Discretely Presented Component Units (DPCU) if applicable

Auditing Standards. The Auditor agrees to provide a copy of their most recent peer review report regardless of the date of the prior peer review report to the Governmental Unit and the Secretary of the LGC prior to the execution of the audit contract (See Item 22). If the audit firm received a peer review rating other than pass, the Auditor shall not contract with the Governmental Unit without first contacting the Secretary of the LGC for a peer review analysis that may result in additional contractual requirements.

If the audit engagement is not subject to Government Accounting Standards or if financial statements are not prepared in accordance with GAAP and fail to include all disclosures required by GAAP, the Auditor shall provide an explanation as to why in an attachment..

- 6. It is agreed that time is of the essence in this contract. All audits are to be performed and the report of audit submitted to the State and Local Government Finance Division (SLGFD) within four months of fiscal year end. Audit report is due on: October 31 , 2017 . If it becomes necessary to amend this due date or the audit fee, an amended contract along with a written explanation of the delay must be submitted to the secretary of the LGC for approval.
- 7. It is agreed that generally accepted auditing standards include a review of the Governmental Unit's systems of internal control and accounting as same relate to accountability of funds and adherence to budget and law requirements applicable thereto; that the Auditor will make a written report, which may or may not be a part of the written report of audit, to the Governing Board setting forth his findings, together with his recommendations for improvement. That written report must include all matters defined as "significant deficiencies and material weaknesses" in AU-C 265 of the AICPA Professional Standards (Clarified). The Auditor shall file a copy of that report with the Secretary of the LGC.
- 8. All local government and public authority contracts for audit or audit-related work require the approval of the Secretary of the LGC. This includes annual or special audits, agreed upon procedures related to internal controls, bookkeeping or other assistance necessary to prepare the Governmental Unit's records for audit, financial statement preparation, any finance-related investigations, or any other audit-related work in the State of North Carolina. <a href="Invoices for services rendered under these contracts shall not be paid by the Governmental Unit until the invoice has been approved by the Secretary of the LGC.">Location (This also includes any progress billings.)</a> [G.S. 159-34 and 115C-447] All invoices for Audit work must be submitted by email in PDF format to the Secretary of the LGC for approval. The invoices must be sent via upload through the current portal address: <a href="http://nctreasurer.slgfd.leapfile.net">http://nctreasurer.slgfd.leapfile.net</a> Subject line should read "Invoice [Unit Name]. The PDF invoice marked 'approved' with approval date will be returned by email to the Auditor to present to the Governmental Unit for payment. Approval is not required on contracts and invoices for system improvements and similar services of a non-auditing nature.
- 9. In consideration of the satisfactory performance of the provisions of this contract, the Primary Governmental Unit shall pay to the Auditor, upon approval by the Secretary of the LGC, the fee, which includes any cost the Auditor may incur from work paper or peer reviews or any other quality assurance program required by third parties (Federal and State grantor and oversight agencies or other organizations) as required under the Federal and State Single Audit Acts. (Note: Fees listed on signature pages.)
- 10. If the Governmental Unit has outstanding revenue bonds, the Auditor shall include documentation either in the notes to the audited financial statements or as a separate report submitted to the SLGFD along with the audit report, a calculation demonstrating compliance with the revenue bond rate covenant. Additionally, the Auditor should be aware that any other bond compliance statements or additional reports required in the authorizing bond documents need to be submitted to the SLGFD simultaneously with the Governmental Unit's audited financial statements unless otherwise specified in the bond documents.

Greater Asheville Regional Airport Authority	
mental Unit	

Contract to Audit Accounts (cont.) Primary Governmental Unit

N/A

Discretely Presented Component Units (DPCU) if applicable

- 11. After completing the audit, the Auditor shall submit to the Governing Board a written report of audit. This report shall include, but not be limited to, the following information: (a) Management's Discussion and Analysis, (b) the financial statements and notes of the Governmental Unit and all of its component units prepared in accordance with GAAP, (c) supplementary information requested by the client or required for full disclosure under the law, and (d) the Auditor's opinion on the material presented. The Auditor shall furnish the required number of copies of the report of audit to the Governing Board as soon as practical after the close of the accounting period.
- 12. If the audit firm is required by the NC CPA Board or the Secretary of the LGC to have a pre-issuance review of their audit work, there must be a statement added to the engagement letter specifying the pre-issuance review including a statement that the Governmental Unit will not be billed for the pre-issuance review. The pre-issuance review must be performed **prior** to the completed audit being submitted to the LGC. The pre-issuance report must accompany the audit report upon submission to the LGC.
- 13. The Auditor shall electronically submit the report of audit to the LGC as a text-based PDF file when (or prior to) submitting the invoice for services rendered. The report of audit, as filed with the Secretary of the LGC, becomes a matter of public record for inspection, review and copy in the offices of the SLGFD by any interested parties. Any subsequent revisions to these reports must be sent to the Secretary of the LGC. These audited financial statements, excluding the Auditors' opinion, may be used in the preparation of official statements for debt offerings, by municipal bond rating services to fulfill secondary market disclosure requirements of the Securities and Exchange Commission and other lawful purposes of the Governmental Unit without subsequent consent of the Auditor. If it is determined by the LGC that corrections need to be made to the Governmental Unit's financial statements, they should be provided within three days of notification unless another time frame is agreed to by the LGC.

If the OSA designates certain programs to be audited as major programs, as discussed in item #2, a turnaround document and a representation letter addressed to the OSA shall be submitted to the LGC.

The LGC's process for submitting contracts, audit reports and invoices is subject to change. Auditors should use the submission process in effect at the time of submission. The most current instructions will be found on our website: <a href="https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx">https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx</a>

- 14. Should circumstances disclosed by the audit call for a more detailed investigation by the Auditor than necessary under ordinary circumstances, the Auditor shall inform the Governing Board in writing of the need for such additional investigation and the additional compensation required therefore. Upon approval by the Secretary of the LGC, this contract may be varied or changed to include the increased time and/or compensation as may be agreed upon by the Governing Board and the Auditor
- 15. If an approved contract needs to be varied or changed for any reason, the change must be made in writing, on the Amended LGC-205 contract form and pre-audited if the change includes a change in audit fee. This amended contract needs to be completed in full, including a written explanation of the change, signed and dated by all original parties to the contract, and then must be submitted through the audit contract portal to the Secretary of the LGC for approval. The portal address to upload your amended contract is <a href="http://nctreasurer.slgfd.leapfile.net">http://nctreasurer.slgfd.leapfile.net</a> No change shall be effective unless approved by the Secretary of the LGC, the Governing Board, and the Auditor.
- 16. A copy of the engagement letter, issued by the Auditor and signed by both the Auditor and the Governmental Unit should be attached to the contract, and by reference here becomes part of the contract. In case of conflict between the terms of the engagement letter and the terms of this contract, the terms of this contract will control. Engagement letter terms that conflict with the contract are deemed to be void unless the conflicting terms of this contract are specifically deleted in Item #25 of this contract. Engagement letters containing indemnification clauses will not be approved by the LGC.

Page 3 of 8

Contract to Audit Accounts (cont.)	Greater Asheville Regional Airport Authority	
	Primary Governmental Unit	
	N/A	
	Discretely presented component units if applicable	

- 17. Special provisions should be limited. Please list any special provisions in an attachment.
- 18. A separate contract should not be made for each division to be audited or report to be submitted. If a DPCU is subject to the audit requirements detailed in the Local Government Budget and Fiscal Control Act and a separate audit report is issued, a separate audit contract is required. If a separate report is not to be issued and the DPCU is included in the primary government audit, the DPCU must be named along with the parent government on this audit contract. Signatures from the DPCU Board chairman and finance officer also must be included on this contract.
- 19. The contract must be executed, pre-audited, physically signed by all parties including Governmental Unit and Auditor signatures and submitted in PDF format to the Secretary of the LGC. The current portal address to upload your contractual documents is <a href="http://nctreasurer.slgfd.leapfile.net">http://nctreasurer.slgfd.leapfile.net</a> Electronic signatures are not accepted at this time. Included with this contract are instructions to submit contracts and invoices for approval as of November 2016. These instructions are subject to change. Please check the NC Treasurer's web site at <a href="https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx">https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx</a> for the most recent instructions.
- 20. The contract is not valid until it is approved by the LGC Secretary. The staff of the LGC shall notify the Governmental Unit and Auditor of contract approval by email. The audit should not be started before the contract is approved.
- 21. There are no other agreements between the parties hereto and no other agreements relative hereto that shall be enforceable unless entered into in accordance with the procedure set out herein and approved by the Secretary of the LGC.
- 22. **E-Verify**. Auditor **shall comply** with the requirements of NCGS Chapter 64 Article 2. Further, if Auditor utilizes any subcontractor(s), Auditor **shall require** such subcontractor(s) to comply with the requirements of NCGS Chapter 64, Article 2.
- 23. Contractor hereby certifies that Contractor, and all subcontractors, are not on the Iran Final Divestment List ("List") created by the North Carolina State Treasurer pursuant to N.C.G.S. 147-86.58. Contractor shall not utilize any subcontractor that is identified on the List.
- 25. All of the above paragraphs are understood and shall apply to this contract, except the following numbered paragraphs shall be deleted: (See Item 16 for clarification).

SIGNATURE PAGES FOLLOW

Contract to Audit Accounts (cont.)	Greater Asheville Regional Airport Authority
Primary G	overnmental Unit
	N/A
Discretely	Presented Component Units (DPCU) if applicable
Greater Asheville Regional Airport Au	uthority - FEES
Year-end bookkeeping assistance – [For audits su	ubject to Government Auditing Standards, this is limited to
bookkeeping services permitted by revised Indepen	dence Standards] NONE
AuditFixed: \$14,700 Var	iable: \$1,500 per major program over 3
Preparation of the annual financial Statements	\$1,500 Total Fixed: \$16,200
required) the Auditor may submit invoices for appro	ial report, applicable compliance reports and amended contract (if oval for services rendered, not to exceed 75% of the total of the stated in total, invoices for services rendered may be approved for up to
The 75% cap for interim invoice approval for thi	is audit contract is \$ 12,150
	** NA if there is to be no interim billing
Communication regarding audit contract requests	for Greater Asheville Regional Airport Authority
modification or official approvals will be sent to th	The state of the s
email addresses provided in the spaces below.	(a)
Audit Firm Signature:	This instrument has been pre-audited in the manner
Gould Killian CPA Group, P.A.  Name of Audit Firm	required by The Local Government Budget and Fiscal Control Act or by the School Budget and Fiscal Control
	Act. Additionally, the following date is the date this audit
By Daniel R. Mullinix  Authorized Audit firm representative name: Type or print	contract was approved by the governing body.
/	_ SETTING TO SETE TO SET PURPOSTO TO SET
Signature of authorized audit firm representative	By Janet Burnette Primary Governmental Unit Finance Officer:
Date / /// 2017-	Type or print name
dmullinix@gk-cpa.com	Similarian
Email Address of Audit Firm	<u> </u>
Governmental Unit Signatures:	Primary Government Finance Officer Signature
Greater Asheville Regional Airport Authority	Date Transfer of the Special Conference of t
Name of Primary Government	(Pre-audit Certificate must be dated.)
By Bob Roberts, Chair	jburnette@flyavl.com
Mayor / Chairperson: Type or print name and title	Email Address of Finance Officer
Signature of Mayor/Chairperson of governing board	
Date	
By N/A	Date Primary Government Governing Body
Chair of Audit Committee - Type or print name	Approved Audit Contract - G.S. 159-34(a)
# Profile 1.0	*
Signature of Audit Committee Chairperson	
Date ** If Governmental Unit has no audit committee, mai	22.7.2014.7.7
this section "N/A"	rk

Contract to Audit Accounts (cont.)	Greater Asheville Regional Airport Authority
	Primary Governmental Unit
	N/A
	Discretely Presented Component Units (DPCU) if applicable
	Discretely Presented Component Units **
The state of the s	<u>/A</u> FEES
Year-end bookkeeping assistance – [For bookkeeping services permitted by revised by revi	or audits subject to Government Auditing Standards, this is limited to ed Independence Standards]
Audit	
required) the Auditor may submit invoice	ited financial report, applicable compliance reports and amended contract (if es for approval for services rendered, not to exceed 75% of the total of the stated is not fixed in total, invoices for services rendered may be approved for up to
Communication regarding audit contra	of requests for
modification or official approvals will b	
email addresses provided in the spaces b	
<b>DPCU</b> Governmental Unit Signatures:	This instrument has been pre-audited in the manner
	required by The Local Government Budget and Fiscal
Name of Discreetly Presented Component Unit	Control Act or by the School Budget and Fiscal Control Act. Additionally, the following date is the date this audit
By	contract was approved by the governing body.
DPCU Board Chairperson: Type or print name	and title
	By
Signature of Chairperson of DPCU governing b	
Date	Type or print name
	DPCU Finance Officer Signature
By	Date
Chair of Audit <u>Committee</u> - Type or print name	(Pre-audit Certificate must be dated.)
	** ####################################
Signature of Audit Committee Chairperson	Email Address of Finance Officer
Date	AND
Date ** If Governmental Unit has no audit conthis section "N/A"	Date DPCU Governing Body Approved Audit Contract - G.S. 159-34(a)

Contract to Audit Accounts (cont.)	Greater Asheville Regional Airport Authority	
, , ,	Primary Governmental Unit	
	N/A	
	Discretely Presented Component Units (DPCU) if applicable	

#### Steps to Completing the Audit Contract

- 1. Complete the Header Information NEW: If a DPCU is subject to the audit requirements as detailed in the Local Government Budget and Fiscal Control Act and a separate audit report is issued, a separate audit contract is required. If a separate report is not issued for the DPCU and is to be included in the Primary Government's audit, the DPCU must be named with the parent government on this Audit contract. The Board chairman of the DPCU also must sign the Audit contract.
- 2. Item No. 1 Complete the period covered by the audit
- 3. Item No. 6 Fill in the audit due date. For Governmental Unit (s), the contract due date can be no later than 4 months after the end of the fiscal year, even though amended contracts may not be required until a later date.
- 4. Item No. 8 If the process for invoice approval instructions changed, the Auditor should make sure he and his administrative staff are familiar with the current process. Instructions for each process can be found at the following link. <a href="https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx">https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx</a>
- 5. Item No. 9 NEW: Please note that the fee section has been moved to the signature pages, Pages 5 & 6.
- 6. Item No. 16 NEW: It is now expected that an engagement letter will be attached to the contract. Has the engagement letter been attached to the contract submitted to the SLGFD?
  - a. Do the terms and fees specified in the engagement letter agree with the Audit contract? "In case of conflict between the terms of the engagement letter and the terms of this contract, the terms of this contract will control."
  - b. Does the engagement letter contain an indemnification clause? The audit contract will not be approved if there is an indemnification clause refer to LGC Memo # 986.
- 7. Complete the fee section for BOTH the Primary Government and the DPCU (if applicable) on the signature pages, please note:
  - The cap on interim payments is 75% of the current audit fee for services rendered if the contracted fee amount is a fixed amount. If any part of the fee is variable, interim payments are limited to 75% of the prior year's total audit fee. If the contract fee is partially variable, we will compare the authorized interim payment on the contract to 75% of last year's actual approved total audit fee amount according to our records. There is a report of audit fees paid by each governmental unit on our web site: <a href="https://www.nctreasurer.com/slg/Pages/Non-Audit-Services-and-Audit-Fees.aspx">https://www.nctreasurer.com/slg/Pages/Non-Audit-Services-and-Audit-Fees.aspx</a> Auditors and Audit Fees.
    - Please call or email Darrus Cofield at 919-814-4299 <u>darrus.cofield@nctreasurer.com</u> if you have any questions about the fees on this list.
  - For variable fees for services, are the hourly rates or other rates clearly stated in detail? If issued separately in an addendum, has the separate page been acknowledged in writing by the Governmental Unit?

Contract to Audit Accounts (cont.)	Greater Asheville Regional Airport Authority
	Primary Governmental Unit
	N/A

Discretely Presented Component Units (DPCU) if applicable

- For fees for services that are a combination of fixed and variable fees, are the services to be provided for the fixed portion of the fee clearly stated? Are the hourly rates or other rates clearly stated for the variable portion of the fee? (Note: See previous bullet point regarding variable fees.)
- If there is to be no interim billing, please indicate N/A instead of leaving the line blank.
- 8. Signature Area There are now 2 Signature Pages: one for the Primary Government and one for the DPCU. Send the page(s) that are applicable to your Unit of Government. Make sure all signatures have been obtained, and properly dated. The contract must be approved by Governing Boards pursuant to G.S. 159-34(a). NEW If this contract includes auditing a DPCU that is a Public Authority under the Local Government Budget and Fiscal Control Act it must be named in this Audit contract and the Board chairperson of the DPCU must also sign the Audit contract in the area indicated. If the DPCU has a separate Audit, a separate Audit contract is required for the DPCU.
- 9. Please place the date the Unit's Governing Board and the DPCU's governing Board (if applicable) approved the audit contract in the space provided.
  - a. Please make sure that you provide email addresses for the audit firm and finance officer as these will be used to communicate official approval of the contract.
  - b. Has the pre-audit certificate for the Primary Government (and the DPCU if applicable) been signed and dated by the appropriate party?
  - c. Has the name and title of the Mayor or Chairperson of the Unit's Governing Board and the DPCU's Chairperson (if applicable) been typed or printed on the contract and has he/she signed in the correct area directly under the Auditor's signature?
- 10. If the Auditor is performing an audit under the yellow book or single audit rules, has year-end bookkeeping assistance been limited to those areas permitted under the revised GAO Independence Standards? Although not required, we encourage Governmental Units and Auditors to disclose the nature of these services in the contract or an engagement letter. Fees for these services should be shown in the space indicated on the applicable signature page(s) of the contract.
- 11. Has the most recently issued peer review report for the audit firm been included with the contract? This is required if the audit firm has received a new peer review report that has not yet been forwarded to us. The audit firm is only required to send the most current Peer Review report to us once not multiple times.
- 12. After all the signatures have been obtained and the contract is complete, please convert the contract and all other supporting documentation to be submitted for approval into a PDF file. Peer Review Reports should be submitted in a separate PDF file. These documents should be submitted using the most current submission process which can be obtained at the NC Treasurer's web site <a href="https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx">https://www.nctreasurer.com/slg/Pages/Audit-Forms-and-Resources.aspx</a>.
- 13. NEW: If an audit is unable to be completed by the due date, an Amended Contract should be completed and signed by the unit and auditor, using the new "Amended LGC-205" form (Rev. 2015). The written explanation for the delay is now included on the contract itself to complete, and must be signed by the original parties to the contract.



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Janet Burnette, Director of Finance and Accounting

DATE: February 17, 2017

#### ITEM DESCRIPTION - Consent Item E

Approve Charges for Credit Card Fees

#### **BACKGROUND**

Several tenants and their employees have requested the ability to pay rents and other fees, such as parking, with credit cards. Because of the additional bank fees charged to us for the use of these credit cards, we need to collect these bank fees from the tenants and employees using credit cards.

Local governments are allowed to impose a surcharge, of up to 4 percent, on credit card transactions. Therefore, we are requesting approval to add up to a 4 percent surcharge to any tenant/employee credit card transaction.

#### **ISSUES**

Without the addition of a credit card surcharge, the Authority will realize a lesser amount of revenues collected as set forth in the annual budget's schedule of fees.

#### **ALTERNATIVES**

The Board could elect to either refuse to accept credit card payments or to treat the cost resulting from accepting the cards as additional operating expenditure with no additional offsetting revenue.



GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY Consent Item E Approve Charges for Credit Card Fees Page 2

#### **FISCAL IMPACT**

The total revenue should equal the total cost, so this would result in a zero net fiscal impact.

#### **RECOMMENDED ACTION**

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to approve the addition of a surcharge up to four percent to tenant credit card payments.



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Michael A. Reisman, A.A.E.

Deputy Executive Director, Development & Operations

DATE: February 17, 2017

### ITEM DESCRIPTION - Old Business Item A

Public Hearing and Final Adoption of the Authority's Ordinance Establishing Rules and Regulations of the Asheville Regional Airport

#### **BACKGROUND**

The Airport Board approved the proposed Rules and Regulations of the Asheville Regional Airport at its December 9, 2016 meeting. The Rules and Regulations have remained available for public inspection and comment since December 9, 2016, with no comments being received to date.

#### **ISSUES**

A Public Hearing is required in accordance with the Greater Asheville Regional Airport Authority Policy and Procedure for the Adoption of Ordinances.

#### **ALTERNATIVES**

None recommended.

#### FISCAL IMPACT

There is no fiscal impact associated with this proposed action.



#### GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

Old Business Item A

Public Hearing and Final Adoption of the Authority's Ordinance Establishing Rules and Regulations of the Asheville Regional Airport

Page 2

#### RECOMMENDED ACTION

It is respectfully requested that following the Public Hearing on the adoption of the Rules and Regulations of the Asheville Regional Airport, that the Greater Asheville Regional Airport Authority Board resolve to adopt the enclosed Ordinance.

**Enclosure** 

# GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY



# AIRPORT ORDINANCE NO. 201701 Airport Rules & Regulations

**ADOPTED:** 

GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY ORDINANCE

#### **ORDINANCE NO. 201701**

AN ORDINANCE, IN ACCORDANCE WITH SECTION 1.6(A) OF THE GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY ACT, NORTH CAROLINA SESSION LAW 2012-121, TO ESTABLISH THE RULES AND REGULATIONS OF THE ASHEVILLE REGIONAL AIRPORT IN ORDER TO REGULATE THE CONDUCT OF PERSONS AND BUSINESSES AT THE ASHEVILLE REGIONAL AIRPORT; AND TO MAKE A VIOLATION OF THIS ORDINANCE OR ANY AIRPORT RULE OR REGULATION CONTAINED HEREIN A MISDEMEANOR, CIVIL INFRACTION, OR ADMINISTRATIVE VIOLATION, AND TO PRESCRIBE THE PENALTIES AND MEANS OF ENFORCEMENT OF SAID RULES AND REGULATIONS;

#### Section 1. Citation.

1.1 This Ordinance may be cited as "<u>Authority Ordinance No. 201701</u>" or as the "<u>Airport Rules & Regulations</u>".

#### Section 2. Findings.

- 2.1 The Greater Asheville Regional Airport Authority was created by Session Law 2012-121, which was ratified by the General Assembly of North Carolina on June 28, 2012, and operates the Asheville Regional Airport.
- 2.2 Section 1.6(a)(7) of Session Law 2012-121 gives the GARAA the ability to, among other things: "[m]ake all reasonable rules, regulations, and policies as it may from time to time deem to be necessary, beneficial or helpful for the proper maintenance, use, occupancy, operation, and/or control of any airport or airport facility owned, leased, subleased, or controlled by the Authority . . . ".
- 2.3 Section 1.6(a)(21) of the Session Law gives the GARAA the ability to: "[e]xercise all powers conferred by Chapter 63 of the General Statutes [of the State of North Carolina] or any successor Chapter or law."
- 2.4 The powers conferred in North Carolina General Statute Section 63-53(2) specifically include the powers to: adopt and amend all needful rules, regulations and ordinances for the management, government and use of any properties under its control and to fix by ordinance, penalties for the violation of said ordinances and enforce said penalties.
- 2.5 North Carolina General Statute Section 63-53(2) also specifically requires that such ordinances be published as provided by general law or the charter of the municipality for the publication of similar ordinances, and that such ordinances conform

to and be consistent with the laws of the State of North Carolina, and the then current federal legislation governing aeronautics and the regulations promulgated thereunder.

2.6 The Greater Asheville Regional Airport Authority, consistent with Resolution No. \_\_\_\_\_\_ (Greater Asheville Regional Airport Authority Policy and Procedure for the Adoption of Ordinance) may adopt these Airport Authority Rules & Regulations by ordinance.

#### Section 3. Purpose and Scope.

- 3.1 The purpose of these Airport Rules & Regulations is to establish by ordinance certain rules and regulations that will govern the use and activities that may take place on the Airport.
- 3.2 Permission to use the Airport, or any part thereof, is conditioned upon strict compliance with these Airport Rules & Regulations, including payment of any fees or charges established hereby.
- 3.3 These Airport Rules & Regulations shall be applicable to every Person utilizing the Airport, unless otherwise indicated, and shall replace and supersede all prior rules and regulations promulgated by the Authority.
- 3.4 These Airport Rules & Regulations shall be in addition to all other applicable lease terms, Minimum Standards, policies, plans and Directives of the Airport, including, but not limited to the: Storm Water Prevention Plan; Spill Prevention Control and Countermeasures Plan; and Wildlife Hazard Management Plan.

#### Section 4. Effective Date.

4.1 These Airport Rules & Regulations shall take effect as of the \_\_\_\_ day of \_\_\_\_\_, 2016.

### Section 5. Definitions.

- 5.1 Unless specifically defined otherwise herein, or unless a different meaning is apparent from the context, the terms used in these Airport Rules & Regulations shall have the meanings set forth in this Section.
- 5.2 <u>Abandon</u> shall mean to forsake, desert, give up and/or surrender one's claim or right, license, use or privilege.
- 5.3 <u>Abandoned Property</u> shall mean any item, including but not limited to Motor Vehicles, equipment and personal belongings, that would appear to a reasonable person that it has been forsaken, deserted, given up, surrendered, or left without

anticipation of the Owner or Operator returning to claim it within a reasonable period of time.

- 5.4 <u>Airport Development Guidelines</u> shall mean the specific written documents detailing the design requirements of all new construction and development on the Airport, and for modifications to existing Airport facilities, regardless of ownership.
- 5.5 <u>Airport Movement Area (AMA)</u> shall mean the Runways, Taxilanes or Taxiways and other areas of the Airport that are utilized for taxiing, air taxiing, takeoff and landing of Aircraft that are under the direct control of the air traffic control tower, including during periods when the tower is closed.
- 5.6 <u>Air Operations Area (AOA)</u> shall mean the areas of the Airport used for Aircraft landing, takeoff, or surface maneuvering, including the areas around hangars, navigation equipment, and Aircraft parking areas.
- 5.7 <u>Aircraft</u> shall mean any device used or designed for navigation or flight in the air including, but not limited to, an airplane, sailplane, glider, helicopter, gyrocopter, ultra-light, balloon or blimp.
  - 5.8 <u>Airport</u> shall mean the Asheville Regional Airport (AVL).
- 5.9 <u>Alcoholic Beverage</u> shall mean any beverage containing at least one-half of one percent (0.5%) alcohol by volume, including any Malt Beverage, Unfortified Wine, fortified wine, spirituous liquor, and mixed beverages, or as otherwise defined by the State of North Carolina.
- 5.10 <u>Apron or Ramp</u> shall mean those areas of the Airport within the AOA designated for loading, unloading, servicing or parking of Aircraft.
  - 5.11 *Authority* shall mean the Greater Asheville Regional Airport Authority.
- 5.12 <u>Authority Board</u> shall mean the collectively appointed members of the Authority that when acting in official capacity on behalf of the Authority, have the powers, authority and jurisdiction conferred upon it by the North Carolina General Assembly.
- 5.13 <u>Authorized Area</u> shall mean a specified location or portion of the Airport, accessible only to specifically authorized Person(s).
- 5.14 <u>Authorized Representative</u> shall mean such Person as designated by the Executive Director.

- 5.15 <u>Car Share</u>— shall mean a service, provided by an organization or individual, in which fleet or individually owned Motor Vehicle is parked at the Airport and made available to members or Persons for short term rental, other than traditional rental car companies.
  - 5.16 *City* shall mean the City of Asheville, North Carolina.
- 5.17 <u>Commercial Activity</u> shall mean the exchange, trading, buying, hiring or selling of commodities, goods, services, or tangible or intangible property of any kind, and/or any revenue producing activity on the Airport, unless otherwise approved by the Executive Director.
- 5.18 *County* shall mean Buncombe County, and/or Henderson County, North Carolina.
- 5.19 <u>Courtesy Vehicle</u> shall mean any Motor Vehicle used in Commercial Activity as herein defined, other than a taxicab, limousine, TNC Vehicle etc. to transport Persons, baggage or goods, or any combination thereof, between the Airport and the business establishment owning or operating such Motor Vehicle, the operation of which is generally performed as a service without any direct or indirect costs to the passenger.
- 5.20 <u>Designated Area</u> shall mean those areas of the Airport, marked by signage where possible, where certain activities are limited, or where certain activities must occur, as specified elsewhere in these Airport Rules & Regulations.
- 5.21 <u>Directives</u> shall mean the specific written documents detailing the approved methods of operations as directed by the Executive Director or his/her Authorized Representative.
- 5.22 <u>Executive Director</u> shall mean the chief executive officer of the Greater Asheville Regional Airport Authority who is appointed by the Authority Board, or his/her Authorized Representative.
- 5.23 <u>Federal Aviation Regulation (FAR)</u> shall mean the rules prescribed by the Federal Aviation Administration (FAA) governing all aviation activities in the United States, as contained in Title 14 of the Code of Federal Regulations.
  - 5.24 *Flammable Liquid* A liquid that is capable of self-sustained combustion.
- 5.25 <u>Foreign Object Damage/Debris (FOD)</u> shall mean any object, live or not, located in an inappropriate location in the Airport environment that has the capacity to injure Airport or air carrier personnel and damage Aircraft.

- 5.26 <u>Fuel Transporting Vehicle</u>, <u>Fuel Truck or Fuel Delivery Device</u> shall mean any Motor Vehicle, tanker truck, trailer or other mobile or fixed device containing a tank of any size and/or pumping equipment, designed or used to deliver and supply fuel to Aircraft, Motor Vehicles, fuel farms, fuel tanks, or other equipment on the Airport.
- 5.27 <u>Hazardous Material</u> shall mean any item or agent (biological, chemical, radiological, and/or physical) which has the potential to cause harm to humans, animals, or the environment, either by itself, or through interaction with other factors.
- 5.28 <u>Helicopter</u> shall mean a rotorcraft that, for its horizontal motion, depends principally on its engine driven rotors.
- 5.29 <u>Landing Fee</u> shall mean the airfield related charges as specified in Airline Rates, Fees and Charges Ordinance.
- 5.30 <u>Malt Beverage</u> shall mean beer, lager, malt liquor, ale, porter, or fermented beverage.
- 5.31 <u>Minimum Standards</u> shall mean the specific written documents detailing the minimum requirements to be met as a condition for the privilege to conduct aeronautical or non-aeronautical services on the Airport.
- 5.32 <u>Motor Vehicle</u> shall mean a self-propelled device in, upon or by which a Person or property may be transported, carried or otherwise moved from point-to-point, including devices moved by human or animal power, except Aircraft or devices moved exclusively upon stationary rails or tracks.
  - 5.33 *NFPA* shall mean the National Fire Protection Association.
- 5.34 <u>Non-Commercial Activity</u> shall mean activities undertaken not for profit, but solely for philanthropic, religious, charitable, benevolent, humane, public interest, or similar purpose and no consideration for same is received, pledged or promised for any part of the respective activity.
- 5.35 <u>Non-Operating Aircraft</u> shall mean any Aircraft located on the Airport which does not possess a current certificate of air worthiness issued by the Federal Aviation Administration and/or is not actively being repaired in good faith to become an operating Aircraft.
- 5.36 <u>Open Container</u> shall mean a container whose seal has been broken or a container other than the manufacturers unopened original container.
- $5.37\ \underline{\it Operator}$  shall mean the individual directly controlling or maneuvering equipment, Motor Vehicle or Aircraft.

- 5.38 <u>Owner</u> shall mean Person(s) possessing a fee interest in real property or ownership interest in personal property.
- 5.39 <u>Parade</u> shall mean any march, demonstration, ceremony or procession of any kind which moves from place to place completely or partially in or upon any Street, sidewalk or other public grounds or places owned or under the control of the Authority along a specified route.
- 5.40 <u>Park</u> shall mean to put or leave or let a Motor Vehicle or Aircraft stand or stop in any location whether the Operator thereof leaves or remains in such Motor Vehicle or Aircraft when such standing or stopping is not required by traffic controls or by conditions beyond the control of the Operator.
- 5.41 <u>Person</u> shall mean any individual, entity, firm, partnership, corporation, company, association, joint stock association or body politic, or other user of the Airport, and includes any trustee, receiver, committee, assignee or other representative or employee thereof. Person includes the singular and plural whenever the context permits.
- 5.42 <u>Picketing</u> shall mean the stationing of any Person by standing, lying, walking, sitting, kneeling, bending, or in any other similar manner at a particular place so as to persuade, or otherwise influence another Person's actions or conduct, or to apprise the public of an opinion or message.
- 5.43 <u>Public Areas</u> shall mean areas and portions of the Airport, including buildings, intended to be accessible and open to the general public, exclusive of Authorized Areas.
- 5.44 <u>Public Parking Facilities</u> shall mean all parking facilities provided for the public at the Airport.
- 5.45 <u>Public Safety</u> shall mean the Department of Public Safety of the Greater Asheville Regional Airport Authority, which provides law enforcement, Aircraft rescue and firefighting, and emergency medical services on the property of the Asheville Regional Airport.
- 5.46 <u>Restricted Area</u> shall mean any designated area of the Airport to which access or entry is limited to authorized Persons only.
- 5.47 <u>Runway</u> shall mean a Restricted Area used solely for take-off and landing of Aircraft.

- 5.48 <u>Solicitation or To Solicit</u> shall mean to repetitively or continuously, directly or indirectly, actively or passively, openly or subtly, ask orally, in writing, or otherwise, (or endeavor to obtain by asking), request, implore, plead for, importune, seek or try to obtain.
- 5.49 <u>Street</u> shall mean any highway, road, street, avenue, boulevard, alley, bridge, or other way within and/or under the control of the Authority and open to public use.
- 5.50 <u>Taxilane or Taxiway</u> shall mean those portions of the AOA authorized or designated by the Authority for the surface maneuvering of Aircraft, which are used in common, and which may or may not be under the control of an Air Traffic Control Tower.
- 5.51 <u>Taxicab, Taxi or Cab</u> shall mean any automobile that carries Person(s) for a fare, determined by a meter and that is appropriately licensed as a taxicab by the proper governmental authority.
- 5.52 <u>Through-the-Fence Operations</u> shall mean a Commercial Activity or a Non-Commercial Activity that is directly related to the use of the Airport, but is developed or located off Airport property, and that has access to the Airport for Aircraft across the property line.
- 5.53 <u>Transportation Network Company (TNC)</u> shall mean citizens utilizing a privately owned Motor Vehicle for commercial ground transportation purposes that are dispatched through electronic means.
- $5.54 \ \underline{\textit{Ultra Light Vehicle}}$  shall mean an Aircraft that meets and operates under the requirements of 14 C.F.R. Part 103.
- 5.55 <u>Unfortified Wine</u> shall mean wine that has an alcoholic content produced only by natural fermentation or by the addition of pure cane, beet, or dextrose sugar.
- 5.56 <u>Weapon</u> shall mean a dirk, billy club, gun, knife, blackjack, slingshot, metal knuckles, tear gas, chemical weapon, any explosive device, electric weapon or any other substantiating instrument that can be utilized to coerce, intimidate or injure a Person, and all other such instruments as defined by local, state or federal law.

# **SECTION 6. GENERAL REGULATIONS.**

6.1 <u>Commercial Activity</u>. It shall be unlawful for any Person to occupy or rent space or conduct any business, commercial enterprise or Commercial Activity, or other form of revenue or non-revenue producing Non-Commercial Activity on the Airport

without first obtaining a written lease, contract, permit or other form of written authorization from the Executive Director or Authorized Representative.

- 6.2 <u>Advertising and Display</u>. It shall be unlawful for any Person to post, distribute, or display signs, advertisements, literature, circulars, pictures, sketches, drawings, or other forms of written material on the Airport without the written permission of the Executive Director or Authorized Representative.
- 6.3 <u>Commercial Speech</u>. It shall be unlawful for any Person, for a commercial purpose, to post, distribute, or display signs, advertisements, circulars, pictures, sketches, drawings, or engage in other forms of commercial speech without a written contract, permit or other form of written authorization from the Executive Director or Authorized Representative.
- 6.4 <u>Commercial Photography</u>. Except as provided for in Section 6.4.1, it shall be unlawful for any Person to take still, motion or sound motion pictures or make sound records or recordings of voices or otherwise on the Airport for commercial purposes without written permission from and in a manner authorized by the Executive Director or Authorized Representative.
  - 6.4.1 Section 6.4 does not apply to bona fide coverage by the news media conducting their business in an Authorized Area.
- 6.5 <u>Through the Fence Activities</u>. Except as described in Section 6.5.1 and 6.5.2 below, it shall be unlawful for any Person to access the public landing area, including the Runway, Taxilane or Taxiway, Aprons, hangar and Aircraft servicing areas from any off Airport property.
  - 6.5.1 Exceptions to Section 6.5 may be sought from the Authority on a case-by-case basis.
  - 6.5.2 Access by exception to Section 6.5 shall only be allowed upon satisfaction of each of the following conditions:
    - 6.5.2.1 The issuance of a permit, license or written agreement by the Authority;
    - 6.5.2.2 When lease terms and operating restrictions can ensure security, safety, equitable compensation to the Authority; <u>and</u>
    - 6.5.2.3 When a fair competitive environment can be established for other comparable Airport tenants.

- 6.5.3 All Through-The-Fence Operations are subject to, and shall take place in, compliance with all FAR or Federal Aviation Administration (FAA) requirements.
- 6.6 <u>Storage of Equipment</u>. It shall be unlawful for any Person, unless otherwise provided for by lease, other agreement, or permit, to use any area on the Airport, including buildings, either privately owned or publicly owned, for any storage of cargo or any other property or equipment, including Aircraft, without permission from the Executive Director or Authorized Representative.
  - 6.6.1 The Executive Director or Authorized Representative shall, upon a violation of Section 6.6, have the authority to order the cargo, Aircraft or any other property removed, or to cause the same to be removed and stored at the expense of the Owner or consignee, without the Authority having any responsibility or liability therefor.
- 6.7 Construction and Repair Activities on Airport Property. It shall be unlawful for any Person, firm, corporation, utility company, tenant, or other entity, to undertake any form of construction or repair activities on the Airport, including but not limited to digging, changing, pouring concrete, erecting structures, repairing public utilities, installing or repairing pavement, or any other form of construction or repair work without a valid easement and/or first obtaining permission from the Executive Director or Authorized Representative.

#### 6.8 Animals.

- 6.8.1 It shall be unlawful to bring upon Airport property any animal that is not properly restrained and controlled by the Owner either on a leash or inside a suitable container if being transported by air.
- 6.8.2 It shall be unlawful to hunt, pursue, trap, catch, injure or kill any animal on the Airport without first obtaining permission from the Executive Director or Authorized Representative.
  - 6.8.2.1 Section 6.8.2 shall not apply to the conduct and official acts of governmental officials, including wildlife management of the United States Department of Agriculture or of the Authority or when such activities are conducted by the Authority for Aircraft operational safety.
- 6.8.3 It shall be unlawful for any Person to feed or to do any other act to encourage the congregation of birds or other animals on the Airport.
- 6.8.4 It shall be unlawful for any Person to fish or boat from the Airport on or in any lakes, ponds or other bodies of water located on the Airport.

6.8.5 Nothing contained in Section 6.8 shall preclude animals on the Airport, to the extent mandated by applicable law, including "service animals" pursuant to the Americans with Disabilities Act.

### 6.9 Preservation of Property.

- 6.9.1 It shall be unlawful for any Person to destroy, injure, deface or disturb any building, sign, equipment, marker, or other structure, tree, flower, lawn, and/or other tangible property on the Airport.
- 6.9.2 It shall be unlawful for any Person to travel on the Airport other than on roads, walks or other marked rights-of-way provided for such specific purpose.
- 6.9.3 It shall be unlawful for any Person to alter, add to or erect any buildings or sign on the Airport or make any excavation on the Airport without prior expressed written approval from the Executive Director or Authorized Representative.
- 6.9.4 Any Person, tenant, company, or organization causing injury, destruction, damage, or disturbance to Airport property of any kind, including buildings, fixtures, or appurtenances, whether through any incident, accident, act or omission, shall immediately report such damage or destruction to the Executive Director.
- 6.9.5 Any Person involved in any incident or accident, whether personal, with an Aircraft, automobile, ground support equipment, or otherwise occurring anywhere on the Airport, shall make a full report to Public Safety as soon as possible after the incident or accident.
  - 6.9.5.1 All accident reports shall include, but not be limited to, the names and addresses of all principals and witnesses, if known, and a detailed statement of the facts and circumstances.
- 6.9.6 Any Person, tenant, company or organization causing damage to or destroying Airport property of any kind, including buildings, fixtures or appurtenances, whether through violation of these ordinance or through any incident, accident, act or omission, shall be fully liable to the Authority for all damages, losses and costs of repair associated therewith.

#### 6.10 Lost, Found and Abandoned Property.

- 6.10.1 Any Person finding any lost article(s) in the Public Areas on the Airport shall immediately deposit them with the Lost and Found located in Guest Services.
- 6.10.2 Articles unclaimed by their proper Owner within ninety (90) days, shall, thereafter, upon request, be turned over to the finder in accordance with then provisions of any applicable North Carolina General Statutes.
- 6.10.3 Articles to which the Owner or finder is not entitled to lawful possession shall be forfeited to the Authority for disposal in accordance with provisions of any applicable North Carolina General Statutes.
- 6.10.4 Nothing in Section 6.10 shall be construed to deny the right of Airport tenants to maintain "lost and found" services for property of their patrons, invitees or employees.
- 6.10.5 It shall be unlawful for any Person to Abandon any property on the Airport.
- 6.10.6 Any property, which has been determined by the Authority to be Abandoned will be removed, stored, and/or disposed of at the Owner's expense, without the Authority having any responsibility or liability therefor.
- 6.11 <u>Violations of Section 6</u>. A violation of <u>Section 6 General Regulations</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. § 14-4; however, civil penalties shall be assessed and civil citations issued for the violation of any provision of <u>Section 6 General Regulations</u>, in accordance with Section 17 Penalties, Remedies and Enforcement below.

### **SECTION 7 – PERSONAL CONDUCT**

- 7.1 <u>Solicitation</u>. It shall be unlawful for any Person To Solicit for any purpose on the Airport without prior authorization from the Executive Director or Authorized Representative.
- 7.2 <u>Obstruction of Airport Use and Operations</u>. No Person shall obstruct, impair or interfere with the safe and orderly use of the Airport by any other Person, Motor Vehicle or Aircraft.
  - 7.3 Restricted Areas and Air Operations Area.
  - 7.3.1 Except as otherwise provided in Section 7.3.2, it shall be unlawful for any Person to, without the prior written authorization of the Executive

Director or Authorized Representative, enter the AOA or any Restricted Area on the Airport.

- 7.3.2 The following Persons may enter the AOA or any Restricted Area on the Airport without the prior written authorization of the Executive Director:
  - 7.3.2.1 Persons assigned to duty thereon with proper training and identification media issued by, or acceptable to, the Authority.
  - 7.3.2.2 Passengers who, under appropriate supervision by qualified and Airport badged airline personnel, enter upon the Apron for the purposes of enplaning or deplaning an Aircraft.
  - 7.3.2.3 Persons engaged, or having been engaged, in the operation of Aircraft with proper identification, if located in a restricted are requiring such identification.
- 7.3.3 It shall be unlawful for any Person or Motor Vehicle to enter the movement areas or cross the Runway or the Taxilane or Taxiway unless the Person or Motor Vehicle Operator has received and satisfactorily completed required training and authorization from the Authority to operate on the movement area.
  - 7.3.3.1 Each Motor Vehicle authorized by the Authority to access the AMA shall be marked and lighted with company names, logos, strobe or rotating lights of appropriate colors, or have a permit issued and displayed by the Authority.
  - 7.3.3.2 Each Person or Motor Vehicle Operator with authorized access to the AOA or AMA shall be directly responsible for the activities of each additional Person or passenger they bring into the AOA or AMA, as each such Person shall be considered under their escort.
- 7.3.4 The security of Motor Vehicle and pedestrian gates, doors, fences, walls, and barricades leading from a tenant or lessee, or contractor's use area, to or from the AOA, or any other Restricted Area, shall be the responsibility of the tenant, lessee or contractor abutting the AOA or the tenant presently using such gate, door, fence, wall or barricades.
- 7.3.5 Each Person or Motor Vehicle Operator using an Airport perimeter security gate at the Airport shall ensure that the gate closes fully and is secure prior to leaving the vicinity of the gate, and that no unauthorized Persons gain access to the AOA through the gate while the gate is open.

- 7.3.6 Any authorized Person utilizing any gate, door, fence, wall or barricade shall be individually responsible for ensuring the security of the same while utilizing such in the course of their business or activities at the Airport, while present in any Restricted Area of the Airport, and while utilizing or operating any such devices.
- 7.3.7 No Person shall walk or drive across the AMA of the Airport without specific permission from the Executive Director or Authorized Representative and, where applicable, the Federal Aviation Administration (FAA) air traffic control tower on the Airport, and without having first completed all Airport required training and background checks.
- 7.4 <u>Compliance with Signs</u>. It shall be unlawful for any Person to fail to observe and obey all posted signs, fences, permanent and temporary traffic control and barricades governing activities and/or demeanor of the respective Person while on the Airport, and while operating an Aircraft or other equipment.

### 7.5 Use and Enjoyment of Airport Premises.

- 7.5.1 It shall be unlawful for any Person, singularly or in association with others, by his, her, or their conduct or by congregating with others, to prevent any other Person lawfully entitled thereto from the use and enjoyment of the Airport and its facilities or any part thereof, or prevent any other Person lawfully entitled thereto from free and unobstructed passage from place-to-place, or through entrances, exits or passageways on the Airport.
  - 7.5.1.1 Nothing in Section 7.5 is intended to prevent any Person from preventing another person, without authorization, from entering Authorized Areas or Restricted Areas.
- 7.5.2 It shall be unlawful for any Person to remain in or on any Public Areas, place or facility on the Airport, in such a manner as to hinder or impede the orderly passage in or through or the normal or customary use of such area, place, or facility by any Person or Motor Vehicle entitled to such passage or use.
- 7.5.3 It shall be unlawful for any Person to commit any disorderly, obscene, or indecent act, or use profane or abusive language, or commit any nuisance within the boundaries of the Airport.
- 7.5.4 It shall be unlawful for any Person to throw, shoot, aim lasers at, or propel any object in such a manner as to interfere with or endanger the safe operation or any Aircraft taking off from, landing at, or operating on the Airport, or any Motor Vehicle on the Airport.

7.5.5 It shall be unlawful for any Person to knowingly or willfully make any false statement or report to the Authority or to any Authorized Representative of the Authority.

### 7.6 Environmental Pollution & Sanitation.

- 7.6.1 To the maximum extent possible, each Person or entity while on the Airport shall limit activities thereon in such a manner as not to cause littering or any other form of environmental pollution, and shall abide by the provisions of the Section 7.6.
- 7.6.2 It shall be unlawful for any Person to dispose of garbage, papers, refuse, or other form of trash including cigarettes, cigars, and matches, except in receptacles provided for such purpose.
- 7.6.3 It shall be unlawful for any Person or entity to dispose of any fill or building materials or any other discarded or waste materials on Airport property except as approved in writing by the Executive Director.
- 7.6.4 It shall be unlawful for any Person or entity to place any liquids in storm drains or the sanitary sewer system on the Airport, which will damage such drains or system or will result in environmental pollution passing through such drain or system.
- 7.6.5 It shall be unlawful for any Person to use a comfort station or restroom toilet or lavatory facility on the Airport other than in a clean and sanitary manner.
- 7.6.6 It shall be unlawful for any Person to burn any refuse on the Airport, except with the written authorization of the Executive Director.
- 7.6.7 It shall be unlawful for any Person to unnecessarily, or unreasonably, or in violation of law, cause any smoke dust, fumes, gaseous matter or particular to be emitted into the atmosphere or be carried by the atmosphere on the Airport.
- 7.6.8 Any Person discarding chemicals, paints, oils or any products on the Airport, with authorization and in accordance with Section 7.6, must discard such materials in accordance with all other applicable state, local, or federal laws and regulations.

#### 7.7 Firearms and Weapons.

- 7.7.1 For the purpose of Section 7.7, a firearm means: (i) any Weapon, including a starter gun, which will, or is designed to, or may readily be converted to expel a projectile by the action of an explosive other than flare guns, (ii) any firearm muffler or firearm silencer, or (iii) any destructive device.
- 7.7.2 It shall be unlawful for any person, except those persons to the extent authorized by federal law and/or state law, to carry or transport any firearm or Weapon on the Airport property except when such firearm or Weapon is properly encased for shipment.
- 7.7.3 The Authority reserves the right to restrict the carrying of firearms and Weapons by watchman and guards on the Airport.
- 7.7.4 It shall be unlawful for any person to discharge any firearm or Weapon on the Airport except in the performance of official duties requiring discharge thereof.
- 7.8 Alcoholic Beverages and Controlled Substances.
- 7.8.1 Except as provided in Sections 7.8.1.1 and 7.8.1.2 below, it shall be unlawful for any Person to consume Alcoholic Beverages on the Airport.
  - 7.8.1.1 It shall be lawful to consume Alcoholic Beverages in areas designated by the Executive Director for the sale and/or consumption of an Alcoholic Beverage, both permanent and temporary in nature, so long as all appropriate permits, licenses and permissions have been obtained; and
  - 7.8.1.2 It shall be lawful to consume an Alcoholic Beverage in areas designated under written agreement by the Authority, so long as all appropriate permits, licenses and permission have been obtained.
- 7.8.2 Except as provided in Sections 7.8.1.1 and 7.8.1.2 above, it shall be unlawful for any Person to possess any Open Container of an Alcoholic Beverage, on the Airport.
- 7.8.3 It shall be unlawful to drive any Vehicle on any Airport property while under the influence of an impairing substance; or after having consumed sufficient alcohol that the individual has, at any relevant time after the driving, an alcohol concentration of 0.08 or more; or with any amount of a Schedule I controlled substance, as listed in N.C. Gen. Stat. Section 90-89, or its metabolites in the individual's blood or urine.

- 7.8.3.1 The relevant definitions contained in N.C. Gen. Stat. § 20-4.01 shall apply to Section 7.8.3
- 7.8.3.2 The fact that a person charged with violating Section 7.8.3 is or has been legally entitled to use alcohol or a drug is not a defense to a charge under Section 7.8.3.
- 7.8.3.3 In any prosecution for operating a Vehicle while impaired on any Airport property, the pleading is sufficient if it states the time and place of the alleged offense in the usual form and charges that the defendant operated the Vehicle within the State and on the Airport while subject to an impairing substance.
- 7.8.3.4 Any person who operates a Vehicle on any Airport property gives consent to chemical analysis if he is charged with the offense of operating a Vehicle while impaired. The charging officer must designate the type of chemical analysis to be administered, and it may be administered when he has reasonable grounds to believe that the person charged has committed the specific crime. The chemical analysis shall be performed pursuant to the procedures established under Chapter 20 of the North Carolina General Statutes applying to other motor vehicle violations. The results of any chemical analysis will be admissible into evidence at the trial on the offense charged and shall be deemed sufficient evidence to prove a person's alcohol concentration.

### 7.9 Picketing, Marching and Demonstration.

- 7.9.1. It shall be unlawful for any Person to walk in a picket line as a picketer, or take part in any form of demonstration including, but not limited to a Parade, on the Airport, except in or at the place specifically assigned by means of prior arrangements in writing by the Executive Director for such Picketing or other permitted demonstration and in accordance with the provisions of Section 7.9.2.
- 7.9.2 Any permitted Picketing or demonstration shall be conducted in accordance with the provisions of Section 7.9.2.1 and Section 7.9.2.2
  - 7.9.2.1 Picketing or demonstration shall be in the peaceful and orderly manner contemplated by law, without physical harm, molestation, threat or harassment of any Person, without obscenities, any violence, any breach of the peace, or other unlawful conduct whatsoever.
  - 7.9.2.2 Picketing or demonstration shall be without obstructing the use of the Airport by others and without hindrance to or interference with

the proper, safe, orderly and efficient operation of the Airport and activities conducted thereupon.

7.10 <u>Interfering with Passenger Screening Process</u>. It shall be unlawful for any Person to intentionally interfere with, disrupt, or delay the process of passenger screening conducted in accordance with any federal, state, or local regulation or procedure, which is being carried out by any federal, state or local agency or contractor.

## 7.11 Smoking.

- 7.11.1 It shall be unlawful to smoke or carry lighted smoking materials or to strike matches or other incendiary devices on Airport Apron areas, within 100 feet of parked Aircraft, during fueling or de-fueling, during the loading or unloading of fuel transport Vehicle, within 100 feet of a Flammable Liquid spill, in any area on the AOA, and in a hangar, shop, or other building in which flammable liquids are stored.
- 7.11.2 It shall be unlawful to smoke, including the use of e-cigarette, in all enclosed areas of the Airport, including all restrooms, break rooms, offices, any Authority owned Motor Vehicle, and inside any portion of the passenger terminal building.
- 7.11.3 This Section 7.11 applies to all Persons utilizing the Airport including all employees, tenants, vendors, independent contractors, passengers and visitors.
- 7.11.4 Smoking outside of the passenger terminal building by Authority and tenant employees is only permitted in a Designated Area.
- 7.11.5 Smoking outside of the passenger terminal building by the general public shall only be permitted in Designated Area.
- 7.11.6 It shall be unlawful to smoke within the cab of a Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device.

## 7.12 <u>Fire Extinguishers</u>.

- 7.12.1 It shall be unlawful to tamper with, at any time, fire extinguishing equipment on the Airport.
- 7.12.2 It shall be unlawful to use, at any time, fire extinguishing equipment on the Airport for any purpose other than firefighting or fire prevention.

- 7.12.3 All tenants or lessees or any other occupants of hangars, Aircraft maintenance buildings, or shop facilities shall supply and maintain readily accessible fire extinguishers in numbers, and at locations, that meet the requirements of applicable local codes or ordinances.
- 7.12.4 All fire extinguishing equipment shall conform to and be maintained in accordance with current NFPA Standards.
- 7.12.5 Tags showing the date of the last inspection shall be attached to each unit or immediately available records acceptable to Fire Underwriters shall be kept nearby showing the current status of such piece of equipment.
- 7.13 <u>Violations of Section 7</u>. A Violation of <u>Section 7 Personal Conduct</u> shall be a misdemeanor punishable in accordance with N.C. Gen. Stat. § 14-4 and subject to the penalties and provisions of <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

### **SECTION 8. SAFETY REGULATIONS.**

#### 8.1 General.

- 8.1.1 All persons using the Airport or any facilities on the Airport shall exercise the utmost care to guard against fire and injury to persons and/or property.
- 8.1.2 All persons using the Airport or any facilities on the Airport shall comply with all local, state or federal laws and any rules and regulations of the Federal Aviation Administration.

## 8.2 Fueling Operations.

#### 8.2.1 Aircraft Engines.

- 8.2.1.1 It shall be unlawful for any Person to fuel an Aircraft with any fuel while one or more of its engines are running or the Aircraft is then being warmed by external heat (Hot Fueling), without advanced approval and standby of Public Safety.
- 8.2.1.2 It shall be unlawful for Person to de-fuel an Aircraft with one or more of its engines running or the Aircraft is then being warmed by external heat.

- 8.2.1.3 It shall be unlawful for any Person to start the engine of an Aircraft if there is any gasoline or other volatile fluid on the ground or otherwise within the vicinity of the Aircraft.
- 8.2.1.4 It shall be unlawful for any Person to fuel an Aircraft inside of any hangar or building on the Airport regardless of whether the Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device is parked outside of the hangar or building. All fueling operations shall take place outdoors.

## 8.2.2 <u>Distance From Buildings.</u>

- 8.2.2.1 Aircraft being fueled shall be positioned so that Aircraft fuel system vents or fuel tank openings are not closer than ten (10) feet from any terminal building, hangar, service building or enclosed passenger concourse other than a passenger boarding bridge.
- 8.2.2.2 Each Fuel Transporting Vehicle, Fuel Truck and Fuel Delivery Device whether loaded or empty, shall never be in hangars nor be parked unattended within a distance of less than fifty (50) feet from hangars, paint and dope shops, fuel storage systems, or any other building or structure where any Person may be present therein.

## 8.2.3 Spillage of Fuel and Other Liquids.

- 8.2.3.1 No fuel, grease, oil, dopes, paints, solvents, acid, Flammable Liquid or contaminants of any kind shall be suffered or allowed to flow into or be placed in any Airport sanitary or storm drain system.
- 8.2.3.2 Any Persons, including the Owner or Operator of Aircraft, causing overflowing or spilling of fuel, oil, grease, or other contaminants anywhere on the Airport, shall be responsible for expeditious notification to Public Safety of said spillage and will be held responsible for immediate cleanup of the affected area.
  - 8.2.3.3 When fuel spills occur, fueling shall stop immediately.
- 8.2.3.4 In the event of spillage, each Fuel Transporting Vehicle, Fuel Truck and Fuel Delivery Device, and all other Motor Vehicles shall not be moved or operated in the vicinity of the spill until the spillage is removed, and a fireguard shall be promptly posted.
- 8.2.3.5 Each Person, tenant or company authorized to store, handle and dispense fuel on the Airport shall follow and remain compliant with all applicable environmental and fire safety measures of the U.S.

Environmental Protection Agency, North Carolina Department of Environmental Quality, NFPA, local laws and requirements.

- 8.2.3.6 Each Person, tenant or company authorized to store, handle and dispense fuel on the Airport shall have an approved Spill Prevention Control and Countermeasures Plan, and have emergency spill control materials and supplies stored on each mobile Fuel Transporting Vehicle, Fuel Truck and Fuel Delivery Device ready for rapid deployment in the event of a spill.
- 8.2.3.7 All Persons authorized to operate a Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device and other fueling equipment, shall be properly trained and familiar with their company's Spill Prevention Control and Countermeasures Plan (SPCC) and shall deploy such means, materials and measures in the event of a spill if safe to do so.
- 8.2.3.8 Each tenant or company that stores and/or handles fuel on the Airport shall be responsible for ensuring that all employees who directly handle fuel are properly trained to all company and fuel branding requirements, as well as all Authority requirements, and have satisfactorily completed all Authority required training.
- 8.2.4 <u>Passengers</u>. It shall be unlawful for any Person to fuel or de-fuel an Aircraft while any passenger is on board unless all of the conditions of Section 8.2.4.1 through 8.2.4.3 are met.
  - 8.2.4.1 A passenger-boarding device is in place at the cabin door of the Aircraft and the canopy is extended, if present.
    - 8.2.4.2 The cabin door is open.
    - 8.2.4.3 A flight crewmember is on-board the Aircraft.

# 8.2.5 <u>Static Bonding / Aircraft Grounding.</u>

- 8.2.5.1 Prior to the fueling of an Aircraft, the Aircraft and the transfer fuel apparatus shall be adequately bonded and/or grounded as specified in this Section 8.2.5.
- 8.2.5.2 Prior to making any fueling connection to the Aircraft, the fueling equipment shall be physically bonded or grounded to the Aircraft being fueled by use of a cable, thus providing a conductive path to equalize the potential between the fueling equipment and the Aircraft.

- 8.2.5.3 The bond or ground shall be maintained until fueling connections have been removed.
- 8.2.5.4 When fueling over a wing, the nozzle shall be bonded or grounded with a nozzle bond or ground cable having a clip or plug to a metallic component of the Aircraft that is metallically connected to the tank filler port.
  - 8.2.5.4.1 When fueling over a wing, the bond or ground connection shall be made before the filler cap is removed.
  - 8.2.5.4.2 When fueling over a wing, if there is no plug receptacle or means for attaching a clip, the Operator shall touch the filler cap with the nozzle spout before removing the cap so as to equalize the potential between the nozzle and the filter port.
  - 8.2.5.4.3 When fueling over a wing, the spout shall be kept in contact with the filler neck until the fueling is completed.
- 8.2.5.5 When a funnel is used in Aircraft fueling, it shall be kept in contact with the filler neck and the fueling nozzle spout or the supply container to avoid the possibility of a spark at the fill opening.
  - 8.2.5.6 Only metal funnels shall be used to fuel an Aircraft.
  - 8.2.5.7 Each hose, funnel, or apparatus used in fueling or defueling Aircraft shall be maintained in good condition and must be properly bonded to prevent ignition of volatile liquids.

## 8.2.6 Positioning of Equipment For Fueling.

- 8.2.6.1 Positioning of Aircraft Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be in accordance with this Section 8.2.6.
- 8.2.6.2 Each Aircraft Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be positioned so that they can be moved promptly after all Aircraft fuel hoses have been disconnected and stowed.
- 8.2.6.3 The drive engine of the fuel pump of the Aircraft Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall not be positioned under the wing of Aircraft during over wing fueling or where Aircraft fuel system vents are located on the upper wing surface.

- 8.2.6.4 Each Aircraft Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall not be positioned within a 10 feet (3 meters) radius of Aircraft fuel system vent opening.
- 8.2.6.5 Hand brakes shall be set, and wheel chocks shall be placed on each fuel servicing Vehicles before the Operators leave the Vehicle.
- 8.2.6.6 No Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be backed within twenty (20) feet of an Aircraft without the Operator having taken those precautions necessary to ensure an appropriate level of safety, which may include ground walkers to assist and guide the Vehicle or fueling object.
- 8.2.7 <u>Fire While Fueling</u>. When a fire occurs in a fuel delivery device while servicing an Aircraft, fueling shall be discontinued immediately and all emergency valves and dome covers shall be shut down at once and Public Safety shall be notified immediately.
- 8.2.8 Operation of Fuel Trucks On Runways & Taxilane and Taxiway. No Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device designed for and/or employed in the transportation of fuel shall be operated on a Taxilane or Taxiway or Runway at any time without expressed prior permission from the Executive Director or Authorized Representative to operate that Motor Vehicle in that place at that time and without being under escort by the Authority.

### 8.2.9 Fire Extinguishers.

- 8.2.9.1 No Person shall engage in Aircraft fueling or de-fueling operations without adequate and fully functioning fire extinguishing equipment being there and being readily accessible at the points of fueling.
- 8.2.9.2 All fire extinguishing equipment shall be recertified annually and all Persons shall be trained in the use of the equipment annually.
- 8.2.9.3 Each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device operating on the Airport shall be equipped with a minimum of two fully charged BC fire extinguishers, with one (1) located on each side of the Motor Vehicle, and with current annual certifications that conform to NFPA guidelines and FAR as may be appropriate.
- 8.2.10 <u>Parking Areas For Fuel Trucks</u>. Parking areas for a Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be arranged in accordance with the provisions of this Section 8.2.10.

- 8.2.10.1 To facilitate dispersal of the Motor Vehicle in the event of emergency;
- 8.2.10.2 To provide at least ten (10) feet of clear space between each parked Motor Vehicle for accessibility for fire control purposes;
- 8.2.10.3 To prevent any leakage from draining on the ground or to any building or structure;
- 8.2.10.4 To minimize exposure to damage from any and all out-of-control Aircraft;
- 8.2.10.5 To provide at least fifty (50) feet from any Airport terminal building, Aircraft cargo building, Aircraft hangar or other Airport structure housing any Person or any member of the public, and which has windows or doors in the exposed walls; and
- 8.2.10.6 Each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device when not in use, shall be stored in a designated area that provides secondary containment protection from a leak or spill from the Motor Vehicle within the parking area.
- 8.2.11 <u>Use of Radio, Radar, And Electrical Systems</u>. It shall be unlawful for any Person to operate a radio transmitter or receiver or switch electrical appliances on or off in an Aircraft while the Aircraft is being fueled or being defueled.
- 8.2.12 <u>Thunderstorm Activity</u>. It shall be unlawful for any Person to conduct fueling or de-fueling operations during periods of thunderstorm and/or lightning activity on or in the vicinity of the Airport.

## 8.2.13 Authority to Dispense Fuel.

- 8.2.13.1 Only those Persons who have then been authorized by the Executive Director or Authorized Representative, via a current self-fueling permit, or those Persons, tenants or companies who have authority through the issuance of a permit or lease by the Authority, may dispense fuel into any Aircraft, Vehicle or ground support equipment on the Airport.
- 8.2.13.2 It shall be unlawful for any Person to dispense or sell aviation fuel for automotive purposes.

#### 8.2.14 Fuel Farms and Bulk Fuel Installments.

- 8.2.14.1 All fuel farms and bulk fuel installations shall conform to the appropriate NFPA Standards, City/County Fire Codes, federal, state, or local laws.
- 8.2.14.2 There shall be NO SMOKING within one hundred (100) feet of a fuel farm or a bulk fuel installation.
- 8.2.14.3 Person(s) using fuel farms and bulk fuel installations shall ensure that such areas are free of weeds, grass, shrubs, trash and other debris at all times.
- 8.2.14.4 Fire extinguishers shall always be maintained in an accessible position, and in an operable condition with a then un-expired certification date.
- 8.2.14.5 No fuel or Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be left unattended during loading or unloading of fuel at a fuel farm or bulk installation.
- 8.2.14.6 All fuel farms and bulk fuel installations shall be operated under a quality control, maintenance, and inspection program of a licensed and bonded fuel supplier, or the State of North Carolina.

#### 8.2.15 Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device

- 8.2.15.1 Each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be conspicuously marked on both sides and rear of the cargo tank with the word "FLAMMABLE", "NO SMOKING" and with an appropriate placard identifying the type of fuel contained within the tank.
- 8.2.15.2 Emergency shut-off devices shall be required on each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device and shall be conspicuously marked "EMERGENCY SHUT OFF".
- 8.2.15.3 The propulsion and pumping engine on each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall have safeguards to reduce ignition sources to a minimum.
- 8.2.15.4 The carburetor on each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be fitted with an approved back-flash arrester.

- 8.2.15.5 The wiring on each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device shall be adequately insulated and fastened to eliminate chafing, and affixed to terminal connections by tight-fitting snap or screw connections with rubber or similar insulating and shielding covers and molded boots.
- 8.2.15.6 Two fire extinguishers shall be conspicuously apparent on each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device, as specified in Section 8.2.9.3.
- 8.2.15.7 Each hose, funnel, or apparatus on a Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device used in fueling or de-fueling Aircraft shall be maintained in good condition.
- 8.2.15.8 Maintenance and testing of Aircraft fueling systems shall be conducted under controlled conditions and in accordance with NFPA Guidelines.
- 8.2.15.9 Each Fuel Transporting Vehicle, Fuel Truck and Fuel Delivery Device shall be stored and maintained outdoors in areas authorized by the Executive Director, and when not in use, within an area that is protected by secondary containment measures.
- 8.2.15.10 Each Fuel Transporting Vehicle, Fuel Truck or Fuel Delivery Device based on the Airport and utilized for the delivery of fuel into Aircraft or authorized Vehicle shall carry an emergency spill response kit upon it containing materials and supplies to be used by the Operator in the event of a fuel spill.
  - 8.2.15.10.1 Any emergency fuel spill kit materials and supplies that are used shall be immediately replaced.

### 8.3 Open Flame Operation.

- 8.3.1 Except as provide in Section 8.3.1.1 through 8.3.1.3, it shall be unlawful to engage in any lead and carbon burning, fusion gas and electric welding, blow-torch work, reservoir repairs, engine testing, battery charging and all operations involving open flames on the Airport.
  - 8.3.1.1 Such operations shall be allowed in the repair shop sections of any hangar.

- 8.3.1.2 During such operations, the shop shall be separated from the storage section by closing all doors and openings to the storage section.
- 8.3.1.3 Any such operations upon any other portions of the Airport shall only be performed after notification and coordination with Public Safety and after receiving permission from the Executive Director or Authorized Representative.

## 8.4 Storage of Materials.

- 8.4.1 It shall be unlawful to keep or store material or equipment in such manner as to constitute a fire hazard or be in violation of applicable, local codes or ordinances or operational Directives of the Authority.
- 8.4.2 Gasoline, kerosene, ethyl, jet fuel, either, lubricating oil or other Flammable Liquid or gas including those used in connection with the process of "doping" shall be stored in accordance with the local codes or ordinances.
- 8.4.3 It shall be unlawful to keep, transport, or store lubricating oils on the Airport except in containers and receptacles designed for such purposes and in areas specifically approved for such storage in compliance with applicable local codes or ordinances and FAR.

#### 8.5 <u>Hazardous Materials</u>.

- 8.5.1 It shall be unlawful for any Person, without prior permission from the Executive Director, to transport, handle, or store on the Airport any cargo of explosives or other hazardous articles which is barred from loading in, or for transportation by Civil Aircraft in the United States under the current provisions of Regulations promulgated by the Department of Transportation (DOT), the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), or by any other governing authority.
- 8.5.2 Compliance with said regulations shall not constitute or be construed to constitute a waiver of the notice required in Section 8.5.1 or as an implied permission to keep, transport, handle or store such explosives or other dangerous articles on the Airport.
- 8.5.3 Twenty-four hours advance notice shall be given to the Executive Director or Authorized Representative in order to investigate and clear any operation requiring a waiver of this Section 8.5.1.

- 8.5.4 It shall be unlawful to offer, or to knowingly accept, any hazardous article for shipment on the Airport unless the shipment is handled and stored in full compliance with the current provisions of any local, state or federal law regulating the handling and storage of hazardous materials.
- 8.5.5 Any Person engaged in transportation of hazardous articles shall have designated personnel on the Airport authorized and responsible for receiving and handling such shipments in compliance with the prescribed regulations.
- 8.5.6 Any Person engaged in the transportation of hazardous articles shall provide storage facilities which reasonably insure against unauthorized access, or exposure to persons and against damage to shipments while on the Airport.
- 8.5.7 Any Person transporting or storing hazardous materials on the Airport shall, a minimum of 24 hours in advance of such transportation or storage, provide current Safety Data Sheets (SDS) documentation on the hazardous material to the Executive Director or Authorized Representative.
- 8.5.8 Safety Data Sheets (SDS) documentation shall be maintained by the Person responsible for the hazardous material and readily available at all times while the hazardous material is present on the Airport.
- 8.5.9 The spill of any hazardous material on the Airport shall immediately be cleaned up by the Person responsible for such spillage, in accordance with all local, state or federal regulations governing the handling and storage of such hazardous materials, and shall be immediately reported to the Executive Director.
- 8.6 <u>Motorized Ground Equipment Around Aircraft</u>. It shall be unlawful for any Person to Park motorized ground equipment near any Aircraft in such manner so as to prevent it or the other ground equipment from being readily driven or towed away from the Aircraft in case of an emergency.

#### 8.7 Aircraft Electrical and Electronic Systems.

- 8.7.1 It shall be unlawful to test or operate radio transmitters and similar equipment in Aircraft within a hangar with dynamotors running unless all parts of the antenna system are at least one (1) foot removed from any other object.
- 8.7.2 It shall be unlawful to place an Aircraft, at any time, such that any fabric-covered surface is within one (1) foot of an antenna system.

8.7.3 It shall be unlawful to operate or ground test, in any area on the Airport, airborne radar equipment that will interfere with any high intensity radar site.

## 8.8 <u>Electrical Equipment and Lighting Systems</u>.

- 8.8.1 It shall be unlawful to use a portable lamp assembly, without a proper protective guard or shield over the lamp to prevent breakage.
- 8.8.2 It shall be unlawful to leave any power operated equipment or electrical devices on when not in actual use.
- 8.8.3 It shall be unlawful to do any work on any Aircraft in a hangar or structure without de-energizing or disconnecting the battery or power source.

### 8.9 Aprons, Building & Equipment.

- 8.9.1 All Persons on the Airport shall keep all areas of the premises leased or used by them clean and free of oil, grease and other flammable material.
- 8.9.2 The floors of hangars and other buildings shall be kept clean and continuously kept free of rags, waste materials or other trash or rubbish, unless such rags and other water materials are kept in proper and approved containers.
- 8.9.3 Approved metal receptacles with a self-extinguishing cover shall be used for the storage of oily waste rags and similar materials.
  - 8.9.3.1 The contents of these receptacles shall be removed daily by Persons occupying the space and kept clean at all times.
- 8.9.4 Clothes lockers shall be constructed of metal or fire-resistant material.
- 8.9.5 Only approved containers shall be stored in or about a hangar or other buildings on the Airport.
- 8.9.6 It shall be unlawful to use Flammable Liquids or other substances for cleaning hangars or other buildings on the Airport.

#### 8.10 Containers.

8.10.1 No Person, tenant, licensee, lessee, concessionaire, or other occupant or user of an Airport facility on the Airport or agent thereof doing

business on the Airport, may keep uncovered trash containers adjacent to sidewalks or roads in any Public Areas on the Airport.

- 8.10.2 It shall be unlawful for any Person to spill dirt or any other material from a Motor Vehicle operated on the Airport or to produce or create FOD in aircraft operational areas without promptly reporting and cleaning up the same.
- 8.10.3 In the event a spill occurs, the Owner of the Motor Vehicle will be responsible for cleaning up the spill at his/her expense.
- 8.10.4 The Owner or Operator of any trash dumpster or large scale container shall ensure that the container remains covered at all times in a manner so that trash and debris from the container do not leave the container.

### 8.11 Repairing Aircraft.

- 8.11.1 Aircraft repairs in storage areas of hangars shall be limited to replacements of parts and repairs incidental thereto, provided such repairs do not involve appliances using any open flame or any heated parts.
- 8.11.2 It shall be unlawful to start or operate an Aircraft engine inside any hangar.
  - 8.11.2.1 Section 8.11.2 shall not prohibit use of tractors with NFPA approved exhaust systems when moving planes within any hangar.
- 8.11.3 It shall be unlawful to undertake repairs to any Aircraft or other equipment for commercial purposes on the Airport unless first obtaining any and all required leases or permits from the Authority,.
- 8.11.4 It shall be unlawful to solicit the services of, or to accept the services of any Person, who undertakes repairs to any Aircraft or other equipment for commercial purposes on the Airport, knowing that the Person has not first obtained all required leases or permits from the Authority to operate on the Airport.
- 8.12 <u>Violations of Section 8</u>. A violation of <u>Section 8 Safety Regulations</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. § 14-4; however, civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 8 Safety Regulations</u>, in accordance with <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

# **SECTION 9. Aeronautical Regulations.**

- 9.1 <u>Compliance With Orders</u>. It shall be unlawful to conduct aeronautical activities on the Airport that are not in compliance with the then current and applicable FAR, and with these Airport Rules & Regulations.
- 9.2 <u>Negligent Operations.</u> It shall be unlawful for any Person to operate Aircraft on the Airport in a careless manner or in disregard of the right and safety of others.
  - 9.2.1 All Persons using the Airport shall be held liable for any property damage caused intentionally or by carelessness or negligence on the Airport.

## 9.3 <u>Denial of Use of Airport.</u>

- 9.3.1 The Executive Director or Authorized Representative shall have the right at any time to close the Airport in its entirety or any portion thereof to air traffic, and/or to delay or restrict any flight or other Aircraft operation, to direct refusal of takeoff permission to Aircraft, and to deny the use of the Airport or any portion thereof to any specified class of Aircraft, or to any Person(s) or group(s), when he (or she) considers any such action(s) to be necessary or desirable to avoid endangering any Persons or any property, and to be consistent with the safe and proper operation(s) of the Airport.
- 9.3.2 In the event the Executive Director or Authorized Representative believes the condition on the Airport to then be unsafe for landings or takeoffs, it shall be within his or her authority to issue, or cause to be issued, a Notice to Airmen (NOTAM) closing the Airport or any portion thereof until such time that such restrictions are terminated.

#### 9.4 Aircraft Accidents or Incidents.

- 9.4.1 Upon the occurrence of an Aircraft accident or incident the Executive Director shall be notified immediately.
- 9.4.2 The pilot or Operator of any Aircraft involved in an incident or accident on the Airport causing personal injury and/or any property damage, in addition to all other reports required by other agencies, shall make a prompt and complete written report concerning said accident or incident to the office of the Executive Director.
  - 9.4.2.1 When a written report of any accident or incident is required by FAR, a copy of such report may be submitted to the Executive Director in lieu of the report required in Section 9.4.2.

9.4.3 Each written report to be submitted in accordance with Section 9.4.2 shall be submitted to the Executive Director within forty-eight (48) hours from the time the accident or incident first occurred.

#### 9.5 Disabled Aircraft.

- 9.5.1 The Owner of an Aircraft which is disabled on the Airport and causing the closure of the airfield or any part thereof, or otherwise impacting safe and/or efficient Airport operations, shall be responsible for the prompt and immediate removal of the disabled Aircraft and it's parts when directed by the Executive Director or Authorized Representative.
- 9.5.2 If the Owner is not present on site, or in the event of the Owner's inability, failure or refusal to comply with removal orders, all disabled Aircraft or any and all the parts thereof may be removed by employees of the Authority or by Persons contracted to do so, all at the Owner's expense, and without the Authority having any responsibility or liability for damage to the Aircraft that may occur as a result of such removal.

#### 9.6 Tampering With Aircraft.

- 9.6.1 It shall be unlawful for any Person to interfere or tamper with any Aircraft or put in motion such Aircraft.
- 9.6.2 It shall be unlawful for any Person to use or remove any Aircraft, Aircraft parts, instruments, or tools without positive evidence of permission of the Owner thereof to do so.
- 9.7 <u>Cleaning, Maintenance and Repair of Aircraft.</u> It shall be unlawful for any Person to clean, paint, wash, polish, or otherwise maintain an Aircraft, other than in areas approved (and in the manner designated) by the Authority, and designated for such purpose, whether on or off any tenant leasehold area.

# 9.8 Hand Propping of Aircraft.

- 9.8.1 Hand propping shall be unlawful, unless there is then no other means of starting the Aircraft.
- 9.8.2 The pilot of the Aircraft remains responsible for any and all liability resulting from hand propping.
- 9.9 <u>Certification of Aircraft and Licensing of Pilots.</u>

- 9.9.1 It shall be unlawful for any Person to operate an Aircraft on the Airport without displaying on board the Aircraft a valid Airworthiness Certificate issued by the Federal Aviation Administration (FAA) or appropriate foreign government
- 9.9.2 It shall be unlawful for any Person to operate an Aircraft on the Airport without displaying on the exterior of the Aircraft a valid registration number issued by the FAA or appropriate foreign government.
- 9.9.3 It shall be unlawful for any Person to operate an Aircraft on the Airport without possessing an appropriate certificate or license, issued by the FAA or appropriate foreign government.
- 9.9.4 All Persons shall, upon request of the Executive Director or Authorized Representative, produce a valid operator's license, Airworthiness certificate, and provide other valid photo proof of identification issued by a government agency.
- 9.10 <u>Violations of Section 9</u>. A violation of <u>Section 9 Aeronautical Operations</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. §14-4; however, civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 9 Aeronautical Operations</u> above, in accordance with <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

### Section 10. Airport Operational Restrictions.

- 10.1 Except to the extent prohibited by applicable FAR, the Authority shall have the ability to designate or restrict the use of a Runway, Taxilane or Taxiway, and/or other operational areas of the Airport, in connection with construction and maintenance activities on the Airport, or for the benefit of efficient Airport operations and safety, or when the Executive Director determines in it is in the best interest of the Airport ,with respect to, but not limited to, the following types of operations: Touch and Go Flights, Training Flights, Experimental Flights, Equipment Demonstration, Air Shows, Maintenance Flight Checks, Compliance with FAR's Part 36, Noise Standards, Aircraft Type and Airworthiness Certification, Skydiving, Banner Towing, and Hot Air Balloons.
- 10.2 It shall be unlawful to engage in an Aircraft engine run up in any location except those specifically Designated Areas.
- 10.3 No equipment or Motor Vehicle supporting the operation of hot air balloons shall be permitted on the Airport without the proper escort or other permission of the Executive Director or Authorized Representative.

#### 10.4 Gliders.

- 10.4.1 It shall be unlawful to conduct glider operations not in accordance with current FAR's Part 91 and current Directives, and approved in advance by the Executive Director.
- 10.4.2 It shall be unlawful to bring equipment or Motor Vehicle supporting the operation of gliders on the Airport without the proper escort and permission of the Executive Director or Authorized Representative.
- 10.5 <u>Ultra-Light Vehicle</u> It shall be unlawful to operate and ultra-light vehicle on the Airport without meeting or exceeding all requirements contained in FAR's Part 103.

### 10.6 Take Offs and Landings

- 10.6.1 Except as provided for in 10.6.1.1 below, it shall be unlawful for any person to cause an Aircraft to takeoff or land, except on a Runway.
  - 10.6.1.1 Helicopters are an exception to Section 10.6.1, as they may operate from an approved location other than a Runway.
- 10.6.2 It shall be unlawful for any Person to cause an Aircraft to take off or land from a closed Runway, or on or from any Apron or Ramp area or Taxilane or Taxiway.
- 10.6.3 Persons landing an Aircraft on the Airport shall make the landing runway available to other Aircraft by leaving said Runway as promptly as possible, consistent with safety.
- 10.6.4 Any Person operating or controlling an Aircraft landing at or taking off from the Airport shall maintain engine noise within applicable Aircraft engine noise limits as promulgated by the FAR, the federal government, or the Authority, whichever is the most restrictive.
- 10.7 <u>Banner Towing.</u> It shall be unlawful to undertake tow banner pickups and drop-offs from or on the Airport, without prior written authorization of the Executive Director.
- 10.8 <u>Kites, Models, Drones, Balloons.</u> It shall be unlawful for any Person to operate on or within the vicinity of the Airport, a kite, model airplane, drone, tethered balloon or other objects constituting a hazard to Aircraft operations, without the prior written authorization of the Executive Director and full compliance with North Carolina state laws and FAR's Part 107.

#### 10.9 Parachute Jumping.

- 10.9.1 It shall be unlawful for any Person to initiate a parachute jump from the Airport without the prior written approval of the Executive Director.
- 10.9.2 All parachute operations are prohibited at the Airport without written approval of the Executive Director, and full compliance with FAR's Part 105.
- 10.10 <u>Violations of Section 10</u>. A violation of <u>Section 10 Airport Operational Restrictions</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. §14-4; however, civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 10 Airport Operational Restrictions</u> above, in accordance with Section 17 Penalties, Remedies and Enforcement below.

### Section 11. Taxi and Ground Rules.

### 11.1 Aircraft Parking.

- 11.1.1. It shall be unlawful for any Person to Park an Aircraft in any area on the Airport except those designated, and in the manner prescribed, by the Executive Director.
- 11.1.2 If any Person uses unauthorized areas for Aircraft parking, the Aircraft so parked may be removed by or at the direction of the Executive Director. The Authority shall not be liable to the Owner for any damage to the Aircraft, and the removal shall be at the expense of the Owner thereof.
- 11.1.3 No Aircraft shall be left unattended on the Airport unless it is in a hangar or adequately locked, and tied down.
- 11.1.4 Articles left in Aircraft are the sole responsibility of the Aircraft Owner and pilot.

#### 11.2 Derelict Aircraft.

- 11.2.1 It shall be unlawful for any Person to Park or store any Aircraft in non-flyable condition on the Airport, including leased premises, for a period in excess of ninety (90) days, without written permission from the Executive Director.
- 11.2.2. It shall be unlawful for any Person to store or retain Aircraft parts or components, being held as inventory, anywhere on the Airport, other than in an enclosed, authorized facility, or in a manner approved by the Executive Director, in advance and in writing.

- 11.2.3 In the event of violations of Section 11.2.1 and 11.2.2, the Executive Director shall notify the Owner or Operator thereof by certified or registered mail, requiring removal of said Aircraft within fifteen (15) days of receipt of notice.
  - 11.2.3.1 In the event the Owner or Operator is unknown or cannot be found for purposes of notice, the Executive Director shall conspicuously post and affix the notice to said Aircraft, requiring removal of said Aircraft within fifteen (15) days from date of posting.
  - 11.2.3.2 In the event the Owner or Operator fails to remove the Aircraft within fifteen days from the date of posting, the Executive Director or Authorized Representative may, in addition to all other penalties and enforcement methods allowed for herein or by law, elect to remove the Aircraft from the Airport and store the Aircraft elsewhere, and invoice the Owner or Operator for the expense associated with such removal or storage.
- 11.3 <u>Violations of Section 11</u>. A violation of <u>Section 11 Taxi and Ground Rules</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. §14-4; however, civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 11 Taxi and Ground Rules</u> above, in accordance with <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

### Section 12. Rotorcraft Operations.

- 12.1 It shall be unlawful to taxi, tow, or otherwise move a Rotorcraft, with rotors turning, unless there is a clear area of at least thirty (30) feet in all directions from the outer tips of the rotors.
- 12.2 It shall be unlawful to operate a Rotorcraft in any manner that creates any safety hazard or impacts personnel, unsecured Aircraft closed areas of the Airport, or other equipment or materials.
- 12.3 <u>Violations of Section 12</u>. A violation of <u>Section 12 Rotorcraft Operations</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. §14-4; however, civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 12 Rotorcraft Operations</u> above, in accordance with <u>Section 17 Penalties</u>, Remedies and Enforcement below.

# Section 13. Use of T-Hangars and Storage Hangars.

- 13.1 It shall be unlawful to utilize T-hangars and storage unit hangars for any purpose that would constitute a nuisance or interferes in any way with the use and occupancy of other buildings and structures in the neighborhood of the leased premises.
- 13.2 T-hangars and unit storage hangars, whether owned by the Authority or by a commercial entity, shall be used for storage of Aircraft only, without the express, written permission of the Executive Director.
- 13.3 It shall be unlawful to attach items of any nature to the building, either interior or exterior, without the permission of the Executive Director an in full compliance with Airport Development Guidelines.
- 13.4 It shall be unlawful to suspend or lift Aircraft or Aircraft component utilizing the building or any component of the building.
- 13.5 It shall be unlawful to make any alterations to the hangar structure without written approval by the Executive Director.
  - 13.5.1 Any approved alterations to the hangar are subject to removal by the Authority at the occupant's expense, upon thirty (30) days written notice, for the purpose of repair, construction or other purposes deemed necessary by the Authority.
- 13.6 Except as provided in Section 13.6.1 below, it shall be unlawful to store or to allow to accumulate in any hangar any flammable material or refuse.
  - 13.6.1 Storage of no more than ten (10) gallons of flammable fluids inclusive of Aircraft lubricants, within the premises, shall not be considered a violation of Section 13.6, so long as all such storage is in NFPA approved containers, or unopened original containers.
- 13.7 It shall be unlawful to wash Aircraft with running water in hangars when such washing will cause drainage into its hangar or through or to any other hangar.
- 13.8 It shall be unlawful to spray paint of any kind in any hangar, unless inside an approved paint booth.
- 13.9 It shall be unlawful to use any tools, equipment, or materials in any hangar that could constitute a fire hazard.
  - 13.10 It shall be unlawful to smoke in any hangar.
  - 13.11 All occupants shall exercise care to keep oil, grease, etc. off the floor(s).

- 13.12 Occupants of each hangar shall see that electric current and water, if available, is not used excessively.
- 13.13 It shall be unlawful to erect, paint, or otherwise display any sign on the exterior or interior of any hangar.
- 13.14 It shall be unlawful for any Aircraft or Motor Vehicle to be parked by a hangar, in such a manner as to block access to adjoining hangar space(s), or to cause inconvenience(s) to other occupants.
- 13.15 A Motor Vehicle parked for more than a 24 hour period must be parked inside the T-hangar.
- 13.16 It shall be unlawful for any Person to use any hangar for Commercial Activity whatsoever, including, but not by way of limitation, the sale of products or services of any kind, and whether or not such actions are transacted for profit, without written approval of the Executive Director, and after having satisfied all of the necessary requirements of the Authority for conducting a Commercial Activity on the Airport.
- 13.17 It shall be unlawful to permit or to perform repair service on automobiles or automotive equipment of any kind other than an authorized motorized towing Motor Vehicle or Aircraft ground support equipment in any hangar.
- 13.8 <u>Violations of Section 13</u>. A violation of <u>Section 13 Use of T-Hangars and Storage Hangars</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. §14-4; however, Civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 13 Use of T-Hangars and Storage Hangars</u> above, in accordance with <u>Section 17 Penalties</u>, <u>Remedies and Enforcement below</u>.

## Section 14. Motor Vehicles.

- 14.1 <u>Traffic Signs and Signal Devices.</u> It shall be unlawful for any Person to fail to comply with the directions and instructions indicated on all parking and traffic signs, markers or devices erected or placed on the Airport.
- 14.2 <u>Pedestrian Right-Of-Way</u>. Except as specified in Section 14.2.1 below, it shall be unlawful for any Person operating a Motor Vehicle to fail to yield the right-of-way to a pedestrian who crosses within a marked pedestrian crosswalk.

- 14.2.1 Section 14.2 shall not apply when the movement of traffic is being actively regulated by on site law enforcement officers, traffic specialists, or traffic control devices.
- 14.3 <u>Motor Vehicle Condition.</u> It shall be unlawful for any Person to operate anywhere on the Airport any Motor Vehicle which: (1) is so constructed, equipped or loaded, or which is in such unsafe condition as to endanger any Persons or any property; (2) which has attached thereto any object or equipment (including that which is being towed) which drags, swings, or projects so as to be hazardous to any Person(s) or any tangible property; or (3) does not meet all current North Carolina state required safety and emission standards or does not have a current North Carolina state inspection certification, if applicable to the Motor Vehicle
- 14.4 <u>Closing or Restricting Use of Airport Roadways</u>. The Executive Director or Authorized Representative is authorized to close or restrict the use of any or all Airport roadways to Motor Vehicle traffic in the interest of safety.
  - 14.5 Storing, Parking or Repairing Motor Vehicles.
  - 14.5.1 Except as specified in Section 14.5.1.1 and 14.5.1.2 below, it shall be unlawful for a Motor Vehicle to be stored or repaired on the Airport.
    - 14.5.1.1 The Executive Director may designate specific areas where a Motor Vehicle may be stored or repaired on the Airport.
    - 14.5.1.2 Minor repairs necessary with respect to a temporarily disabled Motor Vehicle shall not be in violation of Section 14.5.1; however, the Authority can immediately tow or otherwise removal any Motor Vehicle that is causing a safety hazard or creating a traffic flow problem
  - 14.5.2 A Motor Vehicle Abandoned on the Airport, including any Motor Vehicle located within a paid parking lot, shall be towed at the Owner's expense.
- 14.6 Off Road Motor Vehicles. It shall be unlawful to operate any off road Motor Vehicle, including, but not limited to, dirt bikes and 3 and 4 wheelers, on the Airport, except for Airport operational purposes.
- 14.7 <u>License</u>. It shall be unlawful for any Person to operate a Motor Vehicle or motorized equipment on the Airport without valid authorization for use of the Motor Vehicle or equipment, and without holding a license or permit for said use, if required. Such license or permit must be issued by a state-licensing agency, or by the employer through a company training/certification program.

#### 14.8 Procedure In Case of Accident.

- 14.8.1 The Operator of any Motor Vehicle involved in an accident on the Airport which results in injury to or death of any Persons or property damage shall immediately stop such Motor Vehicle at the scene of the accident and shall render reasonable assistance.
- 14.8.2 The Operator shall immediately, by the quickest means of communications, give notice of the accident to Public Safety and to the Executive Director.
- 14.8.3 The Operator of each Motor Vehicle involved shall furnish the name and address of Owner and the driver of the Motor Vehicle, the Operator's license and the Motor Vehicle registration and the name of the liability insurance carrier for the Motor Vehicle, to any Person injured, the driver or occupant of the Motor Vehicle damage, and to any police officer.

### 14.9 Safe Speed

- 14.9.1 It shall be unlawful to drive or operate a Motor Vehicle on the Airport at a speed greater than is reasonable and prudent under the existing conditions and having due regard to actual and potential hazards.
  - 14.9.2 The speed limit on AOA Apron areas shall be 10 MPH.
- 14.9.3 Except as provided for in Section 14.9.3.1, it shall be unlawful to drive a Motor Vehicle at such a slow speed as to impede or block the normal and reasonable movements of traffic.
  - 14.9.3.1 It shall not be a violation of Section 14.9.3, if the reduced speed is necessary for safe operation or in compliance with the law.
- 14.9.4 It shall be unlawful to drive a Motor Vehicle on the streets and other vehicular traffic areas on the Airport, including parking areas, in excess of the speed limits indicated on signs posted by the Authority or on behalf of the Authority.

#### 14.10 Motor Vehicle Operations On Airport Operations Area.

- 14.10.1 Unless express permission has been granted by the Executive Director, it shall be unlawful for any Person to operate a Motor Vehicle on the AOA.
- 14.10.2 Except for an Authority Vehicles, and trucks and any other Vehicle necessary for the servicing and maintenance of Aircraft and transportation of

passengers on the Airport, it shall be unlawful to Park a Motor Vehicle on any portion of the AOA.

- 14.10.3 It shall be unlawful for any Person to Park a Vehicle in any manner so as to block or obstruct: (1) fire hydrants and the approaches thereto, (2) the gates or emergency exits, and/or (3) building entrances or exits.
  - 14.10.4 It shall be unlawful to Park a Motor Vehicle under loading bridges.
- 14.10.5 Aircraft taxiing on any Runway, Taxilane or Taxiway, or Apron area shall always have the right-of-way over any and all Motor Vehicle traffic.
- 14.10.16 Two-way radio communications with the air traffic control tower is required of each authorized Motor Vehicles or escort Motor Vehicles traversing or operating on the AMA during periods of tower operation or on the common traffic advisory frequency when the tower is closed.
- 14.11 <u>Violations of Section 14</u>. A violation of any provision of <u>Section 14 Motor Vehicles</u> shall be an infraction subject to the enforcement and penalties as specified in <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

### Section 15. Motor Vehicle Parking.

- 15.1 Operators of a Motor Vehicle using the Public Parking Facilities at the Airport shall observe and comply with all signs and markings, and a Motor Vehicle shall never be permitted to block, obstruct or interfere with Aircraft operations.
- 15.2 It shall be unlawful for any Motor Vehicle to remain in any of the Public Parking Facilities on the Airport for more than thirty (30) consecutive days, and each Motor Vehicle remaining in excess of 30 consecutive days may be considered Abandoned.
  - 15.2.1 A Motor Vehicle that is Abandoned shall be towed from the Airport at the Owner's expense.
- 15.3 It shall be unlawful for any Person utilizing those Public Parking Facilities that require hourly or daily fees to exit or otherwise remove their Motor Vehicle from said parking areas without first paying the fees that are rightfully due.
- 15.4 The owners or Operator of a Motor Vehicle who is granted permission to Park in employee parking lots or other designated areas on the Airport shall display the Authority issued permit on the Motor Vehicle at all times.

- 15.5 It shall be unlawful for any Person, at any time, to park a Motor Vehicle in any area not specifically designated for the parking of a Motor Vehicle whether on or off any tenant leasehold on the Airport.
- 15.6 Except for an authorized service Motor Vehicle while the Operator is performing official functions on behalf of the Airport, a utility company, contractor, or other authorized agent, it shall be unlawful for any Person to Park a Motor Vehicle on any public roadway on the Airport at any time.
- 15.7 Except for an authorized service Motor Vehicles while the Operator is performing official functions on behalf of the Airport, a utility company, contractor or other authorized agent, it shall be unlawful for any Person to Park a Motor Vehicle on sidewalks, greenways, or other landscaped areas.
- 15.8 It shall be unlawful for any Person to leave a Motor Vehicle unattended in front of the passenger terminal building along the curbside, or any portion of the terminal roadway for any period of time whatsoever.
- 15.9 It shall be unlawful for any Person to Park any Motor Vehicle in any reserved parking area without a valid permit issued by the Authority permitting such parking in the respective reserved area.
- 15.10 It shall be unlawful for any Person or Operator of a Motor Vehicle to block, obstruct or interfere with Aircraft operations.
- 15.11 Public Safety personnel may remove or cause to be removed from any restricted or reserved areas, any roadway or right-of-way, or any other unauthorized area or structure at the Airport, any property which is disabled, Abandoned or which interferes with aircraft operations, creates another operational problem, nuisance security or safety hazard or which otherwise is placed in an illegal, improper, or unauthorized manner.
  - 15.11.1 Any property removed under Section 15.11 shall be relocated to an official impound area or such other area designated by the Authority.
  - 15.11.2 Any property impounded by the Authority shall be released to the Owner or Operator thereof, upon proper identification of the property, after all towing, removal, or storage charges and any other fees have been paid.

#### 15.12 Violations of Section 15.

15.12.1 A violation of any provision of <u>Section 15 Motor Vehicle Parking</u>, except Section 15.8, shall be an infraction subject to the enforcement and penalties as specified in <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

15.12.2 A violation of Section 15.8 shall not be a misdemeanor or an infraction under N.C. Gen. Stat. § 14-4; however, civil penalties shall be assessed and civil citations issued for the violation of Section 15.8 above, in accordance with Section 17 Penalties, Remedies and Enforcement below.

#### Section 16. Ground Transportation Vehicles.

- 16.1 It shall be unlawful for any Person to operate a Motor Vehicle on the Airport for the purposes of providing commercial ground transportation, including but not limited to a Taxicab, Taxi or Cab, Limousine, Car Share, Transportation Network Company, Courtesy Vehicle or Shuttle Van/Bus, for pickup of passengers, without first obtaining a ground transportation permit from the Authority.
- 16.2 <u>Violations of Section 16</u>. A violation of <u>Section 16 Ground Transportation Vehicles</u> shall not be a misdemeanor or infraction under N.C. Gen. Stat. §14-4; however, civil penalties shall be assessed and civil citations issued for the administrative violation of any provision of <u>Section 16 Ground Transportation Vehicles</u> above, in accordance with <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u> below.

#### Section 17. Penalties, Remedies and Enforcement

- 17.1 Unless otherwise specified herein, violation of any provision of these Airport Rules & Regulations shall be enforced in accordance with, and subject to the penalties specified in, <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u>.
- 17.2 In addition to any civil or criminal penalties set out in <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u>, or in any other Section or subsection herein, these Rules & Regulations may be enforced by an injunction, order of abatement, or other appropriate equitable remedy issuing from a court of competent jurisdiction.
- 17.3 The Airport Rules & Regulations may be enforced by one, all or a combination of the penalties and remedies authorized and prescribed in this <u>Section 17 Penalties</u>, <u>Remedies and Enforcement</u>, or elsewhere herein, except that any provision, the violation of which incurs a civil penalty, shall not be enforced by criminal penalties.
- 17.4 Except as otherwise specified herein, each day's continuing violation of any provision of the Airport Rules & Regulations is a separate and distinct offense.
- 17.5 <u>Removal or Denial of Access</u>. The Executive Director or his/her Authorized Representative may order any Person to cease and desist any activities or conduct in violation of or in noncompliance with these Airport Rules & Regulations.

- 17.5.1 The Executive Director or his/her Authorized Representative may order any Person who knowingly fails to comply with a cease and desist order removed from or denied access to the Airport.
  - 17.5.1.1 An order of removal from or denial of access to the Airport shall be issued by the Executive Director or Authorized Representative in writing, and shall be hand delivered or sent by certified mail to the Person's last known address.
  - 17.5.1.2 An order of removal from or denial of access to the Airport shall set forth the reasons for and dates on which removal or denial of access shall begin and end.
- 17.5.2 The Executive Director or Authorized Representative has the authority to take such action as may be necessary to enforce all Airport Rules and Regulations, Directives or Ordinances, and to safeguard the public in attendance at the Airport, and its facilities. All Persons upon the Airport shall cooperate with the Executive Director or Authorized Representative responsible for enforcing these Airport Rules & Regulations.

#### 17.6 Enforcement of Administrative Violations By Civil Citation.

- 17.6.1 The Executive Director shall authorize specific Authority personnel to enforce all administrative violations of these Airport Rules & Regulations by civil citation.
- 17.6.2 Upon any administrative violation of these Airport Rules & Regulations, personnel designated in accordance with Section 17.6.1 shall cause a civil citation to be issued to the violator.
- 17.6.3 All civil citations shall be hand-delivered to the violator or shall be mailed by first class mail addressed to the last known address of the violator. The violator shall be deemed to have been served upon hand-delivery or the mailing of the civil citation.
- 17.6.4 Unless otherwise expressly specified herein the civil penalty associated with each civil citation issued for an administrative violation of these Airport Rules & Regulations shall be as follows:
  - 17.6.4.1 Violation of any provision in <u>Section 6 General Regulations</u>: **\$150.00**.
  - 17.6.4.2 Violation of any provision in <u>Section 8 Safety Regulations</u>: **\$250.00**.

- 17.6.4.3 Violation of any provision in <u>Section 9 Aeronautical</u> <u>Regulations</u>: **\$400.00**.
- 17.6.4.4 Violation of any provision in <u>Section 10 Airport Operational</u> Restrictions: **\$400.00**
- 17.6.4.5 Violation of any provision in <u>Section 11 Taxi and Ground Rules</u>: **\$400.00**
- 17.6.4.6 Violation of any provision in <u>Section 12 Rotorcraft</u>

  <u>Operations</u>: **\$400.00**
- 17.6.4.7 Violation of any provision in <u>Section 13 Use of T-Hangars</u> and <u>Storage Hangars</u>: **\$400.00**
- 17.6.4.8 Violation of Section 15.8: **\$25.00**
- 17.6.4.9 Violation of any provision in <u>Section 16 Ground</u>
  <u>Transportation Vehicles</u>: **\$50.00**
- 17.6.5 Any Person may submit, within ten (10) days of receipt of a civil violation, a written request that the Executive Director review the civil citation, in accordance with Sections 17.6.5.1 through 17.6.5.3 below.
  - 17.6.5.1 A request to the Executive Director shall be in writing and shall be hand delivered to the Office of the Executive Director and must be signed for by an employee of the Authority, or shall be mailed to the Executive Director by certified mail, return receipt requested.
  - 17.6.5.2 A request to the Executive Director must specify in detail all of the reasons why the civil citation should be modified or withdrawn and must provide a mailing address for the Executive Director to submit a response to the request.
  - 17.6.5.3 Within ten (10) days of receipt of a request in accordance with Section 17.6.5.1, the Executive Director shall mail a written decision to the requesting party at the address provided.
- 17.6.6 Unless a written request for review in accordance with Section 17.6.5 above, civil penalties issued via civil citation for an administrative violation of any Section of these Airport Rules & Regulations shall be due and payable to the Authority within 30 days of receipt of the civil citation.

- 17.6.7 If a written request for review is appealed and the civil citation is not withdrawn, payment of the civil penalty shall be due and payable to the Authority within 30 days of issuance of the Executive Director's written decision to the violator.
- 17.6.8 Unless other provided, if the violator fails to respond to a citation within 30 days of issuance and pay the fine prescribed therein, the Authority may institute a civil action in the nature of a debt in the appropriate division of the state general court of justice to collect the fine owed.

#### 17.7 Enforcement of Misdemeanors.

- 17.7.1 Public Safety Officers are authorized to enforce violations of these Airport Rules & Regulations under N.C. Gen. Stat. § 14-4.
- 17.7.2 Unless otherwise expressly specified herein, a Person found to have violated any provision of <u>Section 7 Personal Conduct</u> shall be guilty of a Class 3 misdemeanor in accordance with N.C. Gen. Stat. § 14-4, and shall be subject to a fine, as specified in Section 17.3.2.1 below.
  - 17.7.2.1 Violation of any provision in <u>Section 7 Personal Conduct</u>: **\$250.00**.

#### 17.8 Enforcement of Infractions.

- 17.8.1 Public Safety Officers are authorized to enforce violations of these Airport Rules & Regulations under N.C. Gen. Stat. § 14-4 that constitute infractions.
  - 17.8.2 Unless otherwise expressly specified herein, any violation of <u>Section 14 Motor Vehicles</u> or <u>Section 15 Motor Vehicle Parking</u>, except Section 15.8, shall constitute an infraction, and shall subject the violator to a fine not to exceed **\$50.00**, in accordance with N.C. Gen. Stat § 14-4, and as specified in Section 17.8.2.1 and 17.8.2.4 below.
    - 17.8.2.1 Violations of any provision in <u>Section 14 Motor Vehicles</u>: **\$50.00**.
    - 17.8.2.2 Violations of any provision in <u>Section 15 Motor Vehicle</u> Parking, except Section 15.8: **\$50.00**.

#### SECTION 18. Miscellaneous.

- 18.1 <u>Conflict</u>. These Airport Rules & Regulations supersede and control all the Minimum Standards and all of the Authority's Leasing Policies to the extent of any conflicts, unless the Minimum Standard is required by the FAR. If the Minimum Standard is required by the FAR, the Minimum Standard will have the force and effect as required by the FAR.
- 18.2 <u>Severability</u>. If any provision of these Airport Rules & Regulations is held by any court of competent jurisdiction to be invalid, then the invalid provision shall be considered a separate and distinct and independent part of the ordinance, and such invalidity shall not affect the validity or enforcement of the ordinance as a whole or of any other part contained therein.
- 18.3 <u>Amendment</u>. The Greater Asheville Regional Airport Authority reserves the right to adopt such amendments to these Airport Rules & Regulations from time to time as it determines are necessary or desirable for the benefit of the general public or the operation of the Airport.



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Lew Bleiweis, A.A.E., Executive Director

DATE: February 17, 2017

#### ITEM DESCRIPTION - New Business Item A

Approval to Unseal Closed Session Minutes

#### **BACKGROUND**

The Board approved the Disposition of Authority Board Closed Session Minutes Policy at the April 15, 2011 Authority Board Meeting. The policy provides for the review of the preceding year's Closed Session Minutes at the first Authority Board meeting of each calendar year.

The Director has reviewed those Closed Session Minutes and has provided a recommendation for the unsealing of those certain minutes. The minutes recommended to be unsealed are of a business matter that has come to fruition and is no longer of a confidential nature.

#### **ISSUES**

None

#### **ALTERNATIVES**

The Board can decide to keep all Closed Session Minutes sealed.

#### FISCAL IMPACT

None

#### RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to unseal those portions of Closed Session Minutes as designated and recommended by the Executive Director.



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Lew Bleiweis, Executive Director

DATE: February 17, 2017

#### ITEM DESCRIPTION - New Business Item B

Approval of Property Purchase

#### **BACKGROUND**

The airport owns property that resides just south of Highway 280 and surrounded by Broadmoor Golf Links ("Broadmoor"). A portion of the property owned by the airport is used for the runway safety area, as required by the Federal Aviation Administration (FAA). With the realignment of the runway as part of the airfield redevelopment project (Project), the runway safety area also needs to be realigned. This realignment requires the purchase of an additional +/- 2.3 acres of property.

For the past couple of years, staff has been in discussions with several individuals with Warrior Golf Management, LLC, owners of Broadmoor, about acquiring the necessary property for the Project.

Staff had the property appraised in accordance with FAA procedures and the price was determined to be \$75,200.00 per acre for a total of \$173,000. An offer in this amount was made to Broadmoor. Broadmoor conducted their own appraisal and came up with a value of \$123,913 per acre for a total of \$285,000. After further discussions with Broadmoor, the FAA allowed us to offer an administrative settlement of \$84,601 per acre for a total of \$194,582. This offer was accepted by Broadmoor.

#### **ISSUES**

None.

#### **ALTERNATIVES**

None.



GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY New Business Item B Approval of Property Purchase Page 2

#### **FISCAL IMPACT**

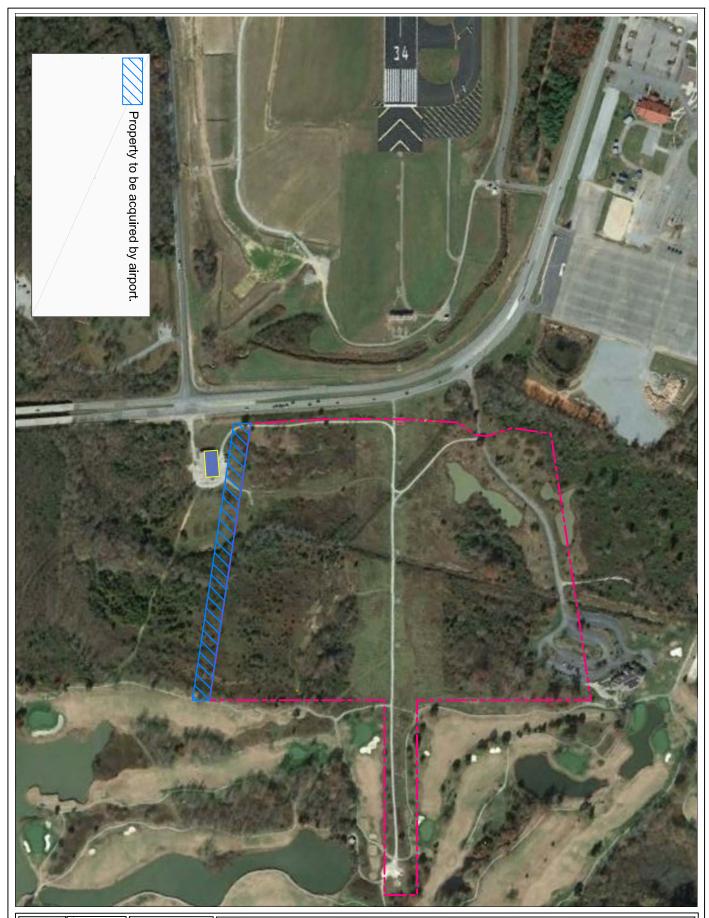
The total purchase price will be \$194,582.00 plus survey and closing costs.

This was a budgeted expenditure in the FY2017 budget, and inclusive of total Project budget. The acquisition also qualifies for eligibility with the FAA and will be reimbursed at the appropriate share.

#### RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to (1) approve the property purchase of 2.3 acres with Broadmoor Golf Links, LLC. for a total purchase price of \$194,582.00 plus survey, closing costs and any other ancillary expenditures necessary for closing; and (2) authorize the Executive Director to execute the necessary documents.

Attachment







### Asheville Regional Airport

Golf Course Property Acquisition



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Lew Bleiweis, Executive Director

DATE: February 17, 2017

#### ITEM DESCRIPTION - New Business Item C

Approval of Resolution Authorizing the Submission of the Draft Airport Assignment & Assumption Agreement to the Federal Aviation Administration for Purposes of Coordinated Review

#### **BACKGROUND**

The Authority has been working with consultant, Steve Baldwin, and with legal counsel and counsel for the City of Asheville and the County of Buncombe to prepare the GARAA's application seeking a new Airport Operating Certificate to the GARAA and seeking authorization for the GARAA to act as sole sponsorship of the Asheville Regional Airport under 49 C.F.R. Part 139. More specifically, the City, the County, the Old Authority and the New Authority are seeking approval and recognition by the FAA for the New Authority to act as the sole sponsor of the Airport for purposes of the receipt of federal funds, including the obligation to comply with the responsibilities imposed by the FAA Sponsor's Assurances in connection with the grant agreements related to the Asheville Regional Airport. As part of this process, the City of Asheville would also execute a Special Warranty Deed transferring title to the Real Property that comprises the Asheville Regional Airport to the GARAA, in accordance with North Carolina Session Law 2012-121.

Prior to the submission of a complete application to the FAA, and in anticipation of submitting it as part of a full application to the FAA, it is the intent of the GARAA's consultant to submit to the FAA a draft Airport Assignment & Assumption Agreement for the FAA's coordinated review. It is further the intent of the GARAA, the ARAA, the City and the County that the Airport Assignment & Assumption Agreement and the Special Warranty Deed from the City to be executed contemporaneously and interpreted as a single transaction, to provide for the orderly transition of Airport operations and the transfer of all Airport assets from the City, the County and the Old Authority to the New Authority, in accordance with North Carolina Session Law 2012-121, subject to a



#### GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

New Business Item C
Approval of Resolution Authorizing the Submission of the Draft Airport Assignment &
Assumption Agreement to the Federal Aviation Administration for Purposes of
Coordinated Review

Page 2

determination by the FAA that it approves or otherwise does not object to such assignment.

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None.

#### **ALTERNATIVES**

None.

#### FISCAL IMPACT

Not Applicable

#### RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board: (1) find the draft Airport Assignment & Assumption Agreement to be accurate and appropriate; (2) authorize the Executive Director and the consultant for the GARAA to submit the draft Airport Assignment & Assumption Agreement to the FAA for review; and (3) resolve to approve the Resolution Authorizing the Submission of the Draft Airport Assignment & Assumption Agreement to the Federal Aviation Administration for the Purposes of Coordinated Review.

Attachment

#### **GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY**

RESOLUTION NO. 021717-01

## RESOLUTION AUTHORIZING THE SUBMISSION OF THE DRAFT AIRPORT ASSIGNMENT & ASSUMPTION AGREEMENT TO THE FEDERAL AVIATION ADMINISTRATION FOR PURPOSES OF COORDINATED REVIEW

WHEREAS, the City of Asheville, North Carolina (the "City") and the County of Buncombe, North Carolina (the "County") are currently co-sponsors of the Asheville Regional Airport (the "Airport") located in Asheville, North Carolina for purposes of compliance with Federal Aviation Administration ("FAA") obligations; and

WHEREAS, the Asheville Regional Airport Authority (the "Old Authority") was created, pursuant to N.C. Gen. Stat. § 160A-462, by the City and the County, and, prior to October 12, 2012, operated and maintained the Airport in accordance with that Restated and Amended Airport Authority Agreement dated January 22, 2008 (the "ARAA Agreement"); and

WHEREAS, on June 28, 2012, the General Assembly of the State of North Carolina adopted House Bill 552, Session Law 2012-121 (the "Act"), which created the Greater Asheville Regional Airport Authority (the "New Authority") to operate and maintain the Airport, in accordance with the Act; and

WHEREAS, the New Authority is a body corporate and politic having all of the powers, authority, and jurisdiction enumerated in the Act, and such other and additional powers and authority as shall be conferred upon it by future acts of the North Carolina General Assembly, including, but not limited to, the power and authority to: acquire aeronautical facilities and other property; incur debt; enter into lease agreements; collect fees and charges; and make rules, regulations and policies governing the use of the Airport and airport facilities; and

WHEREAS, the New Authority is further empowered by the Act to accept grants of money and/or materials and property of any kind from, and to enter into contracts and grant agreements with, the FAA; and

WHEREAS, on September 23, 2014, the Asheville City Council adopted Resolution number 14-230 (the "City Resolution"), authorizing the transfer of any real or personal property owned by the City at the Airport to the New Authority; and

WHEREAS, on February 4, 2014, the Buncombe County Commissioners adopted Resolution number 14-02-03 (the "County Resolution"), authorizing the County's cooperation and assistance in the transfer of any real or personal property at the Airport to the New Authority; and

WHEREAS, the City, the County, the Old Authority and the New Authority have cooperatively prepared the Draft Assignment and Assumption Agreement in anticipation of submitting it as part of a full application to the FAA for a new Airport Operating Certificate to the New Authority, and authorization to act as sole sponsor, under 49 C.F.R. Part 139; and

WHEREAS, the Board of the New Authority has reviewed the attached draft Airport Assignment and Assumption Agreement to be accurate and appropriate for submission to the City and to the County for conceptual concurrence, and thereafter for submission to the FAA for review.

NOW THEREFORE, BE IT RESOLVED, by the Board of the Greater Asheville Regional Airport Authority as follows: The Board hereby finds the attached draft Airport Assignment and Assumption Agreement to be accurate and appropriate and authorizes the Executive Director and the consultant for the New Authority to submit the attached draft Airport Assignment and Assumption Agreement to the FAA for review.

Adopted this the day of Februa	ary, 2017.	
	GREATER	R ASHEVILLE REGIONAL AIRPORT AUTHORITY
ATTESTED BY:	By:	Robert C. Roberts, Chair
Ellen M. Heywood, Clerk to the Board		

### STATE OF NORTH CAROLINA COUNTY OF BUNCOMBE

I, Ellen Heywood, the Clerk to the Board of the	e Greater Asheville Regional Airport Authority, do
hereby certify that the foregoing is a true and exa	ct copy of a resolution entitled "RESOLUTION
AUTHORIZING THE SUBMISSION OF THE DRAF	T AIRPORT ASSIGNMENT & ASSUMPTION
AGREEMENT TO THE FEDERAL AVIATION ADMINI	STRATION FOR PURPOSES OF COORDINATED
REVIEW" adopted by the Board of the Greater Ashevil	le Regional Airport Authority at a meeting held on
the day of February, 2017.	
Witness my hand and the corporate seal of the the day of February, 2017.	Greater Asheville Regional Airport Authority, this
	Ellen Heywood
	Clerk
	Greater Asheville Regional Airport Authority

#### AIRPORT ASSIGNMENT AND ASSUMPTION AGREEMENT

This Airport Assignment and Assumption Agreement (this "Assignment") is entered into as of \_\_\_\_\_\_\_, 2017, by and between the CITY OF ASHEVILLE, North Carolina (the "City") 70 Court Plaza, Asheville, North Carolina 28801, the COUNTY OF BUNCOMBE, NORTH CAROLINA (the "County") 200 College Street, Suite 300, Asheville, North Carolina 28801, the ASHEVILLE REGIONAL AIRPORT AUTHORITY (the "Old Authority"), and the GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY (the "New Authority"), 61 Terminal Drive, Fletcher North Carolina 28732.

#### **RECITALS**

The City and the County are currently co-sponsors of the Asheville Regional Airport (the "Airport") located in Asheville, North Carolina for purposes of compliance with Federal Aviation Administration ("FAA") obligations.

The Old Authority was created, pursuant to N.C. Gen. Stat. § 160A-462, by the City and the County, and, prior to October 12, 2012, operated and maintained the Airport in accordance with that Restated and Amended Airport Authority Agreement dated January 22, 2008 ("ARAA Agreement"). A copy of the ARAA Agreement is attached hereto as Exhibit A.

The City is the owner of certain tracts of land together with certain buildings and other improvements that comprise the Airport ("Real Property") and which were leased to the Old Authority, originally in 1980 and most recently pursuant to that certain Restated and Amended City-Airport Authority Lease Agreement dated January 22, 2008 (the "Lease"), as amended from time to time to add additional property to the Lease. The initial term of the Lease extends through April 30, 2018. A copy of the Lease is attached hereto as Exhibit B. A description of all of the Real Property comprising the Airport is attached as Exhibit I.

On June 28, 2012, the General Assembly of the State of North Carolina adopted House Bill 552, Session Law 2012-121 (the "Act"), which created the New Authority and mandated that the City transfer to the New Authority "all of its right, title and interest to the property known as the Asheville Regional Airport." A copy of the Act is attached hereto as Exhibit C.

The New Authority is a body corporate and politic having all of the powers, authority, and jurisdiction enumerated in the Act, and such other and additional powers and authority as shall be conferred upon it by future acts of the North Carolina General Assembly, including, but not limited to, the power and authority to: acquire aeronautical facilities and other property; incur debt; enter into lease agreements; collect fees and charges; and make rules, regulations and policies governing the use of the Airport and airport facilities.

The New Authority is further empowered by the Act to accept grants of money and/or materials and property of any kind from, and to enter into contracts and grant agreements with, the FAA.

On or about October 12, 2012, in accordance with the requirements of the Act, and pursuant to that First Bill of Assignment, Conveyance, Transfer, Authorization and Grant ("First Assignment"), the Old Authority authorized, granted, assigned, conveyed, transferred, and delivered unto the New Authority all of Old Authority's rights, title, interests and obligations, in and to, and control of, all of Old Authority's property, rights and interests, personal and mixed, tangible and intangible, whether contingent or not, and wherever located, including, but not limited to all personal property that is part of the Asheville Regional Airport and/or owned, used or considered to be used by the Old Authority or the Asheville Regional Airport. A copy of the First Assignment is attached hereto as Exhibit D.

On September 23, 2014, the Asheville City Council adopted Resolution number 14-230 (the "City Resolution"), authorizing the transfer to the New Authority of any real or personal property owned by the City at the Airport. A copy of the City Resolution is attached hereto as Exhibit E.

On February 4, 2014, the Buncombe County Commissioners adopted Resolution number 14-02-03 (the "County Resolution"), authorizing the County's cooperation and assistance in the transfer to the New Authority of any real or personal property at the Airport. A copy of the County Resolution is attached hereto as Exhibit F.

On or about August 30, 2016, for the purpose of securing financing to proceed with the construction of a parking garage at the Airport, and pursuant to that certain Second Bill of Assignment, Conveyance, Transfer, Authorization, and Grant ("Second Assignment") the Old Authority, with the acknowledgment and authorization of the City, authorized, granted, assigned, conveyed, transferred and delivered unto the New Authority all of Old Authority's rights, title, interests and obligations, in, to and under the Lease. A copy of the Second Assignment is attached hereto as Exhibit G.

The City, the County, the Old Authority and the New Authority seek approval and recognition by the FAA for the New Authority to act as the sole sponsor of the Airport for purposes of the receipt of federal funds, including the obligation to comply with the responsibilities imposed by the FAA Sponsor's Assurances in connection with the grant agreements related to the airport (the "Grant Agreements") as listed in Exhibit H. In addition to this Assignment, the City will contemporaneously execute a Special Warranty Deed for the transfer of the Real Property, as more specifically described therein, from the City to the New Authority. The form Special Warranty Deed is attached hereto as Exhibit J.

On or after the Effective Date, the City and the County will terminate the ARAA Agreement and the Old Authority will be dissolved.

Since at least October 2012, the City and the County have treated the Airport as a separate enterprise and control of all funds for the benefit of the Airport has been by the New Authority. As such, there are currently no funds held by the City or the County for the benefit of the Airport, and all funds for the benefit of the Airport are held by the New Authority.

It is the intent of the parties through this Airport Assignment and Assumption Agreement and the Special Warranty Deed, which are intended to be executed contemporaneously and interpreted as a single transaction, to provide for the orderly transition of Airport operations and the transfer of all Airport assets from the City, the County and the Old Authority to the New Authority, subject to a determination by the FAA that it approves or otherwise does not object to such assignment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City, the County, the Old Authority and the New Authority agree as follows:

- 1. <u>Incorporation of Recitals.</u> The above recitals are made a part of this Assignment.
- 2. <u>Incorporation of Exhibits.</u> The following exhibits are incorporated herein and made a part of this Assignment:

Exhibit A – ARAA Agreement

Exhibit B – The Lease

Exhibit C – The Act

Exhibit D – The First Bill of Assignment

Exhibit E – The City Resolution

Exhibit F – The County Resolution

Exhibit G – The Second Bill of Assignment

Exhibit H – List of Grant Agreements

Exhibit I – Airport Property Description

Exhibit J – The Special Warranty Deed

Exhibit K – ARAA Resolution

- 3. <u>Effective Date.</u> The Effective Date of this Assignment is the date the FAA approves the transfer of Sponsorship and issues an Airport Operating Certificate to the New Authority under 14 C.F.R. Part 139 (the "Effective Date").
- 4. <u>Assignment.</u> On the Effective Date, the City, the County and the Old Authority grant, convey, transfer and assign to the New Authority, all of their rights, title, interests and obligations in, to and under the Grant Agreements, including but not limited to the Grant Agreements listed on the attached Exhibit H.
- 5. <u>Acceptance and Assumption.</u> On the Effective Date, the New Authority accepts the assignment granted, and agrees to be bound by and to perform all of the terms, covenants and conditions of the Grant Agreements (including the obligation to comply with the responsibilities

imposed under the FAA Sponsor's Assurances in connection with the Grant Agreements, the terms, covenants and conditions of which are incorporated by reference).

- 6. <u>Transfer of Personal Property.</u> On the Effective Date, the City, the County, and the Old Authority, to the extent they each own any personal property at the Airport, each transfer to the New Authority all fixtures, equipment and personal property used in the operation of the Airport as of the Effective Date.
- 7. <u>Transfer of Real Property.</u> Prior to the Effective Date, the City will provide a Special Warranty Deed to the New Authority transferring ownership to the New Authority of the Real Property owned by the City at the Airport as of the Effective Date. To the extent necessary, the County will join as a grantor on the Special Warranty Deed. The Special Warranty Deed provided by the City will not be recorded until on or after the Effective Date.
- 8. Reversion. If for any reason the New Authority ceases to operate as the Airport sponsor or is dissolved, the sponsorship with regard to ownership, federal obligations and day-to-day operation of the Airport (change in sponsorship) shall revert to a successor so named by act of the North Carolina General Assembly and signed into law by the Governor of the State of North Carolina. Such change in sponsorship shall be subject to the approval of the FAA. In the event the North Carolina General Assembly fails to act in a timely manner, the ownership, federal obligations and day-to-day operations shall revert to the City and the County, which shall serve as co-sponsors until such time as an alternative sponsor may be identified by act of the North Carolina General Assembly and approved by the FAA. If for any reason the New Authority ceases to operate as the Airport sponsor or is dissolved, then ownership of all of the personal property conveyed herein shall revert back to its original ownership to either the City or the County. As required by the Act, if for any reason the New Authority is dissolved or the Airport ceases to operate, ownership of all of the Real Property conveyed by the Special Warranty Deed shall revert back to the City
- 9. <u>Dissolution of Old Authority</u>. On or after the Effective Date, the City and County shall terminate the ARAA Agreement, and the Old Authority Board shall be dissolved in accordance with the Resolution adopted by the Old Authority on February 17, 2017 ("ARAA Resolution") and attached hereto and included herein as Exhibit K.

#### 10. Representations of the City: The City represents and warrants that:

- (a) The City represents that it has taken all necessary action to authorize the execution, delivery, and performance of this Assignment and has the authority to execute, deliver and perform this Assignment and all the transactions contemplated hereby.
- (b) There are no claims pending or threatened before any tribunal or administrative or regulatory authority, except those that have been disclosed to the New Authority, which would materially impair the City's right to make the assignments provided in this Assignment.
- (c) The City has disclosed to the New Authority all material liabilities of any nature, whether accrued, contingent or otherwise, relating to the Airport.

- (d) The City has not caused any default under the terms of the Grant Agreements and that it has not received notice of violation of the Grant Agreements by the FAA or any other party.
  - (e) The City has the right to assign the Grant Assurances.

#### 11. Representations of the County: The County represents and warrants that:

- (a) The County represents that it has taken all necessary action to authorize the execution, delivery, and performance of this Assignment and has the authority to execute, deliver and perform this Assignment and all the transactions contemplated hereby.
- (b) There are no claims pending or threatened before any tribunal or administrative or regulatory authority, except those that have been disclosed to the New Authority, which would materially impair the County's right to make the assignments provided in this Assignment.
- (c) The County has disclosed to the New Authority all material liabilities of any nature, whether accrued, contingent or otherwise, relating to the Airport.
- (d) The County has not caused any default under the terms of the Grant Agreements and that it has not received notice of violation of the Grant Agreements by the FAA or any other party.
  - (e) The County has the right to assign the Grant Assurances.
- 12. <u>Representations of the Old Authority:</u> The Old Authority represents and warrants that:
- (a) The Old Authority represents that it has taken all necessary action to authorize the execution, delivery, and performance of this Assignment and has the authority to execute, deliver and perform this Assignment and all the transactions contemplated hereby.
- (b) There are no claims pending or threatened before any tribunal or administrative or regulatory authority, except those that have been disclosed to the New Authority, which would materially impair the Old Authority's right to make the assignments provided in this Assignment.
- (c) The Old Authority has disclosed to the New Authority all material liabilities of any nature, whether accrued, contingent or otherwise, relating to the Airport.
- (d) The Old Authority has not caused any default under the terms of the Grant Agreements and that it has not received notice of violation of the Grant Agreements by the FAA or any other party.

- 13. <u>Representations of the New Authority.</u> The New Authority represents and warrants that:
- (a) The New Authority represents that it has taken all necessary action to authorize the execution, delivery, and performance of this Assignment and has the authority to execute, deliver and perform this Assignment and all the transactions contemplated hereby.
- (b) There are no claims pending or threatened before any tribunal or administrative or regulatory authority, except those that have been disclosed to the City and the County, which would materially impair the New Authority's right to assume the assignments provided in this Assignment.
- (c) The New Authority has disclosed to the City and the County all material liabilities of any nature, whether accrued, contingent or otherwise, relating to the Airport.
- (d) The New Authority has not caused any default under the terms of the Grant Agreements and that it has not received notice of violation of the Grant Agreements by the FAA or any other party and, to the best knowledge of the New Authority, no other party's actions violate the Grant Agreements.
  - (e) The New Authority has the right to assume the Grant Assurances.
- 14. <u>Notices.</u> Any notice required or permitted to be given will be deemed given when mailed in a sealed envelope by United States certified mail, return receipt requested, postage prepaid, properly addressed as follows to such other address as specified by written notice to the other party:

As to the City:
City Manager
City of Asheville
70 Court Plaza
Asheville, North Carolina 28801

Copy to: City Attorney

As to the County:

County Manager 200 College Street, Suite 300 Asheville, North Carolina 28801

Copy to: County Attorney

As to the New Authority
Executive Director
Greater Asheville Regional Airport Authority
61 Terminal Drive
Fletcher, North Carolina 28732

Copy to: New Authority Attorney

- 15. <u>Legally Binding.</u> All of the covenants and conditions contained in this Assignment will be binding and inure to the benefit of the successors, assigns and legal representatives of the parties. The FAA is intended to be a third party beneficiary with respect to all provisions of this Assignment.
- 16. <u>Entire Agreement.</u> This Assignment, together with the Special Warranty Deed, , constitute the entire understanding and agreement of the parties and supersede all prior agreements and understandings between them, whether written or verbal, with respect to the subject matter hereof.
- 17. <u>Non-waiver</u>; <u>Modification</u>. No failure by either party to insist upon the strict performance of any provisions of this Assignment or to exercise any right or remedy upon a breach, and no acceptance of full or partial performance by either party during the continuance of any breach will constitute a waiver of a breach of any provision. No oral modification of this Assignment will be binding, and any modification must be in writing and signed by the parties.
- 18. <u>Severability.</u> If any provision of this Assignment is held invalid or unenforceable by any court with jurisdiction, the result will not invalidate or render unenforceable any other provision of this Assignment.
- 19. <u>Construction.</u> Each party acknowledges that it has participated in the negotiation of this Assignment, and no provision of this Assignment shall be construed against or interpreted to the disadvantage of any party hereto by any court or other governmental or judicial authority by reason of such party having or being deemed to have structured, dictated or drafted such provision. All parties have at all times had access to an attorney in the negotiation of the terms of and in the preparation and execution of this Assignment, and have had the opportunity to review and analyze this Assignment for a sufficient period of time prior to the execution and delivery thereof. No representations or warranties have been made by or on behalf of any party or relied upon by any party pertaining to the subject matter of this Assignment, other than those set forth in this Assignment.

IN WITNESS WHEREOF, the parties have caused this Assignment to be executed by their duly authorized representatives the day and year first written above.

ATTEST:	THE CITY OF ASHEVILLE
City Clerk:	By:
	Its:
	Date:
	Date:

ATTEST:	THE COUNTY OF BUNCOMBE
County Clerk:	By:
	Its:
	Date:
	ASHEVILLE REGIONAL AIRPORT AUTHORITY
	By:
	Its:
	Date:
Attest:	
Ellen M. Heywood, Clerk	to the Board
	GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY
	By:
	Its:
Attest:	Date:
Attest.	
Ellen M. Heywood, Clerk	to the Board
Notary Blocks	



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Michael A. Reisman, A.A.E.

Deputy Executive Director, Development and Operations

DATE: February 17, 2017

#### ITEM DESCRIPTION - New Business Item D

Approve Contract for Construction of Airfield Re-development Project – Phase IV

#### **BACKGROUND**

The Airport Board has established a \$75.8M budget for construction of the Airfield Redevelopment Project. Phases I and II of the project have been completed, resulting in the commissioning of the temporary runway. Phase III is presently close to completion.

Phase IV of the project includes paving and lighting of the new permanent runway, installation of instrument landing systems, and conversion of the temporary runway to a permanent taxiway. Funding for this phase of work also includes certain engineering design and inspection services associated with the planned scope of work.

Phase IV construction (Bid Package 4) was publicly advertised on December 2, 2016. In addition to the public advertisement, several contractors known to be capable of bidding a project of this size and nature were contacted directly. A pre-bid meeting was held on December 15, 2016. Sealed bids were received and opened on January 27<sup>th</sup>. The bid tabulation is included with this Board Memo.

This phase of the project was bid with several additive alternates, most notably, the option of constructing the pavement with concrete in lieu of asphalt. The FAA has a complex formula for determining the life cycle cost benefits associated with using concrete, and for this project, the life cycle cost does not support the additional cost associated with concrete. The permanent runway will therefore be constructed with asphalt.



GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY
New Business Item D
Approve Contract for Construction of Airfield Re-development Project – Phase IV
Page 2

The responsive and responsible low bid for the asphalt alternative was submitted by Cedar Peaks Enterprises, Inc. in the amount of \$32,492,332.70 (Volume 2 and 3 base bids), plus \$32,425.00 for Bid Alternate 1 (LED Runway Lights), and \$1,178,338.00 for Bid Alternate 2 (Taxiway A Shoulders). The total amount submitted including the bid alternates is \$33,703,095.70. The engineers estimate for this scope of work was \$34,693,531.25.

Bid alternates 3 and 4 (Taxiways B2 and B4) for a total amount of \$1,247,324.50 are not recommended by staff.

An additional lump sum allowance of \$1,000,000.00 (3%) for miscellaneous costs and potential overages during construction is recommended for this project, bringing the total estimated cost of construction to \$34,703,095.70.

#### **ISSUES**

None.

#### **ALTERNATIVES**

The recommended action includes add/alternate 1 in the amount of \$32,425.00 for upgrade of the runway lights from quartz to LED. This is a minimal amount of additional cost that will result in substantial electrical utility cost savings over the life of the system. The Board could elect not to undertake this work. The recommended action also includes add/alternate 2 in the amount of \$1,178,338.00 for the inclusion of asphalt shoulders on Taxiway A which could also be eliminated from the project. This work will eventually need to be carried out under a separate project at a later date, and at a substantially higher cost than can be achieved under this project at this time.

#### FISCAL IMPACT

Total estimated expenses of \$34,703,095.70 will be funded with \$2,769,447 in AIP Entitlement Funds, \$18,052,242 in AIP Discretionary Funds, \$300,000 in NC Department of Transportation Funds and \$13,581,406.7 in Airport Fund Balance.

The total amount is \$5,455,096 over the amount included in the 2016/2017 fiscal year budget, resulting in the Budget Amendment included below.



### GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY New Business Item D Approve Contract for Construction of Airfield Re-development Project – Phase IV Page 3

To date, expenses incurred on the Airfield Re-development Project total \$41,204,056, which includes engineering related services, and other miscellaneous costs for various permits, reviews, and government fees. This amount, plus outstanding contract commitments, and the expenses associated with this action, brings the total project estimate to \$79.9M. Staff anticipates receiving additional federal funds to meet these additional funding needs.

#### RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to (1) approve an amended budget of \$79.9M for the Airfield Redevelopment Project; (2) approve the Airfield Re-development construction project – Bid Package 4, with Cedar Peak Enterprises Incorporated in the amount of \$34,703,095.70 (\$33,703,095.70 plus \$,1000,000.00 allowance); (3) authorize the Executive Director to execute the necessary documents; and (4) amend the FY2016/2017 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2017:

Section 1. To amend the appropriations as follows:

#### **EXPENDITURES**:

Capital Improvements	<u>Decrease</u>	<u>Increase</u> \$5,455,096
Totals	\$0	\$5,455,096

This will result in a net increase of \$5,455,096 in the appropriations. Revenues will be revised as follows:



## GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY New Business Item D Approve Contract for Construction of Airfield Re-development Project – Phase IV Page 4

<u>Decrease</u>

<u>Increase</u>

#### **REVENUES:**

Federal Grants – AIP Entitlement Funds \$			
Federal Grants – AIP Discretionary Fu NC Department of Transportation Fu Transfer from GARAA Cash		\$ \$ 300,000 \$7,924,443	
Totals	\$2,769,347	\$8,224,443	
Section 2. Copies of this budgethe Greater Asheville Regional Airpor Finance Officer for their direction.  Adopted this 17 <sup>th</sup> day of February	, c		
Robert C. Roberts, Chair			
Attested by:			
Ellen Heywood, Clerk to the Bo	 oard		

#### **Greater Asheville Regional Airport Authority - Bid Tabulation**

Project Name: AIRFIELD REDEVELOPMENT PROJECT - BP4 Permanent Runway 17-35 Construction, Paving, Lighting and NAVAIDS

Date/Time: January 27, 2017 at 2:00PM EST

		Addenda		Total Base Bid	Total Base Bid					Base Bid Vol 3-
	Company Name & Address	Confirmed	Bid Bond	Vol2-Asphalt	Vol2-Concrete	Bid Alt 1	Bid Alt 2	Bid Alt 3	Bid Alt 4	Conversion
1	McCarthy Improvements Co 5401 Victoria Ave Davenport, IA 52807	Yes	Yes	\$0.00	\$47,215,025.37	\$81,072.30	\$1,911,049.61	\$903,717.56	\$899,270.39	\$5,095,320.52
					A 14 14 14 14 14 14 14 14 14 14 14 14 14			To the second		
2	Cedar Peaks Enterprises Inc 2717 Kearney Road Wake Forest, NC 27587	Yes	Yes	\$29,592,020.20	\$0.00	\$32,425.00	\$1,178,338.00	\$626,451.50	\$620,873.00	\$2,900,312.50
3	Ajax Paving Industries 1957 Crooks Road, Ste A Troy, MI 48084	Yes	Yes	\$0.00	\$34,443,239.80	\$68,583.00	\$1,154,381.00	\$663,003.50	\$677,451.00	\$3,427,907.60
A STATE OF THE		1								
4	Eutaw Construction Company 410 Old Richton Road Petal, MS 39465	Yes	Yes	\$38,546,004.70	\$42,828,524.45	\$31,311.12	\$1,650,340.78	\$735,630.58	\$747,886.69	\$2,959,159.85

The bid summary is certified to be true and correct to the best of my knowledge.

M.a. Reisma Date: 1-31-17

Michael A. Reisman, Deputy Executive Director, Development & Operations

Greater Asheville Regional Airport Authority



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Michael A. Reisman, A.A.E.

Deputy Executive Director, Development and Operations

DATE: February 17, 2017

#### ITEM DESCRIPTION – New Business Item E

Approve Scope of Work and Fee for Expansion of Terminal Aircraft Parking Apron

#### BACKGROUND

In September of 2015, Allegiant Airlines established a crew base with two based mainline aircraft at AVL. Since then, other airlines have increased the frequency of mainline aircraft usage at AVL, including those that remain overnight. This has resulted in the continuing decrease of available space on the Terminal apron for aircraft that either remain parked overnight, or that may remain more than 24 hours until dispatched again. Allegiant Airlines is scheduled to add another based mainline aircraft during the third quarter of this year, further taxing the airport's ability to accommodate the necessary aircraft.

With the razing of the former DPS building last year, the area formerly occupied by that building is available for additional Terminal apron expansion. This was previously identified in the Airport Master Plan update completed in 2012. It is staff's intent at this time to undertake apron expansion on to the former DPS site, which will add approximately 2,000 SY of additional parking area, and accommodate at least one additional mainline aircraft for parking.

Staff requested a proposal from one of its general consultants for design of this apron addition, and validated the cost through another firm.

#### **ISSUES**

None.



### GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY New Business Item E Approve Scope of Work and Fee for Expansion of Terminal Aircraft Parking Apron Page 2

#### **ALTERNATIVES**

There are no feasible short term alternatives to expanding the Terminal apron in the noted area. The Board could elect not to undertake this work, which would leave the airport and airlines with the potential inability to meet the current and expected demand for aircraft parking at the terminal facility.

#### FISCAL IMPACT

The cost for engineering design services is \$99,000.00, which will be paid from Airport Fund Balance. This action covers engineering design services only. A separate action will be presented to the Board for approval at a later date for authorization associated with construction costs.

#### RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to (1) approve the scope and fee with Delta Airport Consultants in the amount of \$99,000.00; (2) to authorize the Executive Director to execute the necessary documents; and (3) to amend the FY2016/2017 budget by adopting the following budget ordinance amendment:

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2017:

Section 1. To amend the appropriations as follows:

#### **EXPENDITURES:**

Capital Improvements	<u>Decrease</u>	<u>Increase</u> \$99,000
Totals	\$0	\$99,000

This will result in a net increase of \$99,000.00 in the appropriations. Revenues will be revised as follows:



## GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY New Business Item E Approve Scope of Work and Fee for Expansion of Terminal Aircraft Parking Apron Page 3

#### **REVENUES:**

	<u>Decrease</u>	<u>Increase</u>
Transfer from GARAA Cash		\$99,000
Totals	\$	\$99,000
Section 2. Copies of this budgethe Greater Asheville Regional Airpor Finance Officer for their direction.	•	
Adopted this 17 <sup>th</sup> day of Febru	uary, 2017.	
Robert C. Roberts, Chair		
Attested by:		
Ellen Heywood, Clerk to the B	 Board	

### CONSULTANT SCOPE OF SERVICES NO. Nine (9) PROFESSIONAL SERVICES AGREEMENT



PROJECT: Expand Air-Carrier Apron (Approx. 2000 SY)

AIRPORT: Asheville Regional Airport

DELTA PROJECT NO.: 17016

DATE OF ISSUANCE: February 1, 2017

ATTACHMENTS: 1) Scope of Services

2) Estimated Plan Sheets

3) Fee Summary

4) Exhibit 1 - Project Layout

METHOD OF PAYMENT: Design thru Bidding - Lump Sum

Design Phase Reimbursables - Unit Price

PROJECT BUDGET: \$ 99,000

CONTRACT TIME: 90 Days to Complete this Task Order from Notice to Proceed

PROJECT DESCRIPTION: PCC Apron Expansion (Approximate 2000 SY) - Design & Bidding Phase

Prepare CATEX Document

The original Agreement for Professional Services between the Greater Asheville Regional Airport Authority (OWNER) and Delta Airport Consultants, Inc., (CONSULTANT) for Professional Services at Asheville Regional Airport dated October 14, 2013, shall govern all CONSULTANT SCOPE OF SERVICES executed under this Agreement unless modified in writing and agreed to by CONSULTANT and OWNER.

#### **ACCEPTED:**

Kenneth W Moody, P.E., C.M.

Vice President

Delta Airport Consultants, Inc.

11111 Carmel Commons Blvd, Ste 435

Charlotte, NC 28226

#### **APPROVED:**

bv

Lew Bleiweis, A.A.E. Execitive Director

Greater Asheville Regional Airport Authority

61 Terminal Drive, Suite 1

Fletcher, NC 28732

17016-fe00-DDBD.xlsx Control No. 8530



PHASE	DETAILED TASKS
SCHEMATIC DESIGN (SD)	Pre-Design Meeting
SCHEWATIC DESIGN (3D)	Evaluate Existing Conditions (Drainage & Utilities)
	Review and Evaluate Project Layout w/Exhibits
	Categorical Exclusion (CATEX) Document & Sketch Coordinate Subconsultants
	Coordinate Subconsultants
DESIGN DEVELOPMENT (DD)	Final Pavement Design
` ,	Prelim Grading
	Prelim Drainage & SWM
	Prelim Erosion & Sediment Control
	Prelim Electrical & Lighting
	Prelim Estimates
	Owner Coordination
	Coordinate Subconsultants
	Design Meetings / Site Visits
	General Provisions Coordination
	Outline Specifications
	FAA 7460 Assistance
	177V7 TOO 713313CUTTCC
CONSTRUCTION DOCUMENTS (CD)	Final Grading
	Final Drainage & SWM
	Final Erosion & Sediment Control
	Final Electrical & Lighting
	Final Phasing Plan
	Final Estimates
	Coordinate Subconsultants
	Final Design Report
	Final Specifications
	Quality Control and Design Review



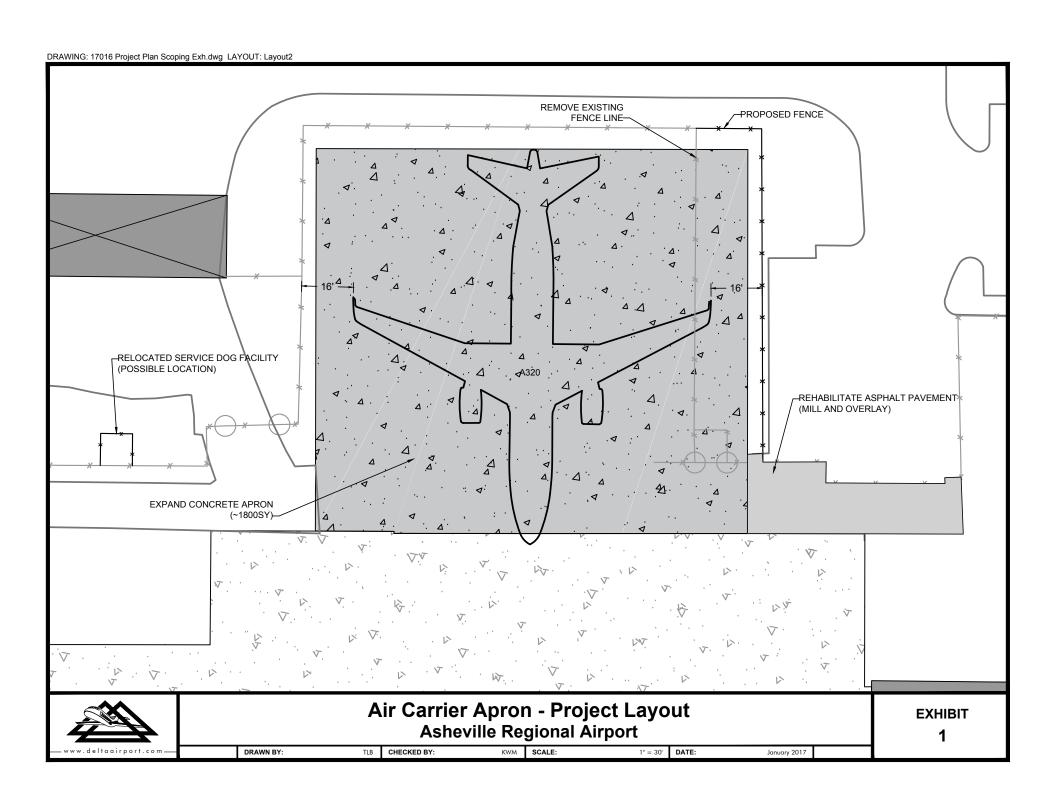
PHASE	DETAILED TASKS
BIDDING (BD)	Bid Preparation, Advertisement, Distribution
	Pre-Bid Meeting
	Bidder Questions, Answers, & Addenda
	Bid Opening (By Owner)
	Bid Tabulation
	Coordinate Award
	Bid Opening (By Owner) Bid Tabulation



		Base Scope	Schematic	Design Development	Construction Documents
DISCIPLINE	SHEET DESCRIPTION	# OF SHEETS	SHEE	TS INCL	UDED
GENERAL	Cover Sheet General Layout General Notes	1 1 1	•	•	•
PHASING	Phasing Layout Phasing Notes	1 1	•	•	•
CIVIL	Demolition Layout Grading & Drainage Erosion & Sediment Control Layout Erosion & Sediment Control Notes Erosion & Sediment Control Details Joint Layout Joint Details Pavement Details & Tyical Sections Drainage Details Fence and Marking Layout Fence Details Marking Details Miscellaneous Details Drainage Profiles Cross Sections	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	•	•
ELECTRICAL	Lighting, Misc. Electrical Layout/Details  GRAND TOTAL	1 21	٠	•	•



FEE SUMMARY				
Design and Bidding Phase Services		\$62,000		
	LUMP SUM TOTAL:	\$62,000		
<u>SUBCONSULTANTS</u>				
Ground Surveys	Vaughn & Melton	\$16,000		
SUE Surveys	Vaughn & Melton	\$6,000		
Geotechnical	SME	\$9,600		
Constructibility Review	Connico	\$3,000		
OTHER DIRECT				
Reproduction		\$1,400		
Travel & Miscellaneous		\$1,000		
	UNIT PRICE TOTAL:	\$37,000		





#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: John G. Coon, A.A.E.

Director of Operations and Maintenance

DATE: February 17, 2017

#### ITEM DESCRIPTION - New Business Item F

Approve installation of glass panels in the Federal Aviation Administration Control Tower.

#### **BACKGROUND**

The glass panels in the Air Traffic Control tower are the original installed panels and have broken seals in several of the panels. In 2016, 1 of the 12 glass panels was replaced. The process of installing the panel(s) is very difficult due to their location and all work must be completed during night time hours when the tower is closed. Over the past year several more panels have broken seals causing difficulty looking through the glass onto the airfield and surrounding air space. Due to the importance of visibility through these panels and the difficulty installing the glass panels, it is recommended to replace the remaining 11 panels at this time. These glass panels have a long lead time from placing the order to installation. Obtaining pricing for these panels is becoming more difficult and since we currently have two willing suppliers, the recommendation is to replace the remaining 11 panels versus replacing 1 or 2 panels over the course of the next several years. As replacement of these panels was not a budgeted item, it is recommended to use the Emergency Repair Reserve Funds.

The Authority requested three quotes from glass suppliers, receiving response from 2 suppliers. The low quote was received from Keller Glasco, Inc. in the amount of \$121,213.00.

#### **ISSUES**

None.



## GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY New Business Item F Approve Installation of Glass Panels in the Federal Aviation Administration Control Tower Page 2

#### **ALTERNATIVES**

Replace only the damaged glass panels which would lead to a higher cost per glass panel.

#### FISCAL IMPACT

The total expense of \$121,213.00 will be taken from the Emergency Repair Reserve account. This account currently has an approved budget in the amount of \$75,000. Therefore, we request an additional \$75,000 to be added to this fund to cover this expenditure and any unforeseen emergency expenditures during the remainder of this fiscal year. This budget amendment will increase both FY16/17 budgeted revenues and expenditures by \$75,000. The net increase in Transfers from GARAA Cash is \$75,000.

#### RECOMMENDED ACTION

It is respectfully requested that the Greater Asheville Regional Airport Authority Board resolve to (1) award the work to Keller Glasco for the amount not to exceed \$121,213.00 and approve the unbudgeted expense and (2) authorize the Executive Director to execute the necessary documents.

BE IT ORDAINED by the Greater Asheville Regional Airport Authority that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2017:

Section 1. To amend the appropriations as follows:

#### **EXPENDITURES:** Decrease Increase **Emergency Repair Costs** \$75,000 Total \$75,000 This will result in a net increase of \$75,000 in the appropriations. Revenues will be revised as follows: **REVENUES**: Decrease Increase Transfer from GARAA Cash \$75,000 \$75,000 **Totals**



#### GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

New Business Item F Approve Installation of Glass Panels in the Federal Aviation Administration Control Tower Page 3

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Greater Asheville Regional Airport Authority, and to the Budget Officer and to the Finance Officer for their direction.

Adopted this 17th day of February, 2017.
Robert C. Roberts, Chair
Attested by:
Ellen Heywood, Clerk to the Board

Ron Mundy Maintenance Supervisor Asheville Regional Airport Fletcher, NC 28732

November 17, 2016 11477Q01 Tel: 828-684-2226 Email: Rmundy@flyavl.com

Ron:

RE: Control Tower Glass Replacement Fletcher, NC

We propose to provide the following work based on your instructions:

- At Control Tower, remove two existing pieces of insulated glass; one on runway side, one on left side.
- Replace with tempered, clear insulated glass.
- Crane, scaffolding, walk boards, roof protection, and personal fall protection are included.
- Work to be performed between 11:30pm and 5:30am.
- Scheduling will be contingent on weather forecast, with worker safety being the top consideration.

Caulking of our work with our standard sealant is included. <u>Demolition</u> of existing work is included. <u>Owner's material</u> is handled at owner's risk. Cleaning & Protection of our work from damage by others is not included. Errors, acts or omissions by others are not our responsibility to identify or determine. Exclusions include, but are not limited to, testing, fireproofing, insulation, bracing, wall flashing, patching, restoration of concealed conditions, barricading, guarding, marking, utilities, permits, cleanup, trash removal, liquidated damages, prorated penalties or back charges. Insurance is statutory WC and \$2,000,000 Bl, PD & Auto. Warranty on our workmanship is one year; manufacturer's warranty varies. Quote is based on use of this proposal. Lien rights shall not be voided, waived or impaired by anything in the contract or invoice forms, except to the extent payment has been received. Minimum notice, subject to material availability, is 72 hours. Schedule is subject to our review. Our quote is not limited to specific brands.

We will furnish necessary labor, material, tax, insurance, and services for:

Alternate #1: Replace all e Alternate #2: Replace thre (Alt 2 glass will be tinted, I	e pieces of insulated (	glass in front offices	\$121,213 \$2,945
Terms with established credi due 20 <sup>th</sup> of month on invoices r costs and attorney's fees applie	endered by the preceding	25 <sup>th</sup> , with retainage due within thir	er 5% is allowed until our completion. Net ty days of our completion. A charge of 2%,
Quote Void In: 30 days	Shop Drawings: N/A	Material Delivery: 6-7 w	eeks <u>Installation</u> : 2 nights Alternate: 11 nights
Sincerely,		[ ] Notice of Intent [	] Acceptance (select one)
Keller Glasco, Inc.		Ву:	Date:
Mil Johnson	Facsimile		
Neil Johnson	Ext. 111	Signed:	Title:



#### 60 LOCUST DRIVE WAYNESVILLE, NC 28786 PH (828) 456-8420 FAX: (828) 456-8742

ASHEVILLE REGIONAL AIRPORT

DATE: 1/6/2017

ATT: RON MUNDY

WE PROPOSE TO FURNISH MATERIALS AS PER SPECIFICATIONS BELOW, SUBJECT TO THE TERMS AND CONDITIONS PRINTED BELOW. AND ON THE BACK HEREOF, WHICH ARE HEREBY REFERRED TO AND MADE PART OF THIS PROPOSAL.

FOR: CONTROL TOWER GLASS REPLACEMENTS TO BE INSTALLED: ARCHITECT: ADDENDA NO.

FOR THE SUM OF: **SEE BELOW** (DOLLARS) (WHERE SALES TAX IS APPLICABLE, SAID TAX IS INCLUDE)

#### FURNISH AND INSTALL.

New 1" clear Low- E, Tempered insulated glass (to match unit replaced in 2016) installed in existing aluminum frame.

Includes scaffolding by certified, licensed scaffold provider and erector. Crane equipment and certified operator, and support vehicle.

To change 2 pieces, one in the center of the west elevation, and one on the south elevation, east corner. \$54,285.00

To change 11 pieces, all but the one unit replaced in 2016 \$ 194,100.00

PLEASE NOTE THAT WE DO NOT INCLUDE ANY CLEANING OR PROTECTION OF GLASS OR ALUMINUM, PAINTING, OR REPLACING OF GLASS BROKEN BY OTHERS. WE INCLUDE CAULKING OF OUR WORK ONLY, AS SPECIFIED.

NOTE: WE DO NOT ACCEPT OR CONSIDER THE AGC 600 LONG OR SHORT FORM

TERMS: THIS PROPOSAL IS SUBJECT TO THE TERMS AND CONDITIONS AS STATED IN THE CURRENT AIA DOCUMENT A401 SUBCONTRACT AGREEMENT. THIS PROPOSAL IS SUBJECT TO REVISION IF NOT ACCEPTED WITHIN 30 DAYS FROM ABOVE DATE.

		BLUE RIDGE GLASS INC
ACCEPTED:		
		BY: Neal McCallister
DATE:	19	
		TITLE: Estimator / Project Manager



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Lew Bleiweis, A.A.E., Executive Director

DATE: February 17, 2017

#### ITEM DESCRIPTION - Information Section Item A

December, 2016 Traffic Report – Asheville Regional Airport

#### **SUMMARY**

December, 2016 overall passenger traffic numbers were up 19.8% compared to the same period last year. Passenger traffic numbers reflect a 19.0% increase in passenger enplanements from December, 2015. Enplanements for Fiscal Year to Date total 242,719 which is a 12.6% increase over the same period last year.

#### **AIRLINE PERFORMANCE**

<u>Allegiant Airlines</u>: Year over Year passenger enplanements for Allegiant in December 2016 were up by 36.3%. There were no flight cancellations for the month.

<u>American Airlines</u>: American's December 2016 passenger enplanements represent a 4.2% increase over the same period last year. There was one (1) flight cancellation for the month.

<u>Delta Airlines</u>: Delta's December 2016 enplanements increased by 6.2% compared to December 2015. There were no flight cancellations for the month.

<u>United Airlines</u>: In December 2016, United Airlines saw an increase in enplanements by 62.3% over the same period last year. There were no flight cancellations for the month.

## **Monthly Traffic Report Asheville Regional Airport**

#### December 2016



Category	Dec 2016	Dec 2015	Percentage Change	*CYTD-2016	*CYTD-2015	Percentage Change	*MOV12-2016	*MOV12-2015	Percentage Change
Passenger Traffic	<b>:</b>								
Enplaned	33,076	27,805	19.0%	414,606	392,762	5.6%	414,606	392,762	5.6%
Deplaned	<u>33,120</u>	<u>27,447</u>	20.7%	<u>412,042</u>	<u>394,373</u>	4.5%	<u>412,042</u>	<u>394,373</u>	4.5%
Total	66,196	55,252	19.8%	826,648	787,135	5.0%	826,648	787,135	5.0%
Aircraft Operation	าร								
Airlines	347	584	-40.6%	6,530	5,972	9.3%	6,530	5,972	9.3%
Commuter /Air Taxi	<u>530</u>	<u>632</u>	-16.1%	9,844	10,028	-1.8%	9,844	10,028	-1.8%
Subtotal	<u>877</u>	<u>1,216</u>	-27.9%	16,374	<u>16,000</u>	2.3%	16,374	<u>16,000</u>	2.3%
General Aviation	3,011	2,997	0.5%	43,389	41,532	4.5%	43,389	41,532	4.5%
Military	<u>240</u>	<u>344</u>	-30.2%	<u>4,214</u>	<u>5,650</u>	-25.4%	4,214	<u>5,650</u>	-25.4%
Subtotal	<u>3,251</u>	<u>3,341</u>	-2.7%	<u>47,603</u>	<u>47,182</u>	0.9%	<u>47,603</u>	<u>47,182</u>	0.9%
Total	4,128	4,557	-9.4%	63,977	63,182	1.3%	63,977	63,182	1.3%
Fuel Gallons									
100LL	8,312	8,525	-2.5%	171,160	156,865	9.1%	171,160	156,865	9.1%
Jet A (GA)	96,548	66,859	44.4%	1,301,812	1,148,905	13.3%	1,301,812	1,148,905	13.3%
Subtotal	104,860	<u>75,384</u>	39.1%	1,472,972	1,305,770	12.8%	1,472,972	1,305,770	12.8%
Jet A (A/L)	243,646	<u>185,735</u>	31.2%	2,626,498	2,716,692	-3.3%	2,626,498	2,716,692	-3.3%
Total	348,506	261,119	33.5%	4,099,470	4,022,462	1.9%	4,099,470	4,022,462	1.9%

<sup>\*</sup>CYTD = Calendar Year to Date and \*Mov12 = Moving Twelve Months.

## **Airline Enplanements, Seats, and Load Factors Asheville Regional Airport**



December 2016

			Percentage			Percentage
	Dec 2016	Dec 2015	Change	*CYTD-2016	*CYTD-2015	Change
Allegiant Air						
Enplanements	11,931	8,754	36.3%	126,793	112,701	12.5%
Seats	14,196	11,310	25.5%	148,263	139,319	6.4%
Load Factor	84.0%	77.4%	8.6%	85.5%	80.9%	5.7%
American Airlines						
Enplanements	7,993	7,671	4.2%	100,854	99,793	1.1%
Seats	10,393	11,419	-9.0%	128,851	138,758	-7.1%
Load Factor	76.9%	67.2%	14.5%	78.3%	71.9%	8.8%
Delta Air Lines						
Enplanements	10,066	9,478	6.2%	141,828	138,674	2.3%
Seats	12,235	12,511	-2.2%	173,752	173,960	-0.1%
Load Factor	82.3%	75.8%	8.6%	81.6%	79.7%	2.4%
Inited Airlines						
Enplanements	3,086	1,902	62.3%	45,131	41,594	8.5%
Seats	3,750	3,200	17.2%	52,114	51,246	1.7%
Load Factor	82.3%	59.4%	38.5%	86.6%	81.2%	6.7%
Гotals						
Enplanements	33,076	27,805	19.0%	414,606	392,762	5.6%
Seats	40,574	38,440	5.6%	502,980	503,283	-0.1%
Load Factor	81.5%	72.3%	12.7%	82.4%	78.0%	5.6%

## **Airline Flight Completions Asheville Regional Airport**

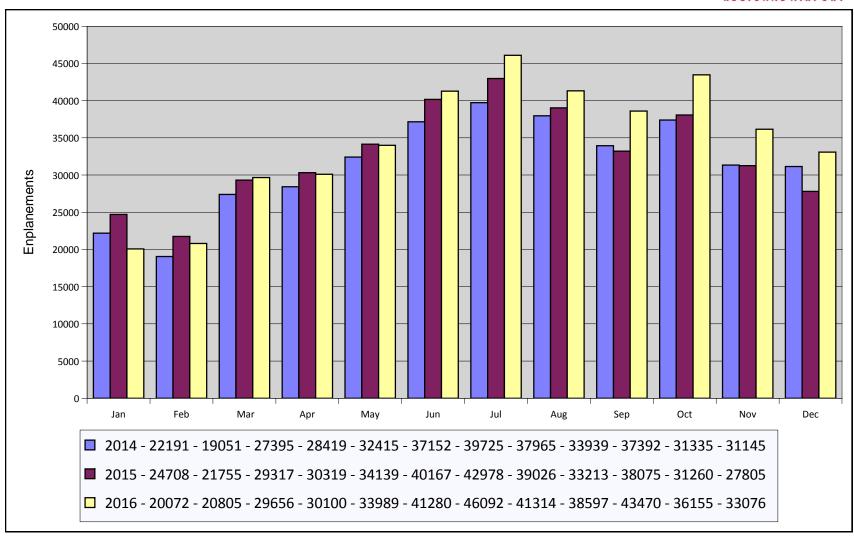
December 2016



	Scheduled		Cancellation	ons Due To	Total	Percentage of	
Airline	Flights	Field	Mechanical	Weather	Other	Cancellations	Completed
Allegiant Air	94	0	0	0	0	0	100.0%
American Airlines	184	0	0	1	0	1	99.5%
Delta Air Lines	174	0	0	0	0	0	100.0%
United Airlines	75	0	0	0	0	0	100.0%
Total	527	0	0	1	0	1	99.8%

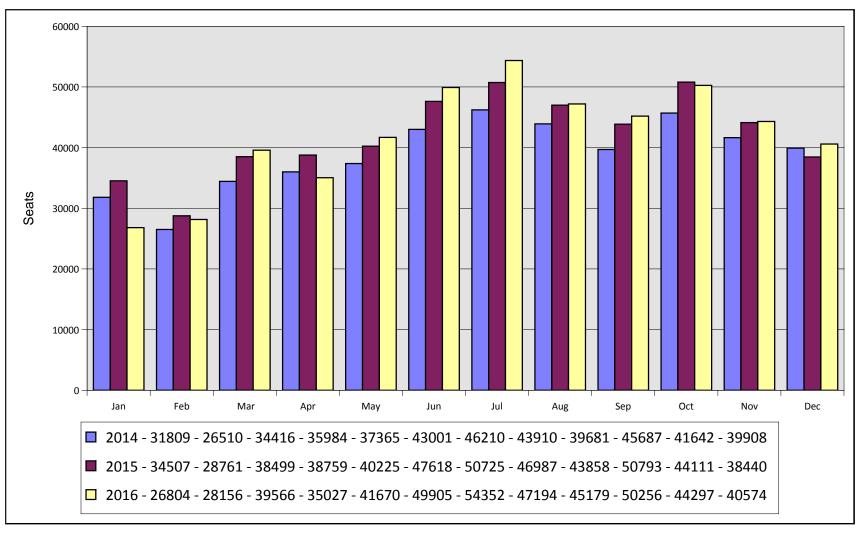
## Monthly Enplanements By Year Asheville Regional Airport





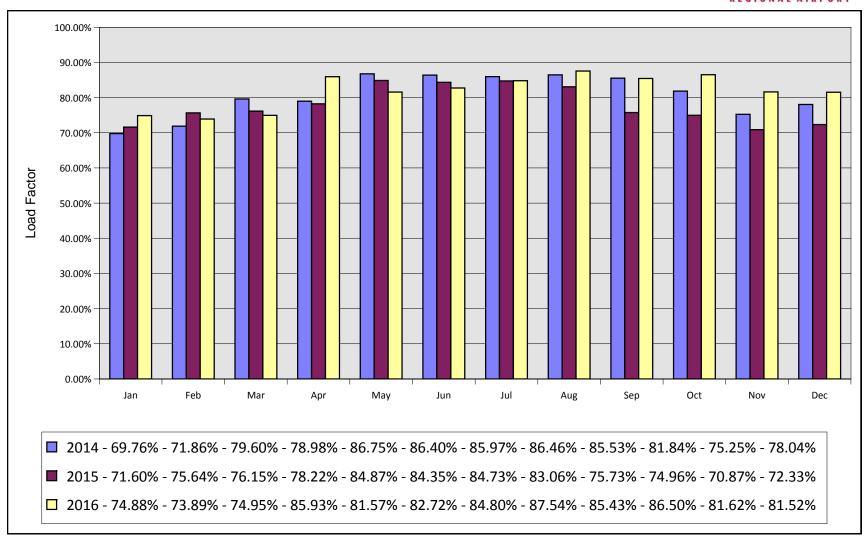
## **Monthly Seats By Year Asheville Regional Airport**





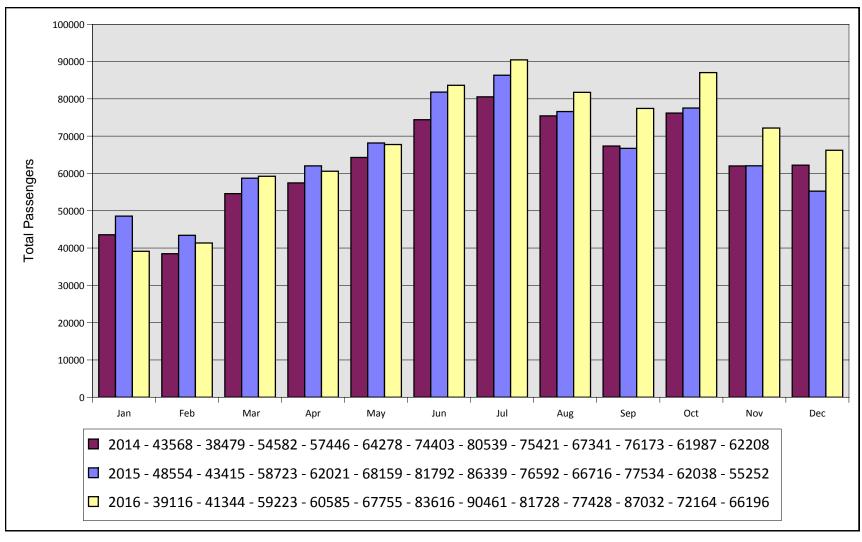
## Monthly Load Factors By Year Asheville Regional Airport





## **Total Monthly Passengers By Year Asheville Regional Airport**

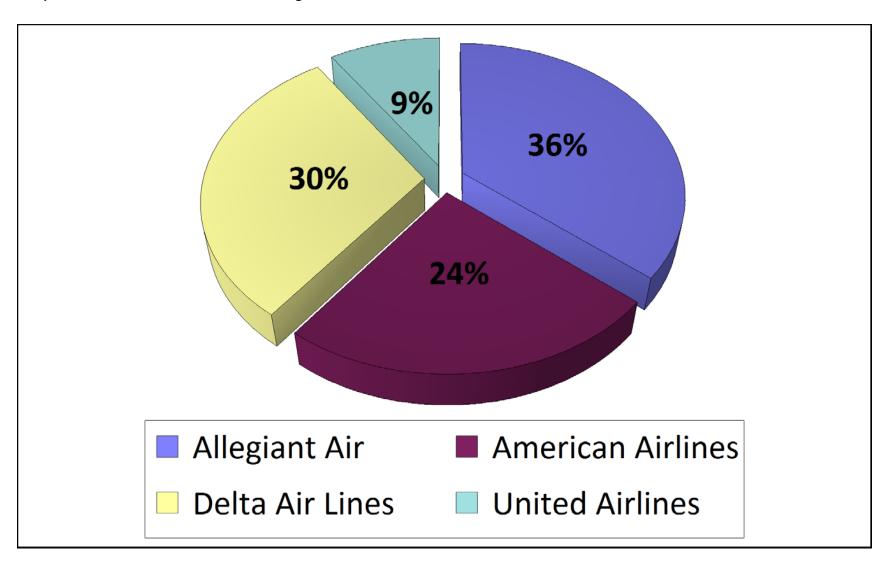




## **Airline Market Share Analysis (Enplanements) Asheville Regional Airport**



Report Period From December 2016 Through December 2016



Schedule Weekly Summary Report for nonstop Passenger (Air - All) flights from AVL to for travel February 2017 vs. February 2016

	Travel	Period	Feb 20	17	Feb 20	Feb 2016			Percent Diff	
Mkt Al	Orig	Dest	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats
AA	AVL	CLT	38	2,148	46	2,300	(8)	(152)	(17.4%)	(6.6%)
AA	CLT	AVL	38	2,148	46	2,300	(8)	(152)	(17.4%)	(6.6%)
DL	ATL	AVL	39	3,047	37	3,038	2	9	5.4%	0.3%
DL	AVL	ATL	39	3,047	37	3,038	2	9	5.4%	0.3%
G4	AVL	<b>EWR</b>	4	664	0	0	4	664		
G4	AVL	FLL	4	675	2	332	2	343	100.0%	103.3%
G4	AVL	PBI	0	0	2	332	(2)	(332)	(100.0%)	(100.0%)
G4	AVL	PGD	2	332	2	332	0	0	0.0%	0.0%
G4	AVL	PIE	2	332	2	332	0	0	0.0%	0.0%
G4	AVL	SFB	2	332	2	332	0	0	0.0%	0.0%
G4	<b>EWR</b>	AVL	4	664	0	0	4	664		
G4	FLL	AVL	4	675	2	332	2	343	100.0%	103.3%
G4	PBI	AVL	0	0	2	332	(2)	(332)	(100.0%)	(100.0%)
G4	PGD	AVL	2	332	2	332	0	0	0.0%	0.0%
G4	PIE	AVL	2	332	2	332	0	0	0.0%	0.0%
G4	SFB	AVL	2	332	2	332	0	0	0.0%	0.0%
UA	AVL	ORD	14	700	7	350	7	350	100.0%	100.0%
UA	ORD	AVL	14	700	7	350	7	350	100.0%	100.0%
		Total	210	16,460	200	14,696	10	1,764	5.0%	12.0%

Schedule Weekly Summary Report for nonstop Passenger (Air - All) flights from AVL to for travel March 2017 vs. March 2016

	Travel		Mar 20		Mar 20		Diff		Percen	t Diff
Mkt Al	Orig	Dest	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats
AA	AVL	CLT	41	2,192	48	2,325	(7)	(133)	(14.6%)	(5.7%)
AA	CLT	AVL	41	2,192	48	2,325	(7)	(133)	(14.6%)	(5.7%)
DL	ATL	AVL	44	3,008	47	3,624	(3)	(616)	(6.4%)	(17.0%)
DL	AVL	ATL	43	2,958	47	3,624	(4)	(666)	(8.5%)	(18.4%)
G4	AVL	<b>EWR</b>	4	664	0	0	4	664		
G4	AVL	FLL	4	675	2	332	2	343	100.0%	103.3%
G4	AVL	PBI	0	0	2	332	(2)	(332)	(100.0%)	(100.0%)
G4	AVL	PGD	2	332	3	498	(1)	(166)	(33.3%)	(33.3%)
G4	AVL	PIE	2	332	4	664	(2)	(332)	(50.0%)	(50.0%)
G4	AVL	SFB	2	332	2	332	0	0	0.0%	0.0%
G4	EWR	AVL	4	664	0	0	4	664		
G4	FLL	AVL	4	675	2	332	2	343	100.0%	103.3%
G4	PBI	AVL	0	0	2	332	(2)	(332)	(100.0%)	(100.0%)
G4	PGD	AVL	2	332	3	498	(1)	(166)	(33.3%)	(33.3%)
G4	PIE	AVL	2	332	4	664	(2)	(332)	(50.0%)	(50.0%)
G4	SFB	AVL	2	332	2	332	0	0	0.0%	0.0%
UA	AVL	EWR	7	954	0	0	7	954		
UA	AVL	ORD	18	900	14	700	4	200	28.6%	28.6%
UA	EWR	AVL	7	954	0	0	7	954		
UA	ORD	AVL	18	900	14	700	4	200	28.6%	28.6%
		Total	247	18,728	244	17,614	3	1,114	1.2%	6.3%

Schedule Weekly Summary Report for nonstop Passenger (Air - All) flights from AVL to for travel April 2017 vs. April 2016

	Travel	Period	Apr 20	17	Apr 20	16	Diff		Percen	t Diff
Mkt Al	Orig	Dest	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats	Ops/Week	Seats
AA	AVL	CLT	46	2,332	48	2,325	(2)	7	(4.2%)	0.3%
AA	CLT	AVL	46	2,317	48	2,325	(2)	(8)	(4.2%)	(0.3%)
DL	ATL	AVL	46	3,228	46	3,194	0	34	0.0%	1.1%
DL	AVL	ATL	46	3,262	46	3,194	0	68	0.0%	2.1%
G4	AVL	BWI	1	166	0	0	1	166		
G4	AVL	EWR	4	664	0	0	4	664		
G4	AVL	FLL	4	675	2	332	2	343	100.0%	103.3%
G4	AVL	PBI	0	0	2	332	(2)	(332)	(100.0%)	(100.0%)
G4	AVL	PGD	3	498	2	332	1	166	50.0%	50.0%
G4	AVL	PIE	3	498	2	332	1	166	50.0%	50.0%
G4	AVL	SFB	2	332	2	332	0	0	0.0%	0.0%
G4	BWI	AVL	1	166	0	0	1	166		
G4	EWR	AVL	4	664	0	0	4	664		
G4	FLL	AVL	4	675	2	332		343	100.0%	103.3%
G4	PBI	AVL	0	0	2	332	(2)	(332)	(100.0%)	(100.0%)
G4	PGD	AVL	3	498	2	332	1	166	50.0%	50.0%
G4	PIE	AVL	3	498	2	332	1	166	50.0%	50.0%
G4	SFB	AVL	2	332	2	332		0	0.0%	0.0%
UA	AVL	EWR	7	826	0	0	7	826		
UA	AVL	ORD	21	1,050	18	900		150	16.7%	16.7%
UA	EWR	AVL	7	826	0	0	7	826		
UA	ORD	AVL	21	1,050	18	900	3	150	16.7%	16.7%
		Total	274	20,557	244	16,158	30	4,399	12.3%	27.2%



#### **MEMORANDUM**

TO: Members of the Airport Authority

FROM: Janet Burnette, Director of Finance & Accounting

DATE: February 17, 2017

#### ITEM DESCRIPTION – Information Section Item B

Greater Asheville Regional Airport – Explanation of Extraordinary Variances Month of December, 2016 (Month 6 of FY2017)

#### **SUMMARY**

Operating Revenues for the month of December were \$457,472, 38.04% under budget. Operating Expenses for the month were \$734,910, 11.31% under budget. As a result, Net Operating Revenues before Depreciation were (\$277,438), 207.47% under budget. Net Non-Operating Revenues were \$240,512, 83.92% over budget.

Year-to-date Operating Revenues were \$5,256,544, 7.34% over budget. Year-to-date Operating Expenses were \$4,046,994, 15.15% below budget. Year-to-date Net Operating Revenues before Depreciation were \$1,209,550, 851.44% over budget. Net Non-Operating Revenues for the year were \$1,617,475, 0.79% over budget.

#### **REVENUES**

Significant variations to budget for December were:

Term. Rentals - Airlines	(\$32,952)	(29.27%)	Portion of previous year premium fees paid to signatory
			carrier
Auto Parking	\$48,396	24.25%	Enplanements over budget
Other Leases/Fees	(\$12,725)	(30.40%)	Previous year airline security premium fees paid to signatory carrier
Landing Fees	(\$288,016)	(497.39%)	Previous year reconciliation resulted in lowered rates and refunds to all carriers. Non-signatory premium fees paid to signatory carrier.

Information Section - Item B



GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY Information Section Item B Asheville Regional Airport – Explanation of Extraordinary Variances Month Ended December 2016 (Month 6 of FY-2017) Page 2

#### **EXPENSES**

Significant variations to budget for December were:

Professional Services	(\$23,644)	(61.24%)	Timing of payments to bond consultants
Other Contractual Services	(\$18,319)	(14.67%)	Timing of services/low parking mgmt. costs
Repairs & Maintenance	\$17,121	75.33%	Asset Forfeiture funds to be added to budget
Advertising, Printing & Binding	(\$20,064)	(85.52%)	Timing of advertising expenses
Operating Supplies	(\$20,372)	(54.02%)	Timing of supply and equipment purchases
Business Development	\$32,138	128.55%	Budget allocated monthly/single payment

#### **STATEMENT OF NET ASSETS**

Significant variations to prior month were:

Cash & Cash Equivalents – Cash & Cash Equivalents decreased by 624k mainly due to parking garage construction and Airfield Redevelopment project.

Grants Receivable – Grants Receivable increased by \$488k due to spending on Airfield Redevelopment project.

Construction in Progress – Construction in Progress increased by \$3,676k mainly due to the Airfield Redevelopment project and the parking garage.

Property and Equipment, Net – Property and Equipment, Net decreased by \$458k due to depreciation.

#### ASHEVILLE REGIONAL AIRPORT INVESTMENT AND INTEREST INCOME SUMMARY As of December 31, 2016

Institution:	Interest Rate	Investment Amount	lonthly nterest
Bank of America - Operating Account	0.20%	\$ 8,510,577	 1,577
First Citizens - Money Market Account	0.05%	6,391,596	271
NC Capital Management Trust - Cash Portfolio		17,239	5
NC Capital Management Trust - Term Portfolio		3,032,439	1,901
Petty Cash		200	
Restricted Cash:			
BNY Mellon		20,955,839	8,339
Bank of America - PFC Revenue Account	0.20%	6,273,442	1,039
Total		\$ 45,181,332	\$ 13,132

#### **Investment Diversification:**

THE CONTROL OF THE CO	
Banks	93%
NC Capital Management Trust	7%
Commercial Paper	0%
Federal Agencies	0%
US Treasuries	0%
	100%

#### ASHEVILLE REGIONAL AIRPORT STATEMENT OF CHANGES IN FINANCIAL POSITION For the Month Ended December 31, 2016

		Current Month	Prior Period
Cash and Investments Beginning of Period	\$	45,805,908	\$ 45,999,741
Net Income/(Loss) Before Capital Contributions		(428,147)	78,350
Depreciation		391,221	391,221
Decrease/(Increase) in Receivables		(148,681)	2,177,698
Increase/(Decrease) in Payables		2,726,280	(1,894,116)
Decrease/(Increase) in Prepaid Expenses		(46,129)	17,177
Decrease/(Increase) in Fixed Assets		(3,608,929)	(3,454,283)
Principal Payments of Bond Maturities		1,738	115,690
Capital Contributions		488,071	2,374,430
Increase(Decrease) in Cash		(624,576)	(193,833)
Cash and Investments End of Period	<u>\$</u>	45,181,332	\$ 45,805,908

### Asheville Regional Airport Detailed Statement of Revenue, Expenses and Changes in Net Assets

#### For the Month Ending December 31, 2016

	Current Month Actual	Current Month Budget	Variance \$	Variance %	YTD Actual	YTD Budget	Variance \$	Variance %	Annual Budget
Operating Revenue:									
Terminal Space Rentals - Non Airline	\$19,839	\$18,077	\$1,762	9.75%	\$109,814	\$108,462	\$1,352	1.25%	\$215,060
Terminal Space Rentals - Airline	79,612	112,564	(32,952)	(29.27%)	913,860	779,495	134,365	17.24%	1,469,851
Concessions	37,443	32,551	4,892	15.03%	247,721	207,598	40,123	19.33%	422,180
Auto Parking	247,996	199,600	48,396	24.25%	1,754,037	1,438,400	315,637	21.94%	2,820,000
Rental Car - Car Rentals	112,595	122,569	(9,974)	(8.14%)	783,352	740,274	43,078	5.82%	1,478,398
Rental Car - Facility Rent	53,700	52,642	1,058	2.01%	312,378	307,205	5,173	1.68%	616,308
Commercial Ground Transportation	7,963	499	7,464	1,495.79%	25,184	12,526	12,658	101.05%	49,850
Landing Fees	(230,111)	57,905	(288,016)	(497.39%)	202,287	400,397	(198,110)	(49.48%)	754,800
FBO'S	81,379	82,455	(1,076)	(1.30%)	506,887	516,529	(9,642)	(1.87%)	1,018,889
Building Leases	13,082	12,756	326	2.56%	76,466	76,502	(36)	(0.05%)	152,509
Land Leases	4,839	4,897	(58)	(1.18%)	25,615	29,382	(3,767)	(12.82%)	58,748
Other Leases/Fees	29,135	41,860	(12,725)	(30.40%)	298,943	280,164	18,779	6.70%	533,611
Total Operating Revenue	\$457,472	\$738,375	(\$280,903)	(38.04%)	\$5,256,544	\$4,896,934	\$359,610	7.34%	\$9,590,204
Operating Expenses:									
Personnel Services	\$395,090	\$435,507	(\$40,417)	(9.28%)	\$2,343,138	\$2,549,111	(\$205,973)	(8.08%)	\$5,154,981
Professional Services	14,964	38,608	(23,644)	(61.24%)	231,168	194,050	37,118	19.13%	429,700
Accounting & Auditing	-	-	-	100.00%	5,975	20,000	(14,025)	(70.13%)	40,000
Other Contractual Services	106,525	124,844	(18,319)	(14.67%)	467,988	653,928	(185,940)	(28.43%)	1,405,549
Travel & Training	4,268	10,007	(5,739)	(57.35%)	62,020	75,640	(13,620)	(18.01%)	210,121
Communications & Freight	6,655	6,564	91	1.39%	36,899	39,385	(2,486)	(6.31%)	78,770
Utility Services	36,344	38,645	(2,301)	(5.95%)	194,956	231,867	(36,911)	(15.92%)	463,735
Rentals & Leases	1,909	992	917	92.44%	11,810	5,950	5,860	98.49%	11,900
Insurance	13,939	19,708	(5,769)	(29.27%)	97,416	118,250	(20,834)	(17.62%)	236,500
Repairs & Maintenance	39,850	22,729	17,121	75.33%	192,348	138,075	54,273	39.31%	278,230
Advertising, Printing & Binding	3,396	23,460	(20,064)	(85.52%)	58,692	101,463	(42,771)	(42.15%)	201,315
Promotional Activities	13,514	4,758	8,756	184.03%	31,234	43,800	(12,566)	(28.69%)	85,850
Other Current Charges & Obligations	12,095	11,374	721	6.34%	51,463	48,744	2,719	5.58%	93,000
Office Supplies	857	750	107	14.27%	3,921	4,500	(579)	(12.87%)	9,000
Operating Supplies	17,339	37,711	(20,372)	(54.02%)	155,643	249,247	(93,604)	(37.55%)	478,564
Books, Publications, Subscriptions & Men	n 11,027	13,526	(2,499)	(18.48%)	42,686	41,943	743	1.77%	62,487
Contingency		8,176	(8,176)	(100.00%)		66,352	(66,352)	(100.00%)	115,411
Emergency Repair	-	6,250	(6,250)	(100.00%)	2,499	37,500	(35,001)	(93.34%)	75,000
Business Development	57,138	25,000	32,138	128.55%	57,138	150,000	(92,862)	(61.91%)	300,000
<b>Total Operating Expenses</b>	\$734,910	\$828,609	(\$93,699)	(11.31%)	\$4,046,994	\$4,769,805	(\$722,811)	(15.15%)	\$9,730,113

### Asheville Regional Airport Detailed Statement of Revenue, Expenses and Changes in Net Assets

#### For the Month Ending December 31, 2016

	Current Month Actual	Current Month Budget	Variance \$	Variance %	YTD Actual	YTD Budget	Variance \$	Variance %	Annual Budget
Operating Revenue before Depreciation	(\$277,438)	(\$90,234)	(\$187,204)	207.47%	\$1,209,550	\$127,129	\$1,082,421	851.44%	(\$139,909)
Depreciation	391,221		\$391,221	100.00%	2,347,326	-	\$2,347,326	100.00%	
Operating Income(Loss) Before Non-Operating Revenue and Expenses	(\$668,659)	(\$90,234)	(\$578,425)	641.03%	(\$1,137,776)	\$127,129	(\$1,264,905)	(994.98%)	(\$139,909)
Non-Operating Revenue and Expense									
Customer Facility Charges	\$104,172	\$76,830	\$27,342	35.59%	\$831,666	\$736,740	\$94,926	12.88%	\$ 1,300,000
Passenger Facility Charges	80,501	51,255	29,246	57.06%	916,175	854,250	61,925	7.25%	1,708,500
Interest Revenue	13,132	2,682	10,450	389.63%	33,680	13,737	19,943	145.18%	30,000
Interest Expense	-	-	-	100.00%	(155,143)		(155,143)	100.00%	
Bond Expense		-	-	100.00%	(52,500)	-	(52,500)	100.00%	
Reimbursable Cost Revenues	-	19,324	(19,324)	(100.00%)	2,055	144,685	(142,630)	(98.58%)	214,000
Reimbursable Cost Expenses		(19,324)	19,324	(100.00%)	(1,165)	(144,685)	143,520	(99.19%)	(214,000)
Gain/Loss on Disposal of Assets	42,707	0	42,707	0.00%	42,707	0	42,707	0.00%	
Non-Operating Revenue-Net	\$240,512	\$130,767	\$109,745	83.92%	\$1,617,475	\$1,604,727	\$12,748	0.79%	\$3,038,500
Income (Loss) Before									
Capital Contributions	(\$428,147)	\$40,533	(\$468,680)	(1,156.29%)	\$479,699	\$1,731,856	(\$1,252,157)	(72.30%)	\$2,898,591
Capital Contributions	\$488,071	\$0	\$488,071	100.00%	\$7,332,120	\$0	\$7,332,120	100.00%	\$0
Increase in Net Assets	\$59,924	\$40,533	\$19,391	47.84%	\$7,811,819	\$1,731,856	\$6,079,963	351.07%	\$2,898,591

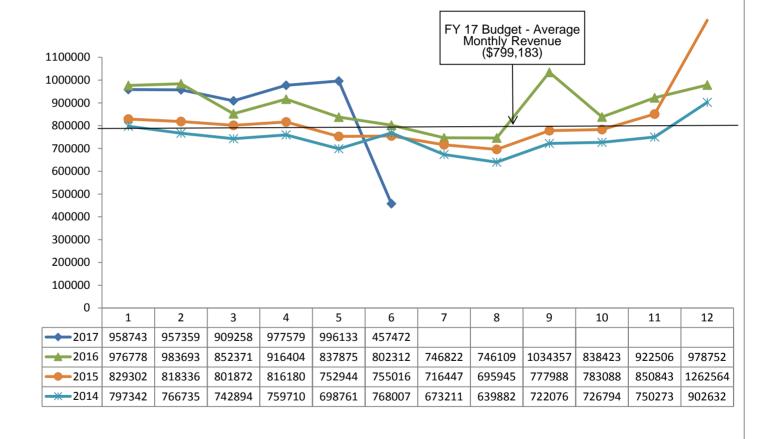
#### ASHEVILLE REGIONAL AIRPORT STATEMENT OF FINANCIAL POSITION As of December 31, 2016

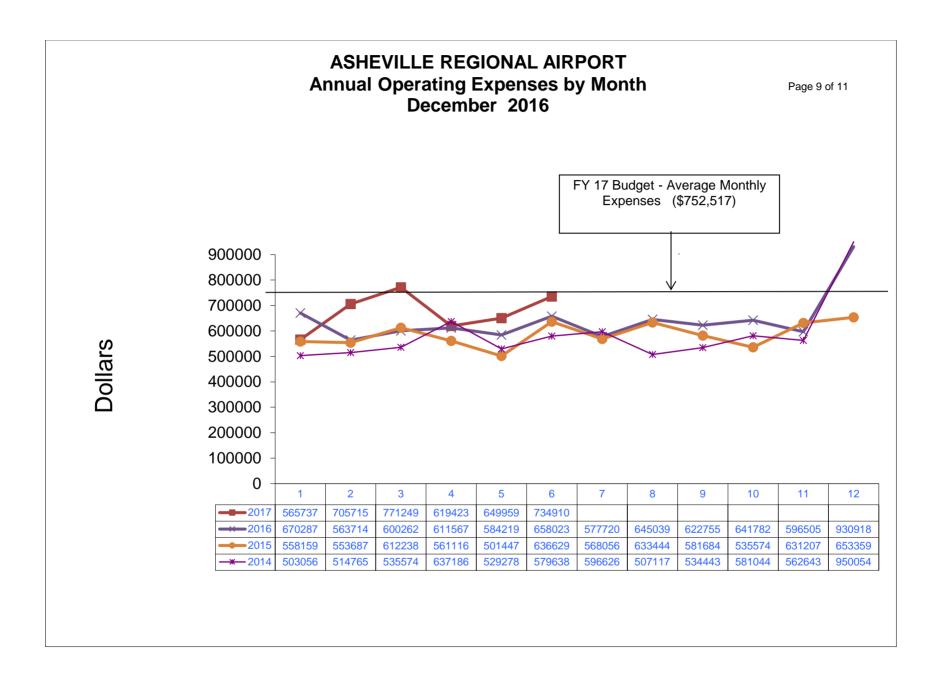
	Current Month	Last Month
<u>ASSETS</u>		
Current Assets:		
Unrestricted Net Assets:		
Cash and Cash Equivalents	\$17,952,051	\$18,861,506
Accounts Receivable	476,777	626,985
Passenger Facility Charges Receivable	125,000	320,000
Refundable Sales Tax Receivable	81,004	75,185
Grants Receivable	2,322,831	1,834,760
Prepaid Expenses	177,658	131,529
Total Unrestricted Assets	21,135,321	21,849,965
Restricted Assets:		
Cash and Cash Equivalents	27,229,281	26,944,402
Total Restricted Assets	27,229,281	26,944,402
Total Current Assets	48,364,602	48,794,367
Noncurrent Assets:		
Construction in Progress	43,171,798	39,495,100
Net Pension Asset - LGERS	(226,282)	(226,282)
Contributions in Current Year	222,035	222,035
Property and Equipment - Net	59,036,363	59,495,353
Total Noncurrent Assets	102,203,914	98,986,206
	\$150,568,516	\$147,780,573
LIABILITIES AND NET ASSETS		
Current Liabilities:		
Payable from Unrestricted Assets:		
Accounts Payable & Accrued Liabilities	\$4,034,524	\$1,426,491
Customer Deposits	17,210	17,210
Unearned Revenue	420,125	301,877
Construction Contract Retainages	739,012	739,012
Revenue Bond Payable - Current	955,000	955,000
Total Payable from Unrestricted Assets	6,165,871	3,439,590
Total Current Liabilities	6,165,871	3,439,590
Noncurrent Liabilities:		
Other Postemployment Benefits	1,202,917	1,202,917
Compensated Absences	326,896	326,896
Net Pension Obligation-LEO Special Separation Allowance	9,893	9,893
Revenue Bond Payable - Noncurrent	20,045,000	20,045,000
Total Noncurrent Liabilities	21,584,706	21,584,706
Total Liabilities	27,750,577	25,024,296
Net Assets:		
Invested in Capital Assets	81,208,161	77,990,453
Restricted	27,229,281	26,944,402
Unrestricted	14,380,497	17,821,422
Total Net Assets	122,817,939	122,756,277
	\$150,568,516	\$147,780,573

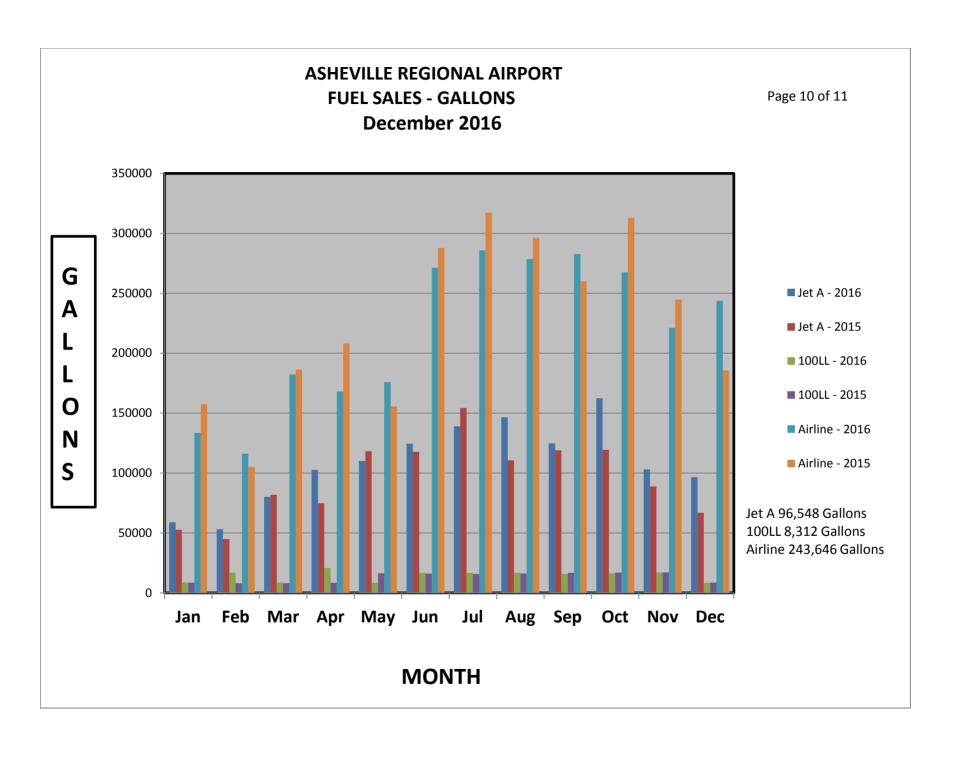
# ASHEVILLE REGIONAL AIRPORT Annual Operating Revenue by Month December 2016

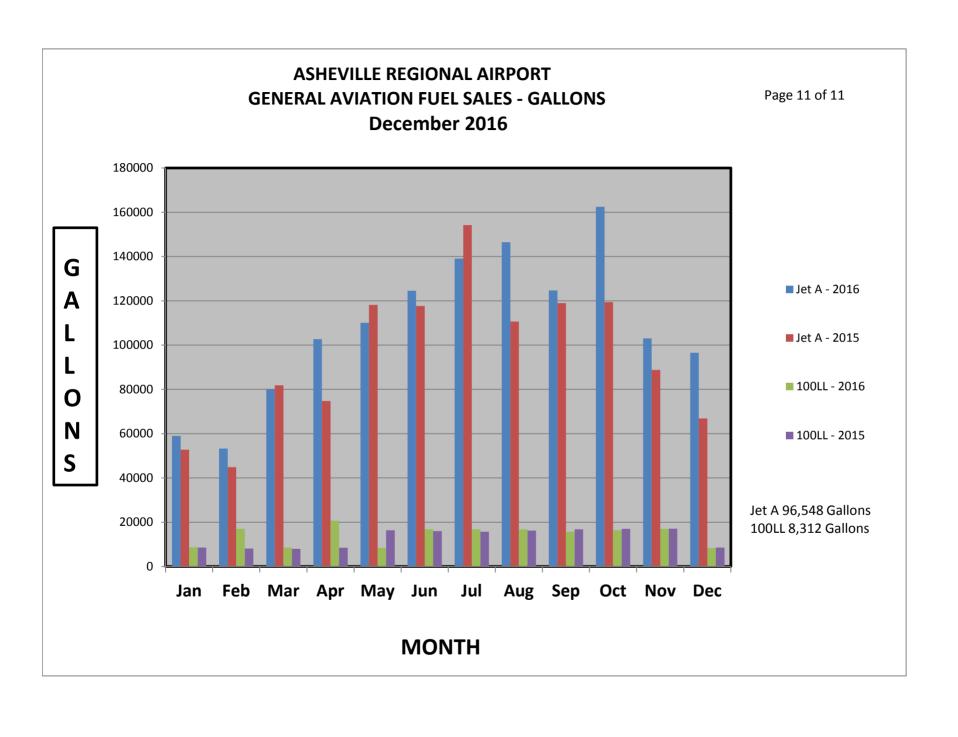
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Oollars









						Do	esign Phase							
Project Number	Project Name	Project Description	Professional Services Consultant	Professional Services Contract	General Contractor	Original Construction Contract	Change Orders (thru 02/01/2017)	Percent of Original Contract	Board Approved Project Cost	Percent Complete	Expensed to Date (thru 02/01/2017)	Start Date	End Date	Current Project Status (as of 02/01/2017)
1	Airfield Re- Development Project	Budget for the complete project				\$64,000,000.00	\$11,800,000.00		\$75,800,000.00	54.3%	\$41,204,056			All Engineer contracts, completed construction contracts and expenses will be inclusive of budget.
1A	Airfield Re- Development Project	Phase I - Design Services	RS&H	\$447,983.00	N/A	N/A	\$0.00	0.00%	(Overall total included in above number)	83%	\$372,161	Dec-12	Jun-16	Project Management work primarily complete.
1B	Airfield Re- Development Project	Phase II - Design Services and Project Management.	RS&H	\$1,842,318.00	N/A	N/A	\$0.00	0.00%	(Overall total included in above number)	94.2%	\$1,735,520	Jun-13	Dec-16	Project Management work continues, pending Contractor resolution.
1C	Airfield Re- Development Project	Phase III and IV - Design Services and Project Management.	RS&H	\$2,399,826.00	N/A	N/A	\$0.00	0.00%	(Overall total included in above number)	41.7%	\$1,001,318	Dec-14	May-18	Phase IV Bid opening on Jan 27, 2017 held.
1D	Airfield Re- Development Project	New Runway Design	AVCON	\$1,902,676.06	N/A	N/A	\$0.00	0.00%	(Overall total included in above number)	91.7%	\$1,744,628	Mar-13	May-18	Phase IV Bid opening on Jan 27, 2017 held.
1E	Airfield Re- Development Project	Miscellaneous and Administrative Expenses			N/A	N/A	\$0.00	0.00%	(Overall total included in above number)		\$3,766,649	Jan-13	Dec-17	Misc.,Admin., \$642K FAA Reimbursable expenses and land acquisition costs of 1.5M are included in this figure.
2	Parking Garage Project	Design and EA for approximately 1300 spaces of covered parking garage.	Delta Airport Consultants	\$1,627,575.00	N/A	N/A	\$0.00	0.00%	\$1,627,575.00	71.3%	\$1,160,345	Oct-15	Nov-17	Construction service and RPR Management continues.
						Cons	truction Phas	е						
Project Number	Project Name	Project Description	Professional Services Consultant	Professional Services Contract	General Contractor	Original Construction Contract	Change Orders (thru 02/01/02017)	Percent of Original Contract	Board Approved Project Cost	Percent Complete	Expensed to Date (thru 02/01/2017)	Start Date	End Date	Current Project Status (as of 02/01/2017)
1	,	Demolition of old runway 16/34, site preparation and NAVAID placement.	RS&H and AVCON, Inc.	Amount included in Phase 3 Design Fees	GLF Construction Corporation	\$14,007,508.90	\$74,717.86	0.53%	\$14,707,884.40	71.6%	\$10,088,807	Apr-16	Jan-17	NAVAIDs electrical wiring, towers and other work continues, punch list items being performed.
2	Parking Garage	Construct a 5 level parking garage for passenger/public parking.	Delta Airport Consultants	\$1,627,575.00	American South General Contractors	\$20,244,000.00	\$93,605.00	0.46%	\$21,938,700.00	21.4%	\$4,355,312	Sep-16	Nov-17	Retaining wall erection on the North, foundations for West wall, electrical conduit/wiring continues and concrete pours.
											(Construction and Administrative Costs			

included)

# Airportsurvey.com





Airport Facilities Review For 4th Quarter 2016

### Welcome

- Welcome to the Airportsurvey.com Airport Facilities Review for the recent quarter, a complimentary data set provided to Airportsurvey.com participating airports
- The following slides provide non-weighted scores and ratings based on an independent survey of air travelers
- Note that passenger responses are based on perception, rather than objective assessment
- Value Added Services available from Canmark include:
  - Report analysis
  - Statistical testing
  - Air carrier responses
  - Non-facility responses
  - Tailored comparison sets
  - Passenger demographics
  - Sample size enhancement
  - Targeted and customized reporting
  - Custom survey questions and content

No representations are made as to the completeness or accuracy of information contained herein. Airport facility raw data is available upon request.

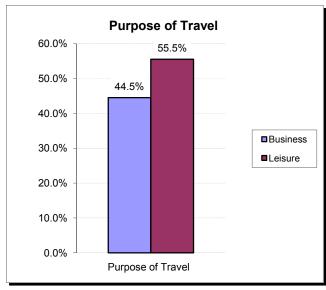
**Proprietary and Confidential** 

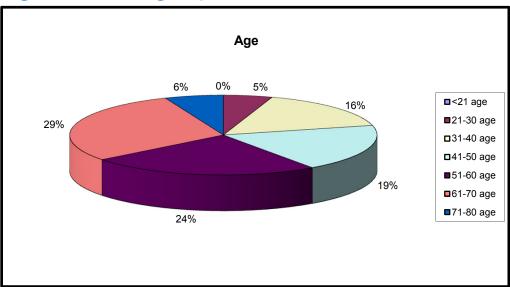
#### Overview

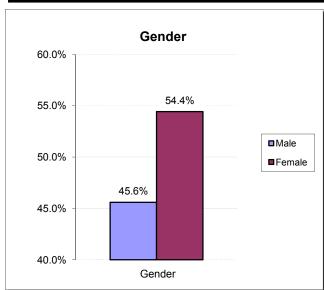
- Airportsurvey.com is an ongoing, all-inclusive online passenger satisfaction survey program from Canmark Research Center
- Invitations to take the survey are distributed at select airports across the country
- Over 30 airports participate
- Each survey invitation card is single-use, and must reference an actual flight
- Survey distribution occurs approximately three days per month
- Response scale is 1 through 5: Poor, Fair, Good, Very Good, Excellent
- Survey participants have a chance to win round-trip airline tickets
- Response rates vary from 10% to 20% based on location
- Facilities attributes are scored according to check-in airport
- Airports are grouped into three tiers according to DOT originating revenue\*

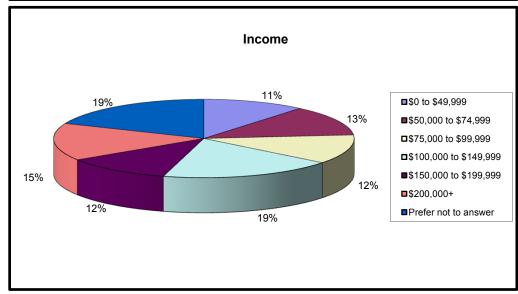
<sup>\*</sup>Updated 4rd Quarter 2012

### Passenger Demographics



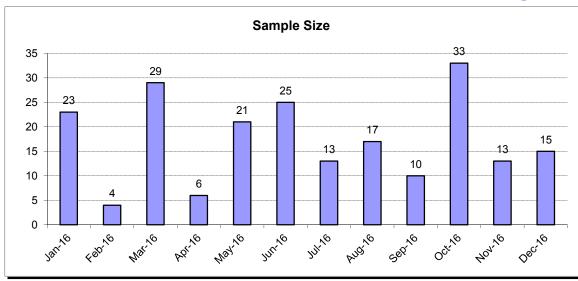






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### **General Findings**



Sample is clustered around airport invitation distribution dates.

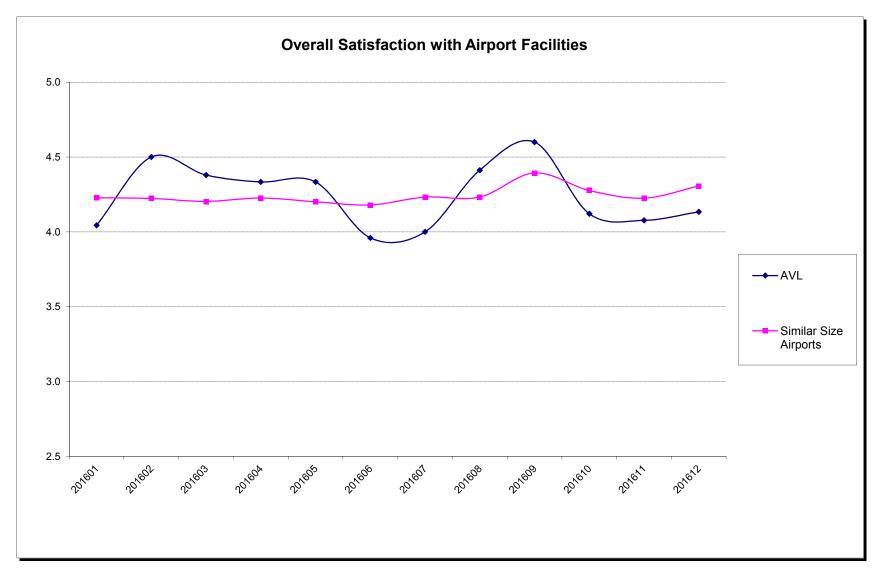
Sample reflects passengers intercepted at arrival airports who rated check-in airport.

	AVL	Similar	+/-	Pct
Overall	4.24	4.24	(0.00)	-0.1%
Availability of parking	3.57	4.12	(0.54)	-15.2%
Cost of parking	3.36	3.66	(0.29)	-8.6%
Clear, easy to follow signs	4.20	4.24	(0.04)	-1.0%
Cleanliness	4.40	4.32	0.08	1.8%
Availability of restrooms	4.42	4.32	0.10	2.2%
Cleanliness of restrooms	4.37	4.25	0.12	2.7%
Concessions / restaurants	3.70	3.77	(0.07)	-1.8%
Transportation to your gate / concourse / terminal	4.16	4.14	0.02	0.5%
Airport Wi-Fi ease of use	4.17	3.94	0.23	5.5%
Overall airport Wi-Fi	4.13	3.86	0.27	6.6%
Overall departure airport concourse	4.27	4.18	0.10	2.3%
Security: Wait time at checkpoint	4.23	4.25	(0.02)	-0.5%
Security: Professionalism of personnel	4.34	4.32	0.03	0.6%
Security: Confidence in airport security procedures	4.26	4.14	0.12	2.8%

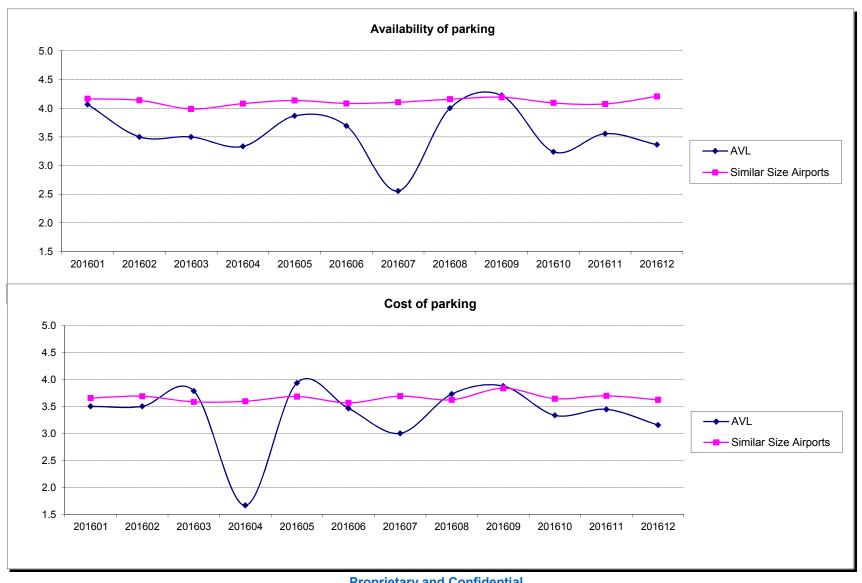
Statistical means testing not performed on results

AVL Responses 209

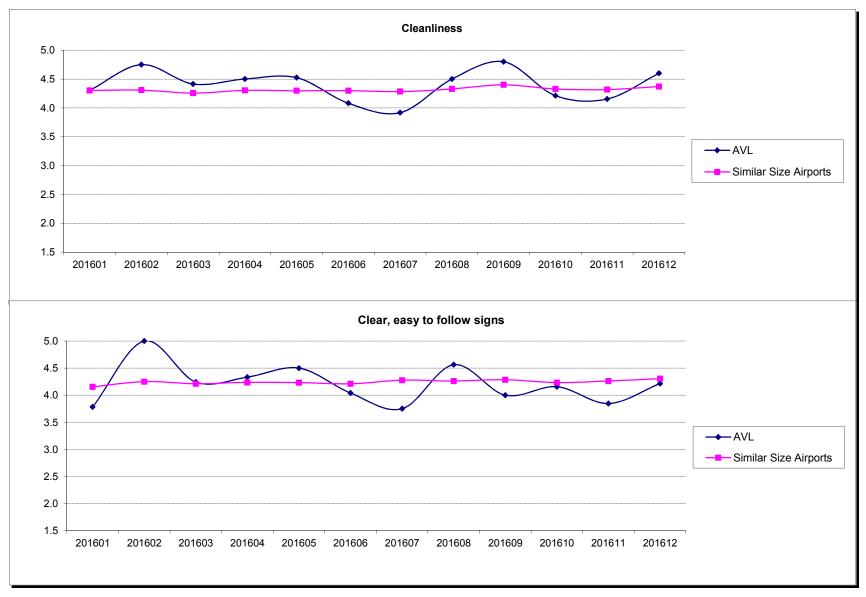
### Overall Satisfaction with Airport Facilities



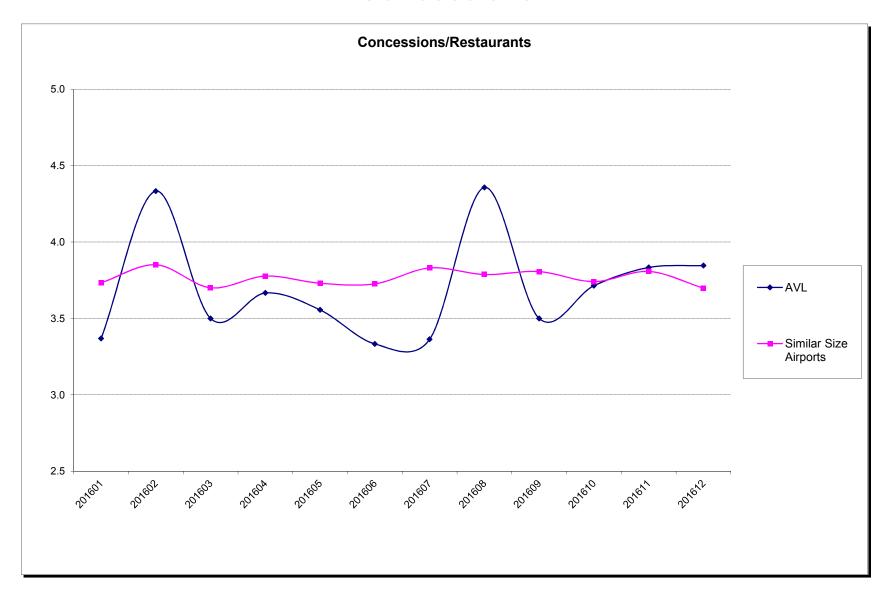
### **Parking Satisfaction**



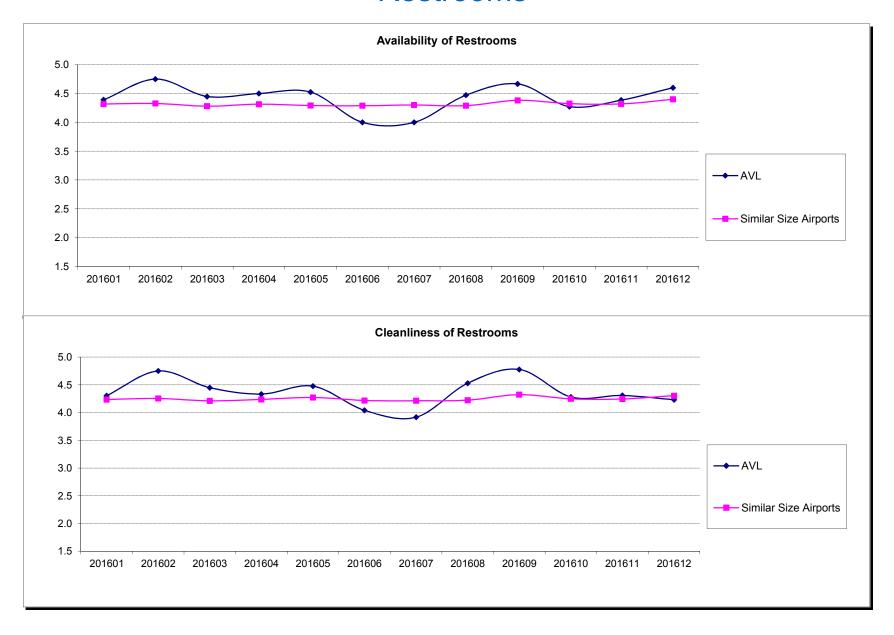
### Cleanliness and Signage



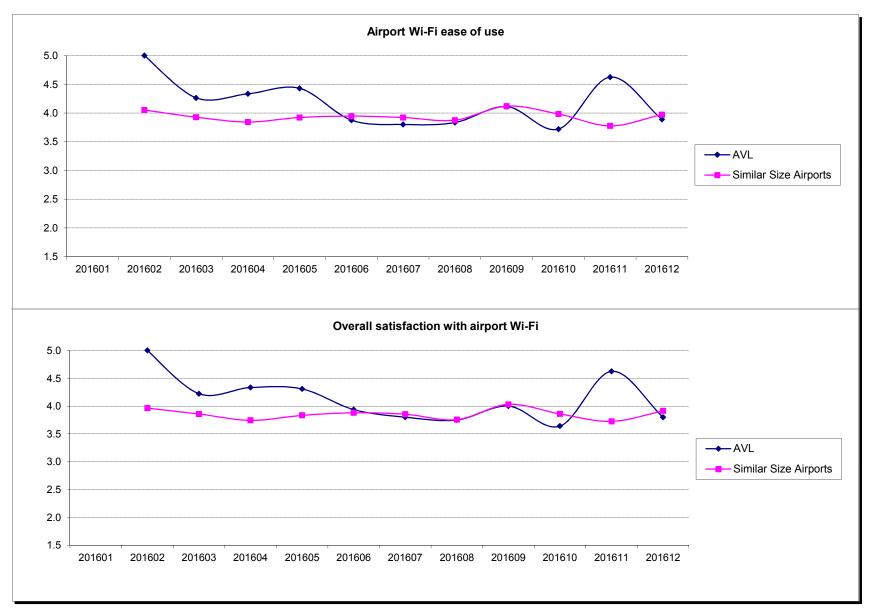
### Concessions



## Restrooms

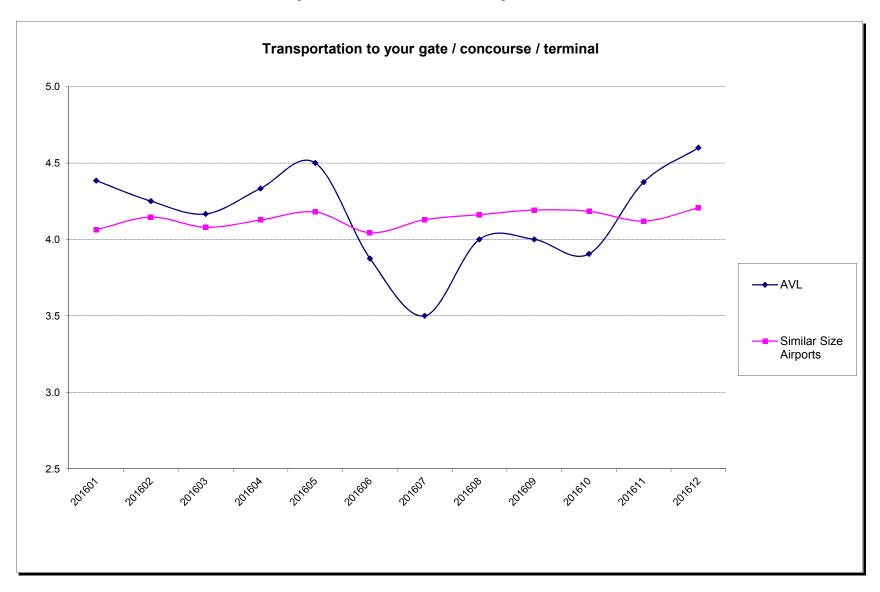


## Wi-Fi

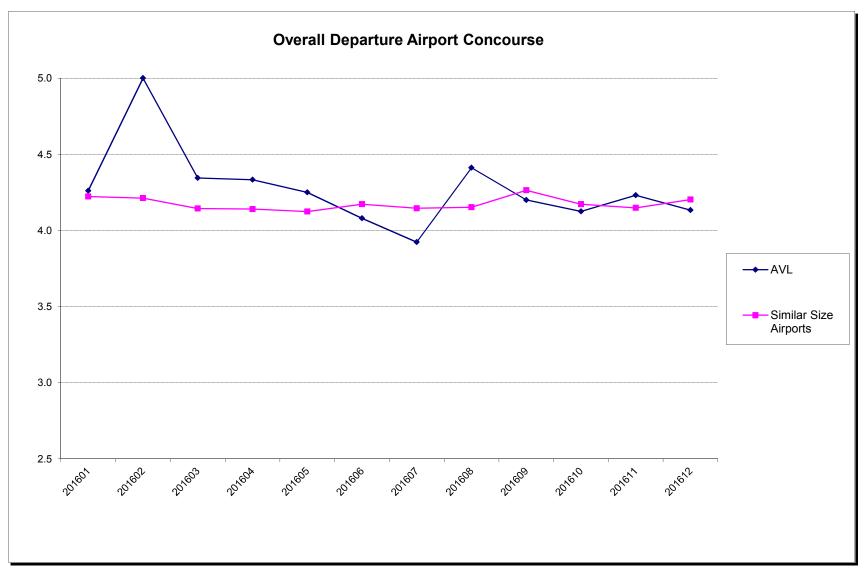


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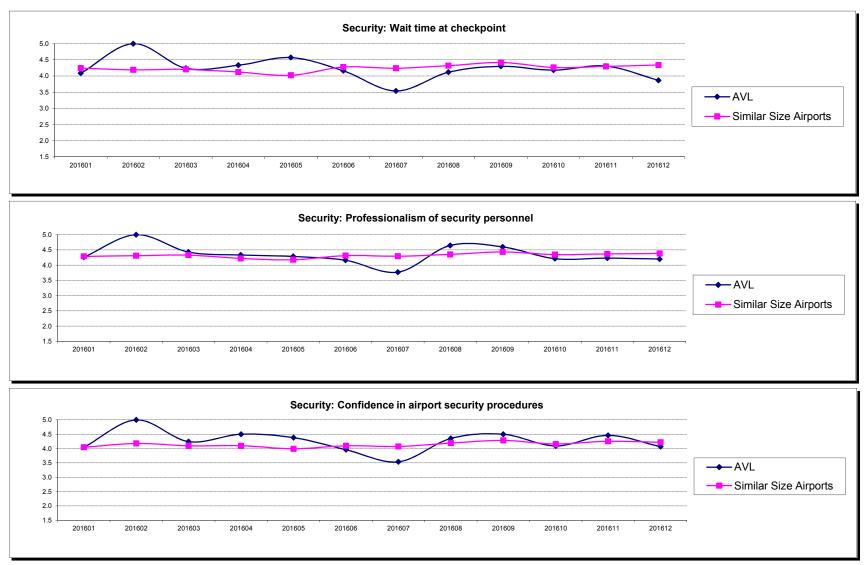
## Transportation to Departure Gate



## **Overall Departure Airport Concourse**



## **Airport Security**



**Proprietary and Confidential** 

## Appendix A - Geographic Breakdown of Respondents

Check-in Passengers by Place of Residence							
	AL	1	EUROPE	1			
	AR	2		•			
	CA	_ 5					
	CT	1					
	FL	10					
	GA	1					
	IL	2					
	IN	1					
	LA	2					
	MA	4					
	MD	2					
	ME	1					
	MI	3					
	MN	2					
	NC	132					
	NE	2					
	NH	1					
	NJ	1					
	NY	7					
	ОН	2					
	OR	2					
	PA	2					
	RI	2					
	SC	2					
	TX	4					
	VA	1					

Note: Only includes passengers who indicated state of residence

## Appendix B - About Canmark

- Since 1993 Canmark Technologies has combined market research, programming, and technical expertise with thoughtful attention to client needs. Our problem-solving orientation has earned the respect of business clients and market researchers across North America.
- With an experienced staff of technical experts and project managers specializing in various fields of data capture and manipulation, programming and software development, web design and scripting, Canmark is able to leverage superior technology and know-how to support projects of all types and scope in the most cost-effective manner possible.
- Areas of expertise include survey development and delivery, project and data management services, requirements gathering, data sampling, paper and web forms management, custom lasering and printing, distribution logistics, data processing, custom programming for data cleansing, reporting and data analysis, and project consulting.
- We stand ready to meet your data needs, if you have any questions, please do not hesitate to contact us.

## Appendix C - Contacts

Paul Isaacs, President pisaacs@canmarktech.com 1-877-441-2057, ext. 11



# GARAA-Authority Members

2016 Board Review & Discussion



# 2016 Review & Discussion

Open discussion and dialogue... "How did we do in 2016 and what suggestions do you have for 2017?"

### 1. Relationships:

- Director & Authority Members
- Director & Community/Stakeholders/Airlines
- Authority Members & Authority Members
- Authority Members & Community/Stakeholders/Airlines
- 2. <u>Administrative procedures</u>: Interactions (information provided) between Director and Authority Members...too much, too little? How to provide the proper amount of empowerment to manage within the guardrails of board governance?
- 3. Communication & Feedback: How can we improve our transparency of communication & feedback with each other; the Director & Staff; and the community stakeholders?
- 4. Summary



## Key strategic priorities

<u>Governance vs. Management</u>: Focus on setting governing direction ("guard rails") for the organizational and holding management accountable for the execution of operational tactics. Pursue continuous educational opportunities for Authority Member development.

- 1. Organizational Relevance: Remaining relevant in an era of airport consolidation
- 2. <u>Financial Stewardship</u>: Sustainability/Operating Performance/Audit & Compliance
- 3. Municipal Relations: Positive relationships with all municipalities surrounding the airport
- 4. <u>Stakeholder Relations</u>: Positive relationships with neighbors and other community organizations
- 5. <u>Community Image</u>: Public Perception/Public Relations/Customer Service/Legal Entity
- 6. Facilities Stewardship: Future Master Facilities Plan
- 7. **Environmental Stewardship**: Accountability/Awareness of Environmental Issues
- 8. **Economic Development**: Engage Community Partners/Airline Service Development
- 9. <u>Vendor-Partner Relations</u>: General Aviation/Rental Car Agencies/Vendors
- 10. Public Safety: Airport Emergency Safety/TSA Relations/Municipal Partners
- 11. Organizational Accountability: Executive Director Supervision





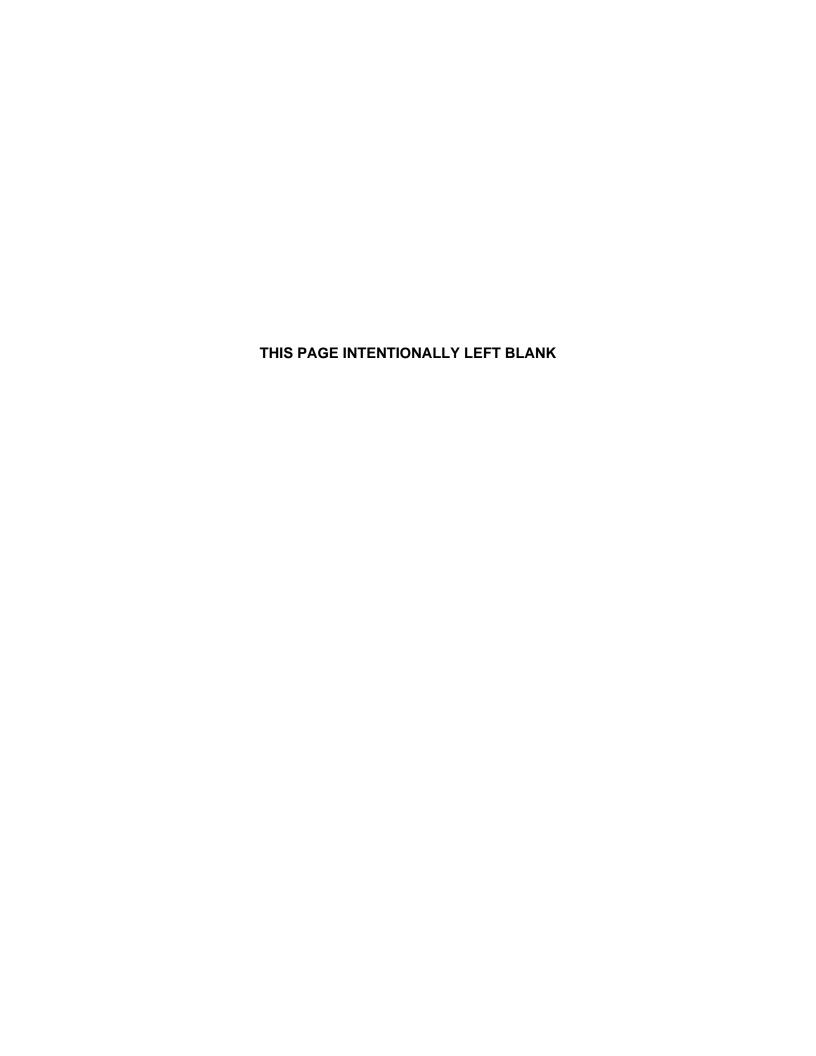
GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY AIRFIELD REDEVELOPMENT PROGRAM

PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 - PAVING, LIGHTING, AND NAVAIDS



VOLUME NO. 1 CONTRACT & BID DOCUMENTS

ISSUED FOR BID DECEMBER 2016



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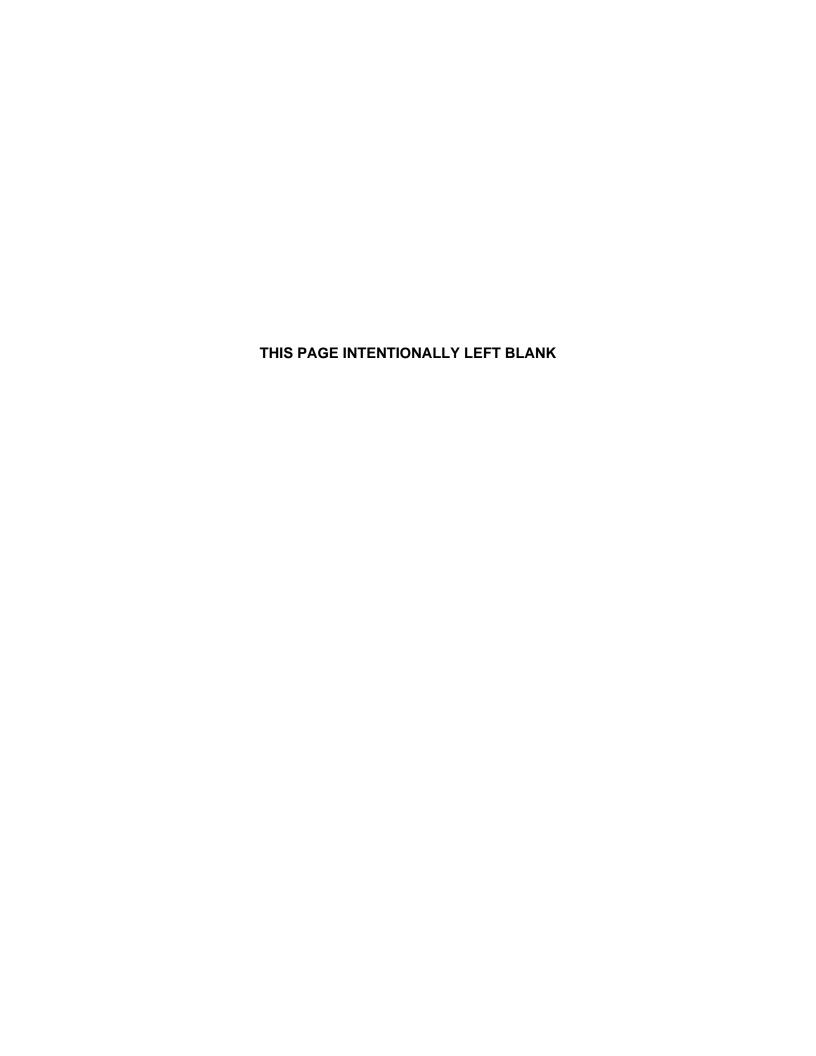
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#### **GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY**

#### **ASHEVILLE REGIONAL AIRPORT**

#### **INVITATION TO BID**

PROJECT NAME: Permanent Runway 17-35 Construction - Bid Package 4 - Paving, Lighting, and

**NAVAIDs** 

BID DATE: January 27, 2017

BID TIME: 2:00 PM

Sealed bids will be received by the **Greater Asheville Regional Airport Authority**, 61 Terminal Drive, Suite 1, Fletcher, NC 28732, until 2:00 PM (local time), on the bid date, at which time and place all bids will be publicly opened and read aloud. Bids must be in the possession of the Airport Authority prior to bid time on the bid date. Bids shall be sealed and plainly marked on the outside of the envelope with the project name, bidder's name, bidder's address, bidder's telephone number. **ANY BID RECEIVED AFTER THE SPECIFIED TIME WILL NOT BE CONSIDERED.** Bids must be completed and signed in ink in space(s) provided on the enclosed bid form(s) or bid will be subject to rejection. Each Bidder must submit with his bid, security in the amount of five percent (5%) of the bid price, subject to the conditions provided in Section 20 of the General Provisions. No Bidder may withdraw a bid within ninety (90) calendar days after the actual date of the bid opening.

<u>PRE-BID CONFERENCE</u>: A Pre-Bid Conference for this project will be held on <u>December 15, 2016</u> at <u>10:30 AM</u> (local time) at the Asheville Regional Airport Administrative Offices Conference Room, 61 Terminal Drive, Suite 1, Fletcher, NC 28732. **Attendance by prospective bidders is mandatory.** 

#### BID DOCUMENTS MAY BE OBTAINED:

- 1) Electronic files by contacting the Program Manager RS&H at 704-940-4731
- 2) Hard Copy for a fee of \$300 by contacting the Program Manager RS&H at 704-940-4731
- 3) McGraw-Hill Construction Dodge Online Plan Room www.construction.com
- 4) Carolinas AGC Online Plan Room https://ibuild.cagc.org/

A cashier's check, a certified check or a surety bond in the amount of five percent (5%) of the bid shall accompany the proposal of each bidder. The said check or bond shall be submitted as security that should the bidder be awarded the work, he will enter into a contract and furnish the necessary bonds and insurance certificates within fifteen (15) calendar days from the date of notice of award and failing to do so, said bid security shall be forfeited to the Owner (Greater Asheville Regional Airport Authority) as liquidated damages. The check or bond shall be made payable to the Owner. The Owner reserves the right to hold the check or bond of the three lowest bidders until the successful bidder has entered into a contract and furnished the necessary bonds. All other checks or bonds will be returned as soon as the award has been made to the successful bidder. The Owner reserves the right to reject all bids and to waive technicalities as provided in Section 20 of the General Provisions.

The **Greater Asheville Regional Airport Authority**, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all Bidders that it will affirmatively ensure that in any Contract entered into pursuant to this advertisement, Disadvantaged Business Enterprises (DBE) will be afforded full opportunity to submit bids in response to this invitation and

will not be discriminated against on the grounds of race, creed, color, national origin or sex in consideration for an award.

The **Greater Asheville Regional Airport Authority** continually strives to develop quality sources for goods and services and encourages all prospective Bidders to respond to the Invitation to Bid. The Authority reserves the following rights: to accept or reject any or all bids; and to award the Contract to the most responsive and responsible Bidder whose bid is determined by the Owner to be in its best interest.

#### INSTRUCTIONS TO BIDDERS

Project Name: Permanent Runway 17-35 Construction – Bid Package 4 – Paving, Lighting, and

**NAVAIDs** 

**Project Description**: This project consists of construction of a new 8000' by 150' runway with a

blast pad, 25' paved shoulders, paved connector taxiways, new airfield lighting, and new NAVAIDs installation. Scope of work encompasses paving, drainage, pavement marking, grooving, airfield electrical, lighting, signage, installation of two instrument landing system (ILS) glide slope facilities, and installation of two precision approach path indicator (PAPI) systems. The work includes furnishing labor, materials, equipment, services, insurance, bonding, permits and incidentals for the work shown

on the bid documents.

**Bid Description**: The Bid includes all of the work described in the above project description

and as shown on the project drawings and called for in the specifications. All Bidders are required to hold their bid prices for 90 days after the date

bids are due.

**Contract Time**: From the date of issuance of Notice to Proceed (NTP) to overall project substantial completion of the Contract: 470 consecutive calendar days.

• 276 consecutive calendar days for Volume 2 Work (Permanent Runway 17-35 Construction)

194 consecutive calendar days for Volume 3 Work (Taxiway B

Conversion and NAVAID Installation)

**Liquidated Damages**: \$2,000 per day for Contractor's failure to achieve substantial completion within the overall project contract time allotted.

\$2,000 per day for Contractor's failure to complete the project schedule phases within the time limits listed in the Contract phasing sheets (SP series).

\$1,000 per each 30 minute increment (or portion thereof) for Contractor's failure to re-open closed airfield pavements for use at the predetermined time after night-time closures.

\$2,000 per day that the site is under a Notice of Violation (NOV) by North Carolina Department of Environmental Quality (NCDEQ) due to Contractor's negligence in erosion and sedimentation control measures.

#### **Required Insurance Coverage**

Employer's Liability	\$1,000,000	Limit each Accident
	\$1,000,000	Limit Disease Policy Aggregate
	\$1,000,000	Limit Disease Each Employee
General Liability	\$2,000,000	Bodily Injury & Property Damage Liability
		(Combined Single Limit Each Occurrence and
		Aggregate)
Automobile Liability	\$2,000,000	Bodily Injury & Property Damage Liability
		(Combined Single Limit Each Accident)
Umbrella Liability	\$5,000,000	Bodily Injury & Property Damage Liability
		(Combined Single Limit Each Occurrence and
		Aggregate)

BID OPENING: January 27, 2017, 2:00 PM, Greater Asheville Regional Airport Authority

Administrative Offices Conference Room, 61 Terminal Drive, Suite 1, Fletcher,

NC 28732

NOTICE IS HEREBY given that sealed bids will be received by the GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY, sometimes referred to hereafter as "Authority" or "Owner" on or before the date and time set out above. Opening of bids will occur immediately thereafter. The Greater Asheville Regional Airport Authority reserves the right to extend the time and date of the bid opening at its sole discretion, by addendum, when deemed to be in the best interest of the Authority.

#### 1. INSTRUCTIONS TO BIDDERS:

#### 1.1 DELIVERY OF BIDS:

- (a) The delivery of the BID to the Greater Asheville Regional Airport Authority prior to the deadline is solely and strictly the responsibility of the Bidder. The deadline for delivery of all BIDS is 2:00 PM, local time, January 27, 2017. One (1) original and two (2) copies of your BID shall be delivered. All BIDS must be marked: SEALED BIDS FOR PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 PAVING, LIGHTING, AND NAVAIDS FOR THE ASHEVILLE REGIONAL AIRPORT. All BIDS will be delivered to the Greater Asheville Regional Airport Authority Administrative Offices located in the Airport Terminal at 61 Terminal Drive, Suite 1, Fletcher, NC 28732.
- (b) Electronic or faxed bids will not be considered.
- (c) For informational purposes, the Bidder is advised that the United States Postal Service and even Express Mail Services may not deliver your BID in a timely manner. Bidders are cautioned to plan necessary delivery time accordingly.
- (d) The delivery of said BID prior to the time stated in the previous section is solely and strictly the responsibility of the Bidder. The Greater Asheville Regional Airport Authority will not be responsible for delays caused by any delivery services that may be used or for any other reason. The BID delivery deadline will be strictly observed. **Any BID** received after the bid opening time will not be considered.

#### 1.2 INQUIRIES/RESPONSES:

Except during the Mandatory Prebid Meeting, the Authority will not respond to oral inquiries concerning this Request for Bids (RFB). Bidders may submit written or e-mail inquiries regarding this RFB, addressed to the Program Manager, RS&H, Attn: Eric Rysdon, PE, 1520 South Boulevard, Suite 200, Charlotte, NC 28203, 704-940-4731, email <a href="mailto:eric.rysdon@rsandh.com">eric.rysdon@rsandh.com</a>. The deadline for inquiries is 5:00 p.m. local time, January 20, 2017. Inquiries and questions received after this time will not be responded to.

The Authority will utilize its website <a href="http://flyavl.com/pages/about-the-airport/doing-business-with-avl/">http://flyavl.com/pages/about-the-airport/doing-business-with-avl/</a> to distribute information and addenda. Bidders and other prospective vendors may register to receive this information on the Authority's website. It shall be the responsibility of the Bidder, prior to submitting their bid, to determine if addenda to this RFB have been issued and, if issued, acknowledging and incorporating them into their bid.

#### 1.3 MANDATORY PREBID MEETING:

The purpose of the mandatory prebid meeting will be to discuss the requirements and objectives of this RFB, to answer any questions potential Bidders have about the RFB, and to answer any general questions about the Authority and the Asheville Regional Airport. At the mandatory prebid meeting, the Authority will attempt to answer all questions received, reserving the right, however, to answer any question in writing in a subsequent addendum to the RFB. In order to conduct these meetings as expeditiously and efficiently as possible, it is requested that all prebid questions be sent to the Program Manager at least three (3) days prior to the meeting to allow staff time to research the questions prior to the meeting.

#### 1.4 EXAMINATION OF BID DOCUMENTS AND WORK SITE

Each Bidder is individually responsible for the careful examination of the site of the proposed Work, the Contract Documents, Addenda and all requirements of the project. The Bidder shall examine and thoroughly familiarize themselves with all existing conditions, including all applicable laws, codes, ordinances, rules and regulations that will affect his work. The failure or omission by any Bidder to do so shall in no way relieve any Bidder from any obligation with respect to its bid.

#### 1.5 COST OF PREPARATION:

The cost of preparing a BID in response to this RFB shall be borne entirely by the Bidder.

#### 2. **DISQUALIFICATION:**

The Greater Asheville Regional Airport Authority reserves the right to disqualify BIDS before or after opening, upon evidence of collusion by any prospective Bidder or Bidders with the intent to defraud or other illegal practices upon the part of the Bidders.

The Greater Asheville Regional Airport Authority may consider any BID informal that is not prepared and submitted in accordance with the provisions of this RFB, and may waive any informalities, or irregularities, or reject any and all BIDS at its sole discretion

The Greater Asheville Regional Airport Authority reserves the right to reject, at its sole discretion, any BID if the evidence submitted by the Bidder or an investigation of the qualifications and/or experience of the Bidder fails to satisfy the Greater Asheville Regional Airport Authority that such Bidder is sufficiently qualified or experienced to carry out the work and obligations as required in this RFB. The Greater Asheville Regional Airport Authority also reserves the right to reject all BIDS to the RFB, in its sole discretion.

#### 3. SUBMITTAL OF BIDS

Submitted Bids shall not be valid unless: sealed in an envelope marked "Sealed Bid"; identified by the name and address of the firm quoting; location of airport; project name; and the date and time of Bid opening. Bids are to be accompanied by one (1) original and two (2) copies of the following Proposal Forms:

- 3.1 Proposal Form 1 Bidder's Certification
- 3.2 Proposal Form 2 Proposal Affidavit
- 3.3 Proposal Form 3 Bid Form
- 3.4 Proposal Form 4 Proposal Bond
- 3.5 Proposal Form 5 Surety's Bond Affidavit
- 3.6 Proposal Form 6 Non-Collusion Affidavit
- 3.7 Proposal Form 7 Equal Employment Opportunity Report Statement
- 3.8 Proposal Form 8 Buy American Certification
- 3.9 Proposal Form 9 Certification of Nonsegregated Facilities
- 3.10 Proposal Form 10 Disadvantaged Business Enterprise (DBE) Utilization Statement
- 3.11 Proposal Form 11 FAA Report of Certified DBE Contractors

- 3.12 Proposal Form 12 Subcontractor List
- 3.13 Proposal Form 13 Iran Divestment Act Certification
- 3.14 Proposal Form 14 E-Verify Affidavit
- 3.15 Proposal Form 15 Statement of Bidder's Qualifications

#### 4. BID REQUIREMENTS

- 4.1 The Greater Asheville Regional Airport Authority shall not be responsible for any cost incurred by any Bidder in the preparation of its bid.
- 4.2 All blanks on the bid must be completed in ink or typed.
- 4.3 Where bid documents have erasures or corrections, such erasures or corrections must be initialed in ink by the Bidder.
- 4.4 In the case of unit price contracts, if an error occurs in the extension of an item, the unit price in words as shown in the bid documents will govern.

#### 5. <u>DIRECT PURCHASES</u>

The Greater Asheville Regional Airport Authority reserves the right to purchase directly various materials, supplies and equipment that may be a part of this contract.

#### 6. QUALIFICATION OF BIDDERS

Bidder must complete and submit the <u>Statement of Bidder's Qualifications Form with the Bid.</u> Bidder shall furnish the Owner satisfactory evidence of its financial responsibility, consisting of a confidential statement or report of the Bidder's financial resources and liabilities as of the last calendar year or the Contractor's last fiscal year, certified by a certified public accountant. Bidder shall further certify whether its financial responsibility is approximately the same as stated or reported by the public accountant. If the Bidder's financial responsibility has changed, the Bidder shall qualify the public accountant's statement or report to reflect Bidder's true financial condition at the time such qualified statement or report is submitted to the Owner. The Financial Statement shall be submitted under separate cover and labeled "Financial Statement."

#### 7. INTERPRETATION OF BID DOCUMENTS

- 7.1 No interpretation of the meaning of the plans, specifications or any other contract document will be binding if made to any Bidder orally, at any presentation by Owner, or by any representative of Owner. Clarifications or corrections to the specifications shall not be valid unless they are issued in addendum form. All such interpretations and any supplemental instructions will be in the form of a written addendum which, if issued, will be published on the Asheville Regional Airport website. All addenda so issued shall become part of the bid specifications and the contract. Addenda may also be issued to modify bidding documents as deemed advisable by the Owner.
- 7.2 Interpretation of Estimated Bid Quantities An estimate of quantities of work to be done and materials to be furnished under these specifications may be given in the Request for Bids. If so, it is the result of careful calculations and is believed to be correct. This is given only as a basis for comparison of bids and the award of the contract. The Owner does not expressly or by implication agree that the actual quantities involved will correspond exactly therewith; nor shall the Bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as hereinafter provided.

#### 8. WITHDRAWAL OR REVISION OF BIDS

A Bidder may withdraw or revise a bid (by withdrawal of one (1) bid and submission of another) provided that the Bidder's request for withdrawal is received by the Owner in writing before the time specified for opening bids. Revised bids must be received prior to the date and time of the bid opening at the place specified.

#### 9. PUBLIC OPENING OF BIDS

Bids shall be opened, and read publicly at the time and place specified in the advertisement or request for bids. Owner reserves the right to extend this date and time at Owner's sole discretion. Bidders, their authorized agents and other interested persons are invited to attend the bid opening. Bids that have been properly withdrawn (by written request) prior to the scheduled opening time or received after the time specified for opening bids shall be returned to the Bidder unopened.

#### 10. IRREGULAR BIDS

Bids shall be considered irregular for the following reasons:

- 10.1 If the bid is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the bid form is detached, or if all required forms (or required documentation where a set form is not mandated) have not been properly submitted.
- 10.2 If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind, which make the bid incomplete, indefinite, or otherwise ambiguous.
- 10.3 If the bid does not contain a unit or lump sum price for each pay item listed in the bid.
- 10.4 If the bid contains unit prices or lump sum prices that are obviously unbalanced.
- 10.5 If the bid is not accompanied by the bid guaranty specified by the Owner.

The Owner reserves the right to reject any irregular bid and the right to waive technicalities, if such waiver is in the best interest of the Owner, in the sole judgment of Owner.

#### 11. DISQUALIFICATION OF BIDDERS

A Bidder shall be disqualified from consideration for award, for any of the following reasons:

- 11.1 Submitting more than one (1) bid from the same individual, partnership, firm or corporation under the same or different name.
- 11.2 Evidence of collusion among Bidders. Bidders participating in such collusion shall be disqualified as Bidders for this project and any future work of the Owner until any such participating Bidder has been reinstated by the Owner as a qualified Bidder.
- 11.3 Evidence that Bidder has a financial interest in the firm of another Bidder for the same work.
- 11.4 Failure to attend the mandatory prebid conference.
- 11.5 Failure to properly complete all required bid forms.
- 11.6 Any other cause specified elsewhere in the Bid/Contract Documents, as determined in the sole judgment of Owner.

#### 12. CONSIDERATION OF BIDS & BASIS OF AWARD

- 12.1 After all qualified bids are publicly opened and read, they will be evaluated based on the total bid price (with consideration to accept any or all Bid Alternates, if applicable), the Bidder's qualifications, DBE ownership or level of DBE subcontractor participation (or documented Good Faith Efforts to obtain such participation) and the Bidder's adherence to the prescribed requirements, unit prices and other data requested by the Owner.
- 12.2 The Owner may consider the qualifications and experience of the Bidder and subcontractors, suppliers and other persons and organizations proposed for portions of the work, and the operating costs, maintenance requirements, performance data and guaranties of items of materials and equipment proposed for incorporation in the work. The Owner may conduct such investigations as the Owner deems necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed subcontractors, suppliers and other persons and organizations to perform and finish the work in accordance with the contract, to the Owner's satisfaction within the prescribed time. If a contract is awarded, it will be awarded to the lowest, most responsive, responsible Bidder meeting all requirements of the request for bids, at the Owner's sole discretion. Bid alternates will be awarded at Owner's discretion.
  - a. Each bidder is required to submit bids for at least one of the Volume 2 Base Bid schedules. The following Volume 2 Base Bid schedules will be considered:
    - 1. Volume 2 Base Bid Asphalt Runway with Quartz High Intensity Runway Lights
    - 2. Volume 2 Base Bid Concrete Runway with Quartz High Intensity Runway Lights
  - b. Each bidder is required to submit bids for the Volume 3 Base Bid schedule:
    - 1. Volume 3 Base Bid Taxiway B Conversion and NAVAIDs
    - Each bidder is required to submit bids for each of the alternate bids:
      - 1. Additive/Deduct Alternate 1 LED High Intensity Runway Lights (HIRL)
      - 2. Additive Alternate 2 Taxiway A Shoulders
      - 3. Additive Alternate 3 Taxiway B2
      - 4. Additive Alternate 4 Taxiway B4
- 12.3 The Volume 2 Base Bid will be awarded to the lowest asphalt or concrete option that meets the following criteria:
  - 1. Low bid is within GARAA budget
  - 2. Life Cycle Cost Analysis

#### 13 REJECTION OF BIDS

The Greater Asheville Regional Airport Authority, in its sole discretion, reserves the right to reject any or all bids; accept or reject any or all alternates; waive technicalities, if such waiver, in the sole judgment of the Authority, is in the best interest of the Authority and conforms to applicable state and local laws or regulations pertaining to the letting of construction contracts; or advertise for new bids; to make inquiries and request clarifications of any bid; or proceed with the work otherwise. All such actions shall promote the best interest of the Greater Asheville Regional Airport Authority.

#### 14 QUALIFICATIONS OF SURETY COMPANIES

In order to be acceptable to the Authority, a surety company issuing the Bid Bonds, Payment Bonds or Performance Bonds called for in these specifications, shall meet and comply with the following minimum standards:

#### 14.1 General

- 14.1.1 All Sureties for Greater Asheville Regional Airport Authority projects must be admitted to do business in North Carolina and all bonds must be submitted on the exact forms contained within the contract documents.
- 14.1.2 Attorneys-in-Fact who sign Bid Bonds, Payment Bonds or Performance Bonds for Greater Asheville Regional Airport Authority projects must file with such bond a certified copy of their Power of Attorney to sign such bond.
- 14.1.3 Agents of surety companies must list their name, address and telephone number on all bonds. A North Carolina registered agent must sign all bonds.
- To be acceptable to the Owner as Surety, a Surety shall comply with the following minimum provisions:
  - 14.2.1 Surety must have twice the minimum surplus and capital required by the North Carolina Insurance Code at the time of bid solicitation.
  - 14.2.2 Surety must be in compliance with all provisions of the North Carolina Insurance Code and hold a current valid certificate of authority issued by the United States Department of the Treasury under SS.31 U.S.C. 9304-9308.
  - 14.2.3 Surety must have a minimum underwriting limitation of \$5,000,000 published in the latest edition of the Federal Register for Federal Bonds (U.S. Dept. of the Treasury).
- 14.3 Sureties rated through A.M. Best shall comply with the following:
  - 14.3.1 The Surety shall be rated as "A-" or better as to General Policyholders Rating and Class VII or better as to financial category by the most current Best's Key Rating Guide, published by A.M. Best Company.
  - 14.3.2 Surety must have fulfilled all of its obligations on all other bonds previously given to the Greater Asheville Regional Airport Authority.

#### 15 AWARD OF CONTRACT

Within ninety (90) calendar days of the public opening of the bids, Award may be made to the lowest responsible Bidder whose bid is responsive to the request for bids and whose qualifications

indicate the award will be in the best interest of the Owner, in Owner's sole judgment. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility, qualifications and financial ability of the Bidder to do the work in accordance with the Contract documents to the satisfaction of the Owner and within the time prescribed. The Owner reserves the right to reject the bid of any Bidder who does not pass such investigation to the Owner's satisfaction. Until the Owner's final execution and delivery of the Contract, the Owner reserves the right to reject any or all bids, to waive technicalities and to advertise for new bids, or to proceed to do the work otherwise when the best interests of the Owner will be promoted.

#### 16 EXECUTION OF THE CONTRACT

The successful Bidder shall sign (execute) and return the contract to the Owner, along with the required proofs of insurance and fully executed performance and payment bonds, within fifteen (15) calendar days after the date of written notice to award.

Upon receipt of the contract, proof of insurance and performance and payment bonds executed by the successful Bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return one fully executed original contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful Bidder's bid and the terms of the contract. No work shall begin until the Owner has issued a formal Notice-to-Proceed.

#### 17 FAILURE TO EXECUTE CONTRACT

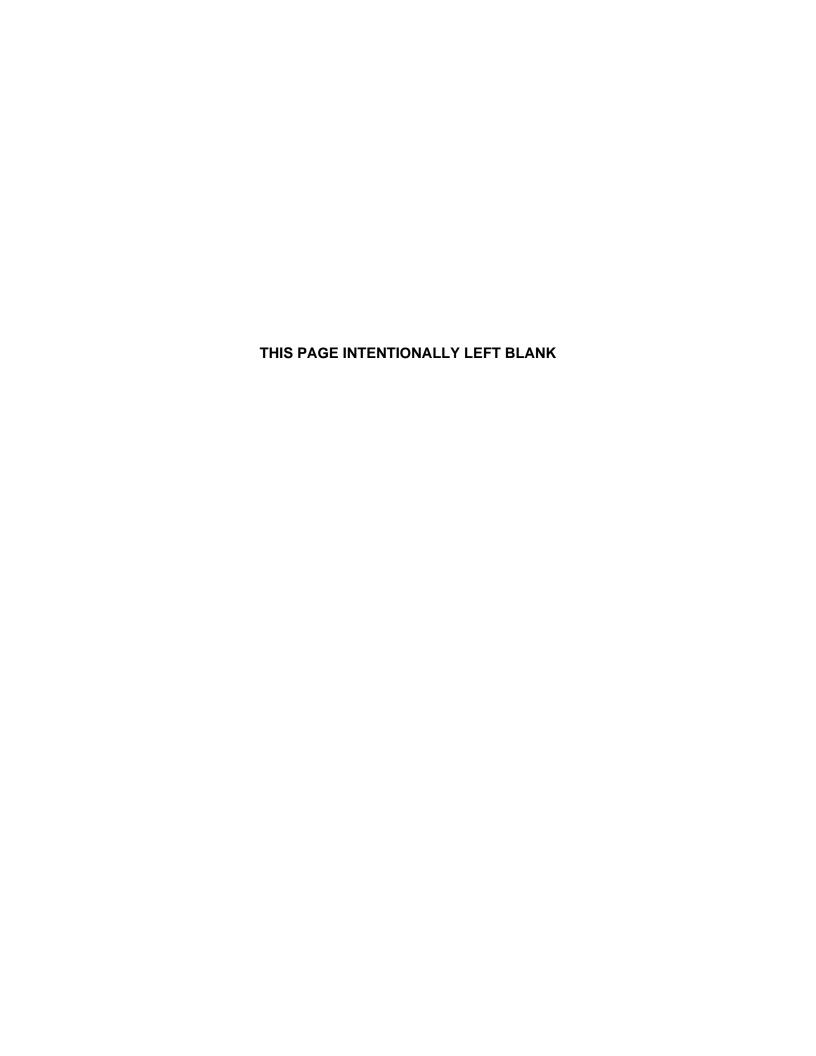
Failure of the successful Bidder to execute the contract or furnish the required proofs of insurance and acceptable performance and payment bonds within the fifteen (15) calendar-day period shall be just cause for cancellation of the award and forfeiture of the bid guaranty, not as a penalty, but as liquidation of damages to the Owner.

The Owner reserves the right to cancel the award without incurring liability to the Bidder (except Owner's return of bid guaranty if appropriate) at any time before a contract has been fully executed by all parties and is approved by the Owner.

#### **18 GENERAL BOND REQUIREMENTS**

- 18.1 <u>Bid Bond or Other Security</u>: A bid bond, certified check, or cashier's check payable to the Greater Asheville Regional Airport Authority, in a dollar amount representing not less than five percent (5%) of the total amount bid as a guarantee to execute the work described herein shall be provided with the Bid.
- 18.2 <u>Performance Bond</u>: A performance bond, letter of credit, or a cashier's check, payable to the Greater Asheville Regional Airport Authority, shall be provided in the amount of one hundred percent (100%) of the total amount bid within fifteen (15) calendar days from the date of written notice of award. The performance guaranty assures that the Contractor will promptly complete the work in accordance with the terms of the contract. All Performance Bonds must be submitted on the form contained within the contract documents.
- 18.3 Payment Bond: A separate payment bond, letter of credit, or a cashier's check, payable to the Greater Asheville Regional Airport Authority, shall be provided in the amount of one hundred percent (100%) of the total amount bid within fifteen (15) calendar days from the date of written notice of award. The payment guaranty assures that the Contractor will promptly pay in full all bills and accounts for materials and labor used in the completion of the work. All Payment Bonds must be submitted on the form contained within the contract documents.





#### PROPOSAL FORM 1: BIDDER'S CERTIFICATION

TO:	Greater Asheville Regional A 61 Terminal Drive, Suite 1 Fletcher, NC 28732	Airport Authority	
PROJECT:	Bid Package 4 – Permanent FAA AIP Project No.: 3-37-000	Runway 17-35 Paving, Lighting, and N 05-046-2016	AVAIDs
BIDDER:			
BIDDER'S ADDRESS:			
DATE:			
BIDDER'S RE	PRESENTATIVE (to be contacte	ed for additional information on this Propo	osal):
(Name)		(Telephone Number)	

#### **BIDDER'S DECLARATION AND UNDERSTANDING**

The undersigned declares that he has carefully examined this Request for Bid and all Bid Documents and has informed himself fully in regard to all conditions pertaining to the site where the work is to be done and carefully estimated on the work. He understands that the OWNER, its agents and employees, are not to be in any manner held responsible for the accuracy of, or bound by, any estimates or plans of underground structures relating to the work and that if any have been given or made, they are to be considered solely as a base for filling out and preparing several proposals.

The undersigned proposes to furnish all labor, equipment material required for the above outlined construction at the airport known as Asheville Regional Airport located in Buncombe County, North Carolina in accordance with the accompanying bid documents for the sums specified herein, subject to additions and deductions according to the specifications and in all respects to the terms thereof.

It is understood that all workmanship and materials under all items of work are guaranteed for one year from the date of final acceptance, unless otherwise specified. It is understood that the OWNER reserves the right to accept or reject any or all bids and to waive any informalities. Wages not less than the minimum rates or wages, as pre-determined for this project by the Secretary of the U.S. Department of Labor, were used in the preparation of this proposal. It is agreed that the description under each item, being stated, implies although it does not mention, all incidentals and that the prices stated are intended to cover all such work, materials and incidentals and constitute bidders obligations as described in the specifications, and any details not specifically mentioned, but evidently included in the contract shall be compensated for in the item which most logically includes it.

The Owner reserves the right to award any, all, or none of the alternate bid items if applicable.

Enclosed herewith is the Proposal Bond in the form specified herein which is submitted as a guarantee of the good faith of the Proposal. The Bidder agrees that, upon receipt of notice to award, he will, within 15

calendar days, execute the Contract in accordance with the Proposal as accepted, and satisfy the Contract bonding and insurance requirements stipulated herein; and that upon his failure or refusal to do so, the Proposal Bond accompanying his bid shall be forfeited to and become the property of the OWNER as liquidated damages for such failure or refusal.

#### **ADDENDA**

The Bidder hereby a	acknowledges that he ha	as received the following Addenda	a:
Addendum #Date: Addendum #Date:		Addendum # Addendum #	Date: Date:
<u>TAXES</u>			
stated bid prices. In The Contractor is li	t is the responsibility of the able for any applicable	eral, State and Local sales and under the Contractor to determine wheth taxes which are not included in form the total sum of all taxes included.	er sales taxes are applicable the stated bid prices. The
	RICES SET FORTH ON SUBJECT TO PRICE AI	I THE ATTACHED SHEETS SHADJUSTMENT.	ALL BE CONSIDERED FIRM
		(CC	DRPORATE SEAL)
ATTEST:		BIDDER:	
		Name of Company	
Signature		Signature	
Ву:		By:	
Title:		Title:	

#### **PROPOSAL FORM 2: PROPOSAL AFFIDAVIT**

The following affidavit must be executed in order that your Proposal may be considered.
STATE OF)
COUNTY OF)
of lawful age, being first duly sworn, upon his oath, deposed and says: That he executed the accompanying Proposal on behalf of the Contractor therein named, and that he had lawful authority so to do, and said Contractor has not directly or indirectly, entered into any agreement, expressed or implied, with any Contractor or Contractors, having for its object the controlling of the price or amount of such Proposal or any Proposals, the limiting of the Proposal of Contractors, the parceling or farming out to any Contractor or Contractors, to other persons of any part of the Contract or any of the subject matter of the Proposals, or of the profits thereof, and that he has not and will not divulge the sealed Proposal to any person whomsoever; except those having a partnership or other financial interes with him in said Proposal or Proposals, until after the sealed Proposal or Proposals are opened.
Signed:
Subscribed and sworn to before me this day of, 20
My Commission Expires:
Notary Public

BIDDER:	Date:

- 1. Price: Includes all labor, materials, and equipment, etc. required to complete project.
- 2. In submitting this bid, I certify:
  - a. Items bid are in exact accordance with specifications, unless noted in bid.
  - b. Prices in this bid have been arrived at independently, without consultation or agreement with any competitor for purpose of restricting competition.
- 3. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal, which includes initials on each bid form sheet, shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Airport: Asheville Regional Airport

Project: Bid Package 4

		Estimated		
Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
VOLUME	2 BASE BID - ASPH	ALT RUNWAY	WITH QUARTZ HIRL	
MOBILIZATION				
atdolla andcents	rs LS	1	\$	\$
· ·	AND			
atdolla	rs EA	14	\$	\$
and cents				
MATERIAL VARIES)	<sub>ro</sub> LF	1,683	\$	\$
and cents	ıs			
		200	\$	\$
at	rs LF			
AIRFIELD PAVEMENT REMOVAL				
atdolla andcents	rs SY	67,100	\$	\$
HAUL ROAD PAVEMENT REMOVAL				
	rs SY	12,600	\$	\$
	MOBILIZATION  at	MOBILIZATION at	MOBILIZATION at	VOLUME 2 BASE BID - ASPHALT RUNWAY WITH QUARTZ HIRL           MOBILIZATION         at         dollars         LS         1         \$

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated		
Item No.	Item Description and Unit Price in Wo	ords	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-101-5.3	PAVEMENT MILLING (4.75") atandcer	_dollars nts	SY	1,800	\$	\$
P-101-5.4	PAVEMENT MILLING (2") atcer	_dollars nts	SY	4,200	\$	\$
P-101-5.5	CRACK REPAIR atcer	_dollars nts	LF	1,000	\$	\$
P-102-1	SAFETY AND SECURITY atcer	_dollars nts	LS	1	\$	\$
P-102-2	MAINTAIN EXISTING BARRICADE atcer	_dollars nts	EA	265	\$	\$
P-102-3	BARRICADE atcer	_dollars nts	EA	45	\$	\$
P-102-4	TAXIWAY CROSSING 1 atcer	_dollars nts	LS	1	\$	\$
P-104-5.1	PROJECT SURVEY AND STAKEOUT atcer	_dollars nts	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atcer	_dollars nts	CY	134,400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-152-4.2	UNSUITABLE EXCAVATION atdollars andcents	CY	5,400	\$	\$
P-152-4.3	SLOPE REPAIR  atdollars andcents	SY	14,500	\$	\$
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	46	\$	\$
P-156-5.1-3	COMPOST SOCK INLET PROTECTION atdollars andcents	EA	16	\$	\$
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK  atdollars andcents	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE atdollars andcents	LF	18,900	\$	\$
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE at dollars and cents	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH atdollars andcents	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP  atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M" atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P"  atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	75,800	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	400	\$	\$
P-401-8.1-1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP)  at	TN	26,400	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP)  at	TN	38,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	64,200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	86,600	\$	\$
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	63,300	\$	\$
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT atdollars andcents	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	13,000	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III at	LF	40	\$	\$
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III at	LF	385	\$	\$
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	639	\$	\$
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated								
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$			
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$			
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY atdollars andcents	EA	1	\$	\$			
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$			
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$			
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$			
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$			
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$			
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$			

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,900	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES at	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	377	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	156,865	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM MODIFICATIONS: atdollars andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	5,885	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	26,300	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	880	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-4	BURIED DUCT	LF	900	<b>#</b>	Φ.
L-110-4	atdollars	LF	900	<b>\$</b>	Φ
	andcents				
	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-5	BURIED DUCT	LF	1,600	\$	\$
L-110-5	atdollars	Li	1,000	Ψ	Ψ
	andcents				
	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-6	BURIED DUCT	LF	400	\$	\$
L 1100	atdollars		400	Ψ	Ψ
	andcents				
	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-7	DUCT	LF	1,500	\$	\$
	atdollars				
	andcents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED	LF			
L-110-8	DUCT		44,385	\$	\$
	atdollars				· <del></del>
	and cents 2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT			\$	
L-110-9		LF	1,340		\$
	atdollars and cents				
	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-10	atdollars	LF	1,115	\$	\$
	and cents				
	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-11	atdollars	LF	230	\$	\$
	and cents				
	10 WAY 2" SCHEDULE 40 PVC CONCRETE				
					_
L-110-12	ENCASED DUCT atdollars	LF	75	\$	\$
	and cents				

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-13	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	180	\$	\$
L-110-14	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	600	\$	\$
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	<b>\$</b>
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) at	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) at	EA	80	\$	\$
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW ASPHALT PAVEMENT (N) atdollars andcents	EA	180	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) at	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE at	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE at	EA	1	\$	\$
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN at	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	3	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	7	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) atdollars andcents	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$
L-125-44	L-867D JUNCTION CAN atdollars andcents	EA	8	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-45	L-867E JUNCTION CAN atdollars andcents	EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	24	\$	\$
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  at	EA	5	\$	\$
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	1	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE atdollars andcents	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$

MOUNT OF VOLUME 2 BASE BID - ASPI	IALT RUNWAY WITH QUARTZ HIRL (IN WORDS)
	Dollars
	Cents
Total Volume 2 Base Bid - Asp	halt Runway with Quartz HIRL Amount: \$
Sum of Taxes Included in Base	Bid - Asphalt Runway with Quartz HIRL: \$

Asheville Regional Airport Bid Package 4 Airport: Project:

	Estimated								
Item No.	Item Description and Unit Price i	n Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
	VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL								
P-101-5.2	HAUL ROAD PAVEMENT REMOVAL atand	dollars _cents	SY	12,600	\$	\$			
P-101-5.3	PAVEMENT MILLING (4.75") atand	dollars _cents	SY	1,800	\$	\$			
P-101-5.4	PAVEMENT MILLING (2") atand	dollars _cents	SY	4,200	\$	\$			
P-101-5.5	CRACK REPAIR atand	dollars _cents	LF	1,000	\$	\$			
P-102-1	SAFETY AND SECURITY atand	dollars _cents	LS	1	\$	\$			
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars _cents	EA	265	\$	\$			
P-102-3	BARRICADE atand	dollars _cents	EA	45	\$	\$			
P-102-4	TAXIWAY CROSSING 1 atand	dollars _cents	LS	1	\$	\$			
P-104-5.1	PROJECT SURVEY AND STAKEOUT atand	dollars _cents	LS	1	\$	\$			

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	129,200	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION  atdollars andcents	CY	5,200	\$	\$
P-152-4.3	SLOPE REPAIR  atdollars andcents	SY	14,500	\$	\$
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION at	EA	46	\$	\$
P-156-5.1-3	COMPOST SOCK INLET PROTECTION atdollars andcents	EA	16	\$	\$
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK  atdollars andcents	LF	60	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK at	ars LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdolla andcents	ars LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENC atdolla andcents	ars LF	18,900	\$	\$
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT COLFENCE at	l E	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  at	ars SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRA atdolla andcents		1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE  atdolla andcents	ars EA	4	\$	\$
P-156-5.1-13	TEMPORARY DIVERSION DITCH at dolla andcents		500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH at dollar and cents	IF	3,500	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	СҮ	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M" atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	33,500	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	400	\$	\$
P-304-8.1	CEMENT TREATED BASE COURSE atdollars andcents	SY	137,000	\$	\$
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP)  at	TN	9,500	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP)  at	TN	21,600	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) at	TN	20,800	\$	\$
P-501.1	PORTLAND CEMENT CONCRETE (15") atdollars andcents	SY	133,000	\$	\$
P-501.2	PORTLAND CEMENT CONCRETE (15") - REINFORCED at	SY	333	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	43,400	\$	\$
P-603-5.1	BITUMINOUS TACK COAT  atdollars andcents	GAL	20,900	\$	\$
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT atdollars andcents	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA at	SF	124,400	\$	\$
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA at	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA at	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	34,500	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	639	\$	\$
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET  atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY atdollars andcents	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,000	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	377	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT at	LF	94,843	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD at dollars and cents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM MODIFICATIONS: at	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS at	LS	1	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT at	LF	5,885	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	26,300	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT at	LF	880	\$	\$
L-110-4	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	900	\$	\$
L-110-5	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	1,600	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
	BURIED DUCT			_	_
L-110-6	atdollars	LF	400	\$	\$
	and cents				
	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED				-
	CONDUIT				
L-110-7	atdollars	LF	1,500	\$	\$
	andcents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-8	atdollars	LF	44,385	\$	\$
	and cents				
	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-9	atdollars	LF	1,340	\$	\$
	andcents 4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
		LF			
L-110-10	DUCT		1,115	\$	\$
	atdollars				·
	and cents				
	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-11	DUCT	LF	230	\$	\$
	atdollars			<del></del>	<del></del>
	andcents				_
	10 WAY 2" SCHEDULE 40 PVC CONCRETE				
L-110-12	ENCASED DUCT atdollars	LF	75	\$	\$
2 110 12				Ψ	Ψ
	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED				
L-110-13	DUCT	LF	180	\$	¢
L-110-13	atdollars	Li	100	Ψ	Ψ
	andcents				
	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED	<u>-</u>			
L-110-14	DUCT	LF	600	\$	\$
L-110-14	atdollars	LF	600	Φ	Φ
	andcents				
-					

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	\$
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW PCC PAVEMENT (N) at	EA	80	\$	\$
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) at	EA	3	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE atdollars andcents	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE atdollars andcents	EA	1	\$	\$
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	8	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	7	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated					
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) atdollars andcents	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$
L-125-44	L-867D JUNCTION CAN atdollars andcents	EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN atdollars andcents	EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	24	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	1	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE atdollars andcents	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars and cents	LS	1	\$	\$

TOTAL AMOUN	IT OF VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL (IN WORDS)						
	Dollars						
	Cents						
Total Volume 2 Base Bid - Concrete Runway with Quartz HIRL Amount: \$							
	Sum of Taxes Included in Base Bid - Concrete Runway with Quartz HIRL: \$						

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
	VOLUME 2	ADD/DEDUC	T ALTERNATE	1 - LED HIRL					
	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR,								
L-125-4	QUARTZ (N)	EA	(3)	\$	\$				
L-125-4	QUARTZ (N) atdollars	LA	(3)	Ψ	Φ				
	andcents								
	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW,								
L-125-5	QUARTZ (N)	EA	(3)	\$	\$				
	atdollars and cents		,						
	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR,								
	LED (NI)								
L-125-6	atdollars	EA	3	\$	\$				
	andcents								
	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW,								
L-125-7	LED (N)	EA	3	\$	\$				
L-125-7	atdollars	LA	3	Ψ	Ψ				
	andcents								
	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR,								
L-125-34	QUARTZ (N) atdollars	EA	(33)	\$	\$				
	and cents								
	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW,								
1 405 05	QUARTZ (N)	<b>-</b> ^	(44)	Φ.	Φ.				
L-125-35	atdollars	EA	(41)	\$	\$				
	andcents								
	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED,								
L-125-36	QUARTZ (N) atdollars	EA	(16)	\$	\$				
			( )		· <del></del>				
	andcents L-862(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR,								
	LED (N)								
L-125-37	atdollars	EA	33	\$	\$				
	and cents								
•	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW,								
L-125-38	LED (N)	EA	41	\$	\$				
L-12J-30	atdollars	LA	41	Ψ	Ψ				
	andcents								

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-39	L-862E(L) RUNWAY THRESHOLD LIGHT - GREEN/RED, LED (N) atdollars andcents	EA	16	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	(2)	\$	\$
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE/DEDUCT ALTERNATE 1	- LED HIR	L (IN WORDS _ _ Dollars	5)	
			Cents		
	Total Bid Schedule Amount - Addit	ive/Deduct	Alternate 1:	\$	
	Sum of Taxes I	ncluded in	Alternate 1:	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated					
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
VOLUME 2 ADDITIVE ALTERNATE 2 - TAXIWAY A SHOULDERS								
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	1,000	\$	\$			
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	7	\$	\$			
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	2,340	\$	\$			
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	5,200	\$	\$			
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	5,370	\$	\$			
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	9,300	\$	\$			
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$			
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$			
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	17,400	\$	\$			

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

Itaaa Na	Itaas Daardattaa aad Hali Dilaa ta Warda		Estimated	Half Delay in Noveland	Total Assessed Day House
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	SEEDING				
T-901-5.1	atdollars	AC	5	\$	\$
	andcents				
	SODDING				
T-904-5.1	atdollars	SY	5,000	\$	\$
	andcents				
	MULCHING				
T-908-5.1	atdollars	AC	5	\$	\$
	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-2	BURIED DUCT	LF	(11,400)	\$	\$
	atdollars		(11,100)	·	
	andcents  1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-8	atdollars	LF	11,400	\$	\$
	and cents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-29	EDGE LIGHT - IN ASPHALT SHOULDER (N)	EA	146	\$	\$
L-125-29	atdollars	LA		Ψ	Ψ
	and cents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-30	EDGE LIGHT - IN TURF (T) atdollars	EA	(146)	\$	\$
	and cents				
TOTAL AMOU		AV A 01101	IL DEDO (INI)	(ODDC)	
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 2 - TAXIW	AT A SHUL	JLDEKO (IN V	IOKDS)	
			<u></u>		
			Dollars		
			Cents		
	Total Bid Schedule Amoun	t - Additive	Alternate 2:	\$	
I	Sum of Taxes	Included in	Alternate 2:	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	VOLUM	E 2 ADDITIVE A	ALTERNATE 3 -	TAXIWAY B2	
P-102	TAXIWAY CROSSING 3 at	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	100	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	1,900	\$	\$
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) at	TN	600	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) at	TN	1,000	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	1,500	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	2,200	\$	\$
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	1,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	TEMPORARY AIRFIELD MARKING (YELLOW), W/O		-		
	REFLECTIVE MEDIA				
P-620-5.2	atdollars	SF	4,000	\$	\$
	and cents				
	TEMPORARY AIRFIELD MARKING (RED), W/O				
	DEEL FOTIVE MEDIA				
P-620-5.3	atdollars	SF	1,200	\$	\$
	and cents				
-	PERMANENT AIRFIELD MARKING (YELLOW), W/				
	REFLECTIVE MEDIA				_
P-620-5.5	atdollars	SF	5,500	\$	\$
	andcents				
	SODDING	SY	340	_	\$
T-904-5.1	atdollars			\$	
	andcents				
	TEMPORARY POWER & TEMPORARY AIRFIELD				
	LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES	LS		•	
L-104-1	atdollars		1	\$	\$
	andcents				
	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV				
	STRANDED COPPER CABLE, INSTALLED IN DUCT		3,000	\$	
L-108-1	OR CONDUIT	LF			\$
	atdollars				
	and cents				
	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE,				
L-108-2	INSTALLED OVER DUCT OR CONDUIT	LF	2,890	\$	\$
2 100 2	atdollars		2,000	Ψ	Ψ
	andcents				
	0.75" DIAMETER BY 10.00' LONG COPPER CLAD				
L-108-3	STEEL SECTIONAL GROUND ROD	EA	25	\$	\$
000	atdollars	_, .	_0	Ψ	<del></del>
	and cents				
	GROUND DISSIPATION PLATE25"x24"x24" WITH				
	PINKERED EDGE, INCLUDING 8 FOOT SECTION OF	<b>-</b> 4			
L-108	COUTERPOISE WIRE	EA	4	\$	\$
	atdollars				
	and cents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH				
	BURIED CONDUIT				
L-110-1	atdollars	EA	100	\$	\$
	and cents				
	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
	BURIED DUCT				
L-110-2	atdollars	LF	625	\$	\$
	andcents				
-	2 WAY 2" SCHEDULE 40 PVC DIRECT				
	EARTHBURIED DUCT				
L-110-3	atdollars	LF	60	\$	\$
	and cents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				<del>-</del>
	DUCT		1,300		
L-110-8	atdollars	LF		\$	\$
	atdollars and cents				
	andcents 2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-9		LF	210	\$	\$
	atdollars				
	andcents				
	1 WAY 4" SPLIT DUCT CONCRETE ENCASED				
L-110-16	atdollars	LF	275	\$	\$
	and cents		2.0		
	L OFOO DUBINALY EDOE LIQUE. OLEAD/OLEAD				
	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR,				
L-125-4	QUARTZ (N) atdollars	EA	1	\$	\$
	atdollars				
	andcents				
	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW,				
L-125-7	LED (N) atdollars	EA	1	\$	\$
				·	·
-	and cents				
	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3				
L-125-10	- 2 MODULE	EA	1	\$	\$
_ :_5 .5	atdollars		•	·	*
	andcents				

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	2	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	3	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	2	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	2	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	(5)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	1	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	6	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	1	\$	\$
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	(1)	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated				
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item		
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	1	\$	\$		
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) at	EA	(1)	\$	\$		
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$		
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$		
L-125	L-867B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) at	EA	3	\$	\$		
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) at	EA	1	\$	\$		
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$		
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXIW	AY B2 (IN	WORDS)				
			 Dollars				
			Cents				
				<b>5</b>			
Sum of Taxes Included in Alternate 3: \$							

Airport: Project: Asheville Regional Airport Bid Package 4

Itama Na	Itaan Decembra and Huit Drice in Monda	11.2	Estimated	Linit Duine in Numbers	Total Amount Per Item					
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item					
VOLUME 2 ADDITIVE ALTERNATE 4 - TAXIWAY B4										
P-102	TAXIWAY CROSSING 3 atdollars andcents	LS	1	\$	\$					
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	100	\$	\$					
P-209-5.1	CRUSHED AGGREGATE BASE COURSE at	CY	1,900	\$	\$					
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) at	TN	600	\$	\$					
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) at	TN	1,000	\$	\$					
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	1,500	\$	\$					
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	2,200	\$	\$					
P-603-5.1	BITUMINOUS TACK COAT at	GAL	1,500	\$	\$					
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA at	SF	4,000	\$	\$					

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,475	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD at	EA	45	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE atdollars andcents	EA	2	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	100	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	630	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,300	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	210	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	275	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE at	EA	1	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	4	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	4	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE LED, TAXIWAY EDGE LIGHT (A) atdollars and cents	EA	(7)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	2	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	7	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	2	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXIWA	AY B4 (IN	_		
			Dollars		
	Total Rid Cabadula Amaunt	م داخانده	Cents	<b>n</b>	
				\$	
	Sum of Taxes I	ncluded in	Alternate 4: 3	Б	

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Word	s Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
VOLUME 3 BASE BID - TAXIWAY B CONVERSION AND NAVAIDS									
GP-105-2.1	MOBILIZATION atdo andcents		1	\$	\$				
S-140-4.1	REMOVAL OF DRAINAGE STRUCTURES (SI. MATERIAL VARIES)  at	llars EA	3	\$	\$				
S-140-4.2	REMOVAL OF DRAINAGE PIPES (SIZE AND MATERIAL VARIES) at	llars LF	33	\$	\$				
S-140-4.4	REMOVAL OF EXISTING FENCE atdo andcents	llars LF	800	\$	\$				
S-140-4.5	REMOVAL OF EXISTING PERIMETER ROAD atdo andcents	llars SY	5,900	\$	\$				
S-140-4.6	REMOVAL OF DIRECTIONAL SIGN atdo andcents	llars EA	3	\$	\$				
P-101-5.2	PAVEMENT REMOVAL atdo andcents	llars SY	550	\$	\$				
P-102	SAFETY AND SECURITY atdo andcents	llars LS	1	\$	\$				
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdo andcents	llars LS	1	\$	\$				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-152-4.1	EMBANKMENT IN PLACE  atdollars  andcents	CY	45,700	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atdollars andcents	CY	1,800	\$	\$
P-152-4.5	BORROW AREA GRADING, CLEAN UP, AND CLOSE OUT at	LS	1	\$	\$
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	6	\$	\$
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,100	\$	\$
P-156-4.1-10	EXCELSIOR MATTING  atdollars andcents	SY	9,200	\$	\$
P-156-4.1-20	RIP RAP, CLASS 1 atdollars andcents	CY	130	\$	\$
P-156-4.1-22	RIP RAP, CLASS 2 atdollars andcents	CY	75	\$	\$
P-156-4.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	210	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-26	SHOREMAX PROTECTION MAT  atdollars andcents	SF	4,700	\$	\$
P-156-4.1-28	REMOVE EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-4.1-31	REMOVE EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-4.1-33	CONVERT EXISTING SEDIMENT BASIN "D" TO DETENTION BASIN atdollars andcents	LS	1	\$	\$
P-156-4.1-35	REMOVE EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-4.1-37	REMOVE EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-4.1-39	REMOVE EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-4.1-41	REMOVE EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-4.1-51	CONVERT EXISTING SEDIMENT BASIN "M" TO DETENTION BASIN atdollars andcents	LS	1	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-53	CONVERT EXISTING SEDIMENT BASIN "N" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-55	REMOVE EXISTING SEDIMENT BASIN "O" at dollars and cents	LS	1	\$	\$
P-156-4.1-59	REMOVE EXISTING SEDIMENT BASIN "Q" at dollars and cents	LS	1	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	510	\$	\$
NCDOT 520-2	PERIMETER ROAD REPAIRS atdollars andcents	SY	1,800	\$	\$
NCDOT 600	PRIME COAT atdollars andcents	GAL	130	\$	\$
NCDOT 610	BITUMINOUS ASPHALT PAVEMENT (9.5C) atdollars andcents	TN	240	\$	\$
P-608-8.1	ASPHALT SURFACE TREATMENT atdollars andcents	SY	93,600	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	23,200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA at	SF	3,300	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	8,300	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	157,400	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	52	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	64	\$	\$
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	140	\$	\$
D-701-5.1-10	48" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	140	\$	\$
D-701-5.1-11	54" REINFORCED CONCRETE PIPE, CLASS III at	LF	697	\$	\$
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED at dollars and cents	EA	4	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	1	\$	\$
D-754-5.1	CONCRETE LINED DITCH atdollars andcents	LF	565	\$	\$
F-160-5.1	20' DOUBLE SWING GATE atdollars andcents	EA	3	\$	\$
F-160-5.2	WILDLIFE FENCE atdollars andcents	LF	769	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	80	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	80	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES at	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars and cents	EA	79	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	105	\$	\$
L-107-1	L-806(L) WIND CONE, SIZE 1, STYLE 1A, NEW COMPLETE atdollars andcents	EA	1	\$	\$
L-107-2	RELOCATE L-806 (L) LED WINDCONE atdollars andcents	EA	1	\$	\$
L-108-1	STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT at	LF	16,100	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	10,500	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	200	\$	\$
L-108	PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE  at	EA	4	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	65	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	8,426	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED at	LF	200	\$	\$
L-125-8	L-853 ELEVATED RETROREFLECTIVE MARKER at	EA	10	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE at	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	2	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	12	\$	\$
L-125-13	L-858C SIGN - SINGLE FACE, NON-LIGHTED, TAXIWAY END MARKER atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	2	\$	\$
L-125-19	L-858B(L) RELOCATE RUNWAY DISTANCE REMAINING SIGN, LED, SIZE 4 atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	7	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	7	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	2	\$	\$
L-125-24	L-860HR(L) OMNIDIRECTIONAL, GREEN, LED ELEVATED HELIPORT LIGHT - IN TURF (T) atdollars andcents	EA	14	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	22	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	19	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	49	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	5	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	60	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

	. B . C		Estimated		T
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125	L-867B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	5	\$	\$
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	6	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	1	\$	\$
N-1005-1	FAA ALLOWANCE at FIFTY THOUSAND DOLLARS and ZERO cents	AL	1	<u>\$50,000.00</u>	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
		S	UMMARY		
TOTAL AMOUNT	OF VOLUME 2 BASE BID - ASPHALT RUNWAY	WITH QUAF	RTZ HIRL (IN V	VORDS)	
_			 Dollars		
_			Cents		
	Total Amount Volume 2 Base Bid - Asphalt R	Runway with	Quartz HIRL: 5	\$	
Sum of Ta	axes Included in Volume 2 Base Bid - Asphalt R	Runway with	Quartz HIRL:	\$	
	•	•			<del></del>
TOTAL AMOUNT	OF VOLUME 2 BASE BID - CONCRETE RUNWA	AY WITH QU	ARTZ HIRL (IN	WORDS)	
			(	, , , , , , , , , , , , , , , , , , , ,	
-			 Dollars		
_			Cents		
_	Total Amount Volume 2 Base Bid - Concrete R	Runway with	Quartz HIRL:	\$	
Sum of Tax	tes Included in Volume 2 Base Bid - Concrete R				
Jun or rux		turring triur	~ ~ ~ · · · · · · · · · · · · · · · · ·	*	
TOTAL AMOUNT	OF VOLUME 2 ADD/DEDUCT ALTERNATE 1 - L	LED HIRL (IN	WORDS)		
-			 Dollars		
_			Cents		
_	•	Total Alterna	te 1 Amount:	\$	
			n Alternate 1: S		
					<del></del>

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
TOTAL AMOUNT	OF VOLUME 2 ADDITIVE ALTERNATE 2 - TAXI	WAY A SHO	ULDERS (IN W	/ORDS)	
			Dollars		
			Cents		
	Sum of Taxe	s Included in	n Alternate 2: 3	\$	
<b>TOTAL AMOUNT</b>	OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXI	WAY B2 (IN	WORDS)		
			Dollars		
			Cents		
				<b></b>	
	Sum of Taxe	s Included in	n Alternate 3: 🤄	\$	
TOTAL AMOUNT	OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXI	WAY B4 (IN	WORDS)		
			<del>_</del>		
			Dollars		
			Cents	_	
				B	
	Sum of Taxe	s Included in	n Alternate 4: 🤄	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
TOTAL AMOUN	T OF VOLUME 3 BASE BID - TAXIWAY B CONVE	RSION AND	NAVAIDS (IN \	WORDS)	
			<u> </u>		
			Dollars		
			Cents	•	
Com of Tou	Total Bid Volume 3 Base Bid - Taxiway B C				
Sum of Tax	tes Included in Volume 3 Base Bid - Taxiway B Co	Didder (Type	d or Drinted):		
	Name of	bidder (Typer	d or Printed):		
	Signature of Bidder (	Same as Pro	posal Form):		
			Title:		
Addendum:			<del>-</del>		
The Bidder certifies	s that he has acknowledged the addendum(s) to the contr	act indicated be	elow:		
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
			-		
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendam No		Dateu.			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
		END OF E	BID SCHEDUL	E	

# **PROPOSAL FORM 4: PROPOSAL BOND**

Bond No	
(Not to be filled in if a Cash	ier's check is submitted)
KNOW ALL MEN BY THESE PRESENTS: That the understand in the desired principal, and in the greater Asheville Regional Air dollars (\$ well and truly to be made, we hereby jointly and administrators, successors and assigns.	port Authority in the sum of, as Surety, as Surety), for the payment of which I severally bind ourselves, our heirs, executors
THE CONDITION OF THIS OBLIGATION is such that	if Principal:
Does not withdraw the attached Proposal (base bid dollars     Asheville Regional Airport for a period of ninety (90 and	
2. Enters into the written contract and furnishes the Performance Bonds, with Surety or Sureties accept Authority, within fifteen (15) days after notice that the be void; otherwise the same shall be in full force and the Greater Asheville Regional Airport Authority as	able to the <b>Greater Asheville Regional Airpor</b> said Proposal is accepted, then this obligation shall be full amount of this Proposal Bond shall be paid to
Signed this	day of, 20
(PRINCIPAL MUST INDICATE WHETHER CORPORATION, PARTNER- SHIP, COMPANY OR INDIVIDUAL)	Principal
THE PERSON SIGNING FOR THE PRINCIPAL SHALL, IN HIS OWN HANDWRITING, SIGN THE PRINCIPAL'S NAME, HIS OWN NAME AND HIS TITLE. WHERE THE PERSON SIGNING FOR A CORPORATION IS OTHER THAN THE PRESIDENT OR VICE PRESIDENT, HE MUST FURNISH A CORPORATE RESOLUTION SHOWING HIS AUTHORITY TO BIND THE CORPORATION.	By: Title
(Affix Surety's Corporate Seal)	Surety

# PROPOSAL FORM 5: SURETY'S BOND AFFIDAVIT

STATE OF	)
COUNTY OF	)
properly licensed under the laws of	ity, personally appeared Who, is that he is a duly authorized (resident) (non-resident) insurance agent, if the State of Morth Carolina, to, and the State of North Carolina, to, a company ty bonds under the laws of the State of North Carolina (the "Surety").
Said	Further certifies that as agent or attorney-in-fact for the said surety, the sum of (U.S. \$
	Airport Authority covering FAA AIP Project No. 3-37-0005-046-2016, ay 17-35 Paving, Lighting, and NAVAIDs at Asheville Regional Airport.
attorney-in-fact, and included in h said bond and that his commission	Further certifies that the premium on the said will be paid in full directly to the surety or to him as agent or s regular commission as agent or attorney-in-fact, for the execution of on will not be divided with anyone except to who is a duly authorized under the laws of the State of North Carolina.
	Surety
North Carolina Resident Agent	Attorney-in-Fact
Address of Resident Agent	Acknowledgment for Attorney-in-Fact
Address of Bond Company	Sworn to and Subscribed Before me this Day of, 20
Phone Number	Notary Public, State of
	My commission expires:
Fax Number	

# PROPOSAL FORM 6: NON-COLLUSION AFFIDAVIT

STATE OF	
COUNTY OF	
	, being first duly sworn, deposes and says that:
1. (S)He is submitted the attached Bid;	of, the Bidder that has
2. (S)He is fully informed respecting the pertinent circumstances respecting such Bid;	preparation and contents of the attached Bid and of all
3. Such Bid is genuine and is not a collus	ive or sham Bid;
colluded, conspired, connived, or agreed, directly or collusive or sham Bid in connection with the Contrefrain from bidding in connection with such Contragreement or collusion or communication or conferences in the attached Bid or of any other Bidder, or or the Bid price of any other Bidder, or to secure the	n behalf of the Bidder, including this affiant, has in any way rindirectly with any other Bidder, firm or person to submit a ract for which the attached bid has been submitted or to act, or has in any manner, directly or indirectly, sought by ence with any other Bidder, firm or person to fix the price or to fix any overhead, profit or cost element of the Bid price hrough any collusion, conspiracy, connivance or unlawful eville Regional Airport Authority or any person interested in
	ched Bid are fair and proper and are not tainted by any reement on the part of the Bidder or anyone acting on
	(Signature)
	(Title)
Subscribed and Sworn to before me of this	,
	(Notary's Signature)
	(Notary's Stamped or Printed Name)
	Notary Public, in and forCounty,
	My commission expires:

## PROPOSAL FORM 7: EQUAL EMPLOYMENT OPPORTUNITY REPORT STATEMENT as Required by 41 CFR 60-1.7 (b)

Section 60-1.7(b) of the Regulations of the Secretary of Labor requires each bidder or prospective prime Contractor and proposed Subcontractor, where appropriate, to state in the bid or at the outset of negotiations for the Contract whether it has participated in any previous Contract or Subcontract subject to the equal opportunity clause; and if so, whether it has filed with the Joint Reporting Committee, the Director, an agency, or the former President's Committee on Equal Employment Opportunity all reports due under the applicable filing requirements. In any case in which a bidder or prospective prime Contractor or proposed Subcontractor which participated in a previous Contract subject to Executive Order 10925, 11114. or 111246 has not filed a report due under the applicable filing documents, no Contract or Subcontract shall be awarded unless such Contractor submits a report covering the delinquent period or such other period specified by the FAA or the Director, OFCCP.

The Bidder (proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bid.				
1. The Bidder (proposer) has () has not () developed and has on file at each establishmen Affirmative Action Programs pursuant to 41 CFR 60-1.4 and 41 CFR 60-2.				
2. The Bidder (proposer) has () has not () participated in any previous Contract or Subcontract subject to the Equal Opportunity Clause prescribed by Executive Order 10925, or Executive Order 111114 or Executive Order 11246.				
4. The Bidder (proposer) has () has not () filed with the Joint Reporting Committee the annua compliance report on Standard Form 100 (EEO-1 Report).				
4. The Bidder (Proposer) has () has not () submitted all compliance reports on connection with an such Contract due under the application filing requirements; and that representations indicating submission of required compliance reports signed by proposed Subcontractors will be obtained prior to award of Subcontractors.				
5. The Bidder (Proposer) does () does not () employ fifty (50) or more employees.				
If the Bidder (Proposer) has participated in a previous Contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder (Proposer) shall submit a compliance report on Standard Form 100, "Employee Information EEO-1" prior to the award of Contract.				
Standard Form 100 is normally furnished to Contractors annually, based on a mailing list currently maintained by the Joint Reporting Committee. In the event a Contractor has not received the form, he may obtain it by writing to the following address: Joint Reporting Committee, 1800 G Street, Washington, DC 20506				
(Name of Bidder)				
By:Signature*				
Title:				
Date:				
*Must be same signature on Bid Proposal				

### PROPOSAL FORM 8: BUY AMERICAN CERTIFICATION

#### **Certificate of Buy American Compliance for Manufactured Products**

(Non-building construction projects, equipment acquisition projects)

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter "X".

☐ Bidder or offeror hereby certifies that it will comply with 49	9 USC & 5010 <sup>-</sup>	1 by:
--	---------------------------	-------

- a) Only installing steel and manufactured products produced in the United States, or;
- b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing, or:
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- 2. To faithfully comply with providing US domestic product
- 3. To furnish US domestic product for any waiver request that the FAA rejects
- 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
  - To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
  - 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
  - 3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
  - 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

#### **Required Documentation**

**Type 3 Waiver -** The cost of the item components and subcomponents produced in the United States is more that 60% of the cost of all components and subcomponents of the "item". The required documentation for a type 3 waiver is:

 a) Listing of all product components and subcomponents that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers

- Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety)
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

**Type 4 Waiver** – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

render the maker subject to prosecution under Title 18	8, United States Code.
Date	Signature
Company Name	Title

**False Statements**: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may

### PROPOSAL FORM 9: CERTIFICATION OF NONSEGREGATED FACILITIES

The federally assisted construction contractor certifies that he does not maintain or provide, for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the equal opportunity clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex or national origin, because of habit, local custom, or any other reason. The federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause, and that he will retain such certifications in his files.

Name of Signer (Please Print)	Title	
Signature of Contractor	Date	

# PROPOSAL FORM 10: DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION STATEMENT

By completing this form you should identify and document whether you will meet the Greater Asheville Regional Airport Authority's DBE participation goal for this project (13.7%), and if not, you should identify and document your good faith efforts to meet the goal.

CERTIFIED W/M/DBE LIST			
W/M/DBE Firm Name(s)	Type of Work / Specialty	\$ Value of Work	Percent of Work
1		\$	%
2		\$	%
3		\$	%
4		\$	%
5		\$	%
6		\$	%
7		\$	%
8		\$	%
this Trade Package.  The bidder/offeror, wh	committed to a minimum of nile unable to meet the establis _% W/M/DBE utilization on thi	shed goal, hereby co	mmits to a
	attachment(s) demonstrating	_	
Total Estimated Value of Base	e Bid \$		
	et Work \$		
the W/MBE and or DBE firm(s) work items noted for each firm.	r assures that the information inc listed herein, have agreed to per The undersigned further understa from the Greater Asheville Region	form a commercially unds that no changes to	useful function in the
Bidder's/Offeror's Firm Name			

Date

**Authorized Signature** 

# PROPOSAL FORM 11: FAA REPORT OF CERTIFIED DBE CONTRACTORS USED ON AWARDED AND COMMITTED FAA-ASSISTED CONTRACTS

Enter the firm's and information for all data that is entered in Sections A/B of the DBE Uniform Form for the FY being reported. Enter online at <a href="https://faa.dbeconnect.com/FAA/login.asp">https://faa.dbeconnect.com/FAA/login.asp</a>?.

Asheville Regional Airport

·	<u> </u>				
Name of Recipient: <u>(</u>	Greater Asheville Regional Ai	rport Authority			
City/State/Zip: <u>F</u>	Eletcher, NC 28732				
	Y 16 – FY 17				
Preparer's Name:					
Email address and Felephone No:					
Date Prepared:					
DBI	Firm:				
	ldress:				
City/Sta	City/State/Zip:				
Telepho	ne No.:				
Type of Work and NAICS:					
Dollar Amount of Work:					
AIP Grant #'s: 3-37-0005-046-2016					
	Disadventaged Croup (				
Black	Disadvantaged Group (d Hispanic	Native	Subcontinent		
American	American	American	Asian American		
Male	Male	Male	Male		
Female	Female	Female	Female		
Asian Pacific American	Non-Minority	Other (not of any	group listed here)		
Male	Male	Male			
Female	Female	Female			
	- Cirialo	Citiale			

Name of Airport:

DBE Firm:_	
Address:_	
City/State/Zip:_	
Telephone No.:_	
Type of Work and NAICS:	
Dollar Amount of Work:	
AIP Grant #'s:_	3-37-0005-046-2016

Disadvantaged Group (check one):

Black	Hispanic	Native	Subcontinent
American	American	American	Asian American
Male	Male	Male	Male
Female	Female	Female	Female
Asian Pacific	Non-Minority	Other (not of any group listed here)	
American			
Male	Male	Male	
Female	Female	Female	

(Add additional pages as necessary for each DBE firm)

# PROPOSAL FORM 12: SUBCONTRACTOR LIST

Subcontractor Name	Address	Work to be Performed	% of Total Contract Price

# PROPOSAL FORM 13: IRAN DIVESTMENT ACT CERTIFICATION

Name of Bidder:	
	ted below, the vendor or bidder listed above is not listed on the Final Divestment List tate Treasurer pursuant to N.C.G.S. 147-86.58.
The undersigned the foregoing sta	hereby certifies that he or she is authorized by the vendor or bidder listed above to make tement.
Signature:	Date:
Printed Name:	
Title:	<del></del>

Notes to persons signing this form:

N.C.G.S. 147-86.59(a) requires this certification for bids or contracts with the State of North Carolina, a North Carolina local government, or any other political subdivision of the State of North Carolina. The certification is required at the following times:

When a bid is submitted

When a contract is entered into (if the certification was not already made when the vendor made its bid) When a contract is renewed or assigned

N.C.G.S. 147-86.59(b) requires that contractors with the State, a North Carolina local government, or any other political subdivision of the State of North Carolina must not utilize any subcontractor found on the State Treasurer's Final Divestment List.

The State Treasurer's Final Divestment List can be found on the State Treasurer's website at the address www.nctreasurer.com/lran and will be updated every 180 days.

# PROPOSAL FORM 14: E-VERIFY AFFIDAVIT

l,	(the individual attest	ing below), being	g duly authorized	l by and on
behalf of	(the ent	ity bidding on pro	oject hereinafter	"Employer")
after first being duly sworn hereby	y swears or affirms as fol	lows:		
1. Employer understands that E-\ Department of Homeland Securit used to verify the work authorizat NCGS §64-25(5).	y and other federal agend	cies, or any succ	essor or equival	ent program
2. Employer understands that Emwork in the United States, shall vaccordance with NCGS§64-26(a)	erify the work authorization			
3. Employer is a person, business employs 25 or more employees in			s business in thi	s State and tha
a. YES, or				
b. NO				
Employer's subcontractors con Employer will ensure compliance				
This day of	_, 20			
Signature of Affiant:				
Print or Type Name:				
State of				
County of				
Signed and sworn to before me, t	his the day of _	,	20	
Notary Public				
My Commission Expires				

### PROPOSAL FORM 15: STATEMENT OF BIDDER'S QUALIFICATIONS

THIS FORM MUST BE COMPLETED, NOTARIZED AND SUBMITTED WITH THE BID. ANY CHANGES WHICH AFFECT THE BIDDER'S ORGANIZATIONAL STRUCTURE, QUALIFICATIONS OR LICENSES SHALL BE REPORTED IMMEDIATELY TO THE GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY. FAILURE TO UPDATE CHANGES WHICH MAY AFFECT THE BIDDER'S RESPONSIBILITY MAY BE GROUNDS FOR DECLARING THE BIDDER NONRESPONSIVE FOR THIS BID OR FUTURE BIDS WITH GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY.

Submitted By:			
( ) Corporation -	If Out of State Corporat	State of Incorporation tion is currently authorized to do business in North Caroli prization:	na
( ) Partnership -	Date of Organization	-	
	Nature of Partnership:	General Limited Association	
( ) Individual - Nam	ne and Address of Owner		
( ) Joint Venture - E	BetweenName		
	AndName		
	Date of Agreement		
( ) Other - Explain	·		
Parent Company Office	ce Address (if any):		
Principle Office Addre	ess:		
Person to Contact:			
Title:		Telephone No.:	
List Type(s) of Work F	Performed:		

The signor of this statement of qualifications guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of all statements and of all answers to inquiries made.

The undersigned hereby authorizes and requests any public official, engineer, architect, surety company, bank depository, material or equipment manufacturer or distributor or any person, firm or corporation to furnish any pertinent information requested and deemed necessary by the Asheville Regional Airport Authority to verify the statements made in this application or regarding the standing and general reputation of the Bidder.

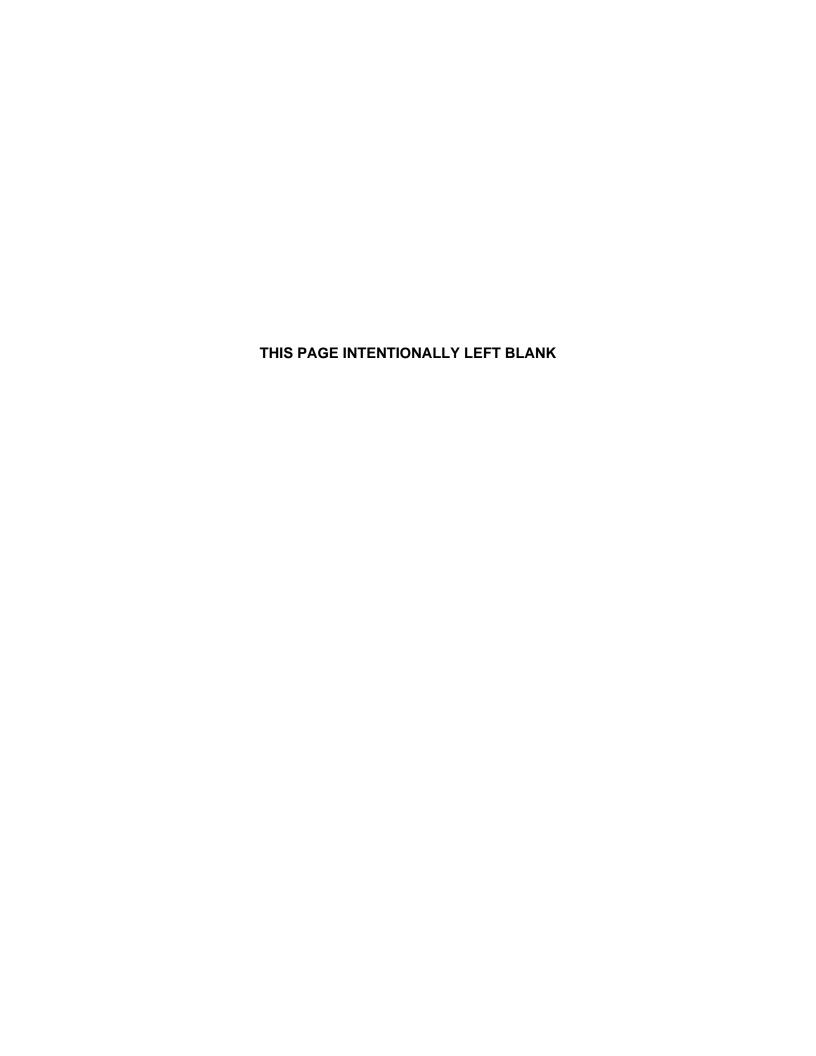
1.	How many years has your organization been in business as a General Contractor under you present name?				
2.	Under what other or former names has your organization operated?				
3.	List below your organization's Officers, Owners or Partners, as well as any Shareholde organization is a closely-held Corporation:				
NAME		TITLE	ADDRESS	DATE ASSUMING POSITION	
4.		answer to any of the		please attach details. Reference the sheet	
	4.1	Has your organiz See Sheet No		any work awarded to it?	
	4.2	Has your organiz See Sheet No	ation ever defaulted on a cor	ntract?	
	4.3	Has your organiz See Sheet No		by the Owner of a Project?	
	4.4		nst your organization or its of	on proceedings or law suits pending or ficers?	
	4.5		ction contracts within the las	equested arbitration or defended same with t five (5) years?	
5.	Has your organization ever been refused registration by any federal, state or municipal agency as a Prequalified Bidder or Qualified Bidder?				
	If so,	for what type of wor	k:		
	Give	details and reason:			
6.	Give below any information which would indicate the size and capacity of your organization,				

(use e	extension sheet if necessary and reference sheet number herein:)
	n resumes of key personnel, including superintendents for field management. The resum nclude the following information:
7.1	Name and present position or capacity
7.2	Years of related construction experience, type of work, position or capacity and cost range
7.3	Brief education and professional registrations
List th	e type of work normally provided by your own work forces:
which	
which the fo	demonstrate past experience on types of work outlined in this request. The list shall include
which	demonstrate past experience on types of work outlined in this request. The list shall include llowing information: (reference sheet numbers herein:)
which the fo	demonstrate past experience on types of work outlined in this request. The list shall include llowing information: (reference sheet numbers herein:)  Project Title and Location
which the fold 10.1 10.2	demonstrate past experience on types of work outlined in this request. The list shall include llowing information: (reference sheet numbers herein:)  Project Title and Location  Contractor or Subcontractor
which the fold 10.1 10.2 10.3	demonstrate past experience on types of work outlined in this request. The list shall include llowing information: (reference sheet numbers herein:)  Project Title and Location  Contractor or Subcontractor  Contract Amount and Date of Contract
which the fol 10.1 10.2 10.3 10.4	Project Title and Location  Contractor or Subcontractor  Contract Amount and Date of Contract  Date Completed
which the following the follow	demonstrate past experience on types of work outlined in this request.  The list shall include lowing information: (reference sheet numbers herein:)  Project Title and Location  Contractor or Subcontractor  Contract Amount and Date of Contract  Date Completed  Project Manager or Superintendent
which the following the follow	demonstrate past experience on types of work outlined in this request.  The list shall include lowing information: (reference sheet numbers herein:)  Project Title and Location  Contractor or Subcontractor  Contract Amount and Date of Contract  Date Completed  Project Manager or Superintendent  Required Completion Date
which the following the follow	demonstrate past experience on types of work outlined in this request.  The list shall include lowing information: (reference sheet numbers herein:)  Project Title and Location  Contractor or Subcontractor  Contract Amount and Date of Contract  Date Completed  Project Manager or Superintendent  Required Completion Date  Name, Address and Telephone Number of Owner

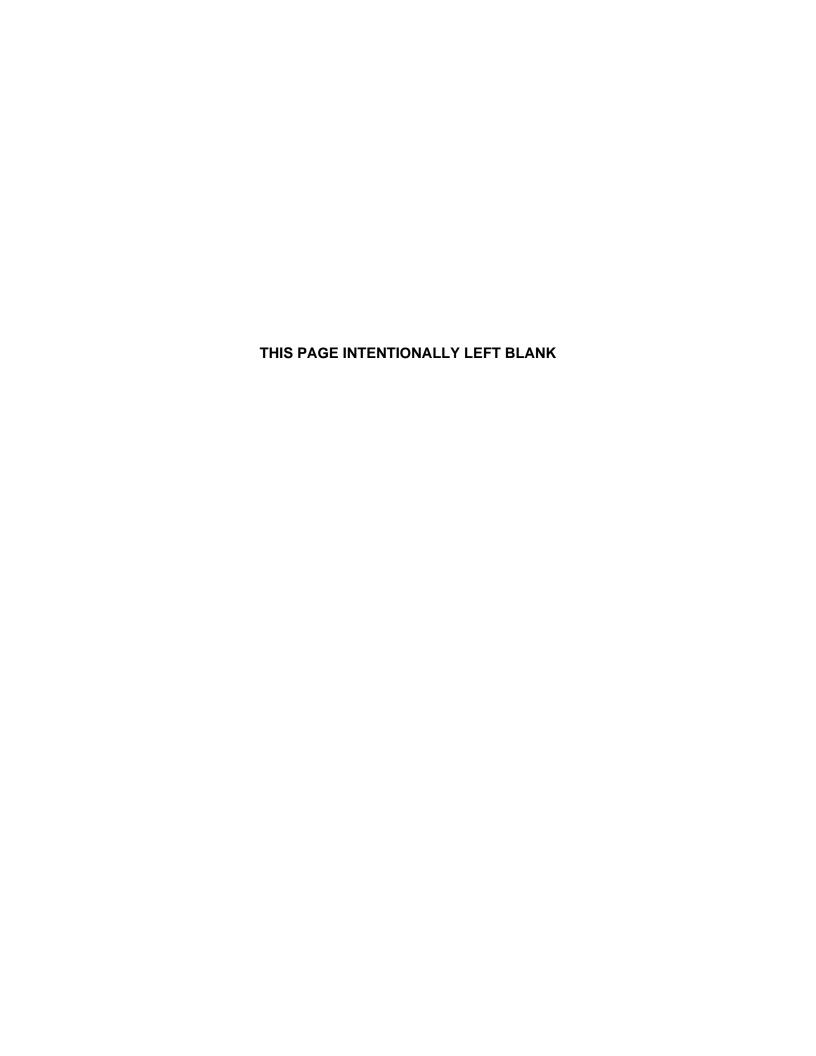
	Does your safety & health program comply with OSHA's HAZCOM F (Right-to-Know)?
11.2	Are you in compliance with OSHA's Process Safety Management Standards?
11.3	Does your company have a substance abuse program designed to provide a diworkplace?
11.4	Have your on-site supervisors completed the OSHA 30 or 10-hour training course
11.5	Are your foremen trained in Safety and CPR?
11.6	Do you require your job-site foremen to attend safety meetings? If yes, how frequency
11.7	Are weekly toolbox safety meetings required? If yes, how frequently?
11.8	Do you conduct regular documented safety audits? If yes, how frequently and are writing?
11.9	Do you have an Incident Investigation process? If yes, what types of incide investigated and by whom? Please describe.

13.	What is the do undertake?		the largest pr		ur organization is qualified	to
14.	Attach a financial statement consisting of a report of the bidder's financial resources and liabilities as of the last calendar year or the firm's last fiscal year that has been certified by a certified public accountant (CPA).					
	Dated at		, this	day of	,20	
	_		Name of O	ganization		
	Ву:		Printed			
	Ву:		Signature			
			Title			
			Mailing Add	dress		
			City, State,	Zip		
			Telephone	Number		
			Contact Pe	rson		
STATE	OF	)				
COUNT	ΓY OF	)				
and in t	he County afores	said, to take a	cknowledgmer		thorized in the State aforesa d before me	id
		who acknowle	edged that he	/she executed the for	egoing instrument freely ar	nd

	SS my hand and official seal in the County and State last aforesaidday of, 20
	Signature of Notary
	Printed Name of Notary
(SEAL)	
	Notary Public State of
	My Commission Expires
	Commission Number







#### GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

THIS AGREEMENT made and entered into this da	ay of
by and between the GREATER ASHEVILLE REGIONAL AIRPORT	AUTHORITY (Party of the First Part,
hereinafter called the Owner) and	
(Party of the Second Part, hereinafter called the Contractor).	

#### WITNESSETH:

That the said Contractor has agreed and by these presents does agree with the said Owner, for the consideration herein mentioned in his proposal and under the penalty expressed in Bonds, hereto attached, to furnish all equipment, tools, material, skill and labor of every description necessary to carry out and complete in good firm, substantial, and workmanlike manner, the work specified in strict conformity with the drawings, and the specifications hereinafter set forth, which drawings and specifications together with foregoing Proposal made by the Contractor, the Instructions to Bidders, Mandatory Contract Provisions, Special Conditions, General Provisions, Technical Specifications and this Agreement constitute the contract. The work covered by this Agreement includes all work shown on the plans and specifications and listed in the attached Proposal, at the Asheville Regional Airport, to-wit:

Project Name: Permanent Runway 17-35 Construction – Bid Package 4 – Paving, Lighting, and NAVAIDs

The Contractor shall commence the work with adequate forces and equipment on a date to be specified in a written order of the Owner and shall complete the work within <u>470</u> Calendar Days, from and including the date stipulated in the "Notice to Proceed."

The Contractor shall fully guarantee his workmanship and materials furnished for a period of one year following the date of final acceptance of the work. The performance and payment bonds shall remain in full force for this one year period.

If Contractor fails to complete the Work by the date specified herein for achievement of Substantial Completion, such as date may be adjusted pursuant to the Contract Documents, Owner shall deduct from progress payments or any other funds remaining due to Contractor or, if no funds remain due, Contractor shall pay to Owner the amount specified under Subsection 80-08 of the General Provisions for each day that the Work remains uncompleted beyond the specified Substantial Completion Date for each phase of work. Such sum is hereby, in view of the difficulty of estimating such damages, agreed upon, fixed and determined by Contractor and Owner as the liquidated damages that Owner shall suffer by such default and not by way of penalty.

It is further mutually agreed between the parties hereto that if, at any time after the execution of this agreement and the surety bond hereto attached for its faithful performance, the first party shall deem the surety or sureties upon such bonds to be unsatisfactory, or if, for any reason, such bonds cease to be

adequate to cover the performance of the work, the second party shall at its expense, within five days after the receipt of notice from the first party so to furnish an additional bond or bonds in such form and amount, and with surety or sureties as shall be satisfactory to the first party. In such event, no further payment to the second party shall be deemed to be due under this agreement until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the first party.

This Agreement will be governed by and construed in accordance with the laws of the State of North Carolina. Venue for any actions arising out of the Agreement will lie in Buncombe County, North Carolina.

IN WITNESS WHEREOF, the parties her day of		
Greater Asheville Regional Airport By:	Authority:	Contractor: By:
Signature		Signature
Print Name and Title		Print Name and Title
Attested By:		Attested By:
This instrument has been pre-audited in t Act.	- he manner required	by the Local Government and Fiscal Contro
Finance Officer	-	

#### PERFORMANCE BOND

KNO	OW ALL MEN BY THESE PRESE	NTS, THAT WE
of the State of	and County of	hereinafter, known as
the Principal, and _		a corporation chartered and
existing under the la	ws of the State of	and duly authorized to do business in the State
of North Carolina as	Surety, are held and firmly bound	unto the Greater Asheville Regional Airport Authority
hereinafter known as	s the Owner, in the penal sum of	
Dollars (\$		) to be paid to the Owner, for the
under or for the purp	oose of the hereinafter named conselves, our heirs, executors, add	skill, tools, machinery or materials, or subcontracting ntract, for which payment, well and truly to be made, ministrators, successors and assignees, jointly and
This obligation is he	owever subject to the following co	onditions:

This obligation is, however, subject to the following conditions:

The above bound Principal has entered into a contract with the Owner under which it agrees to furnish all the labor and material and do all work necessary to construct all improvements described in these contract documents under certain terms, conditions, and stipulations and in accordance with the plans and specifications for the project, which are hereto attached and made a part of this obligation.

NOW, THEREFORE, the conditions of this obligation are such that the above bound Principal shall faithfully and fully carry out and comply with the terms and conditions of said contract, to complete the work therein specified and in the event Contractor fails to perform, it shall be the duty of the Surety herein to assume the responsibility for the performance of the contract and to complete the work specified therein. including, but not limited to, obligations created by way of warranties and/or guarantees for workmanship and materials which warranty and/or guarantee may extend for a period of time beyond completion of said contract, and such alterations or additions as may be made therein or in the plans and specifications, and shall indemnify and save the Owner and Owner's Agents harmless against any claims for using any form of material process, composition or anything which is patented, and likewise indemnify and save the Owner and the Owner's Agents harmless against all claims for damages by reason of any default or negligence, want of skill or care on the part of said Principal or Agents in and about the performance of said contract, and shall comply with all laws pertaining to said work, and shall comply with and perform any and all warranties and/or guarantees provided for in said contract, then this obligation shall be void: otherwise it shall remain in full force and effect.

And the Surety to this bond, for value received agrees that no change, extensions of time, alterations or additions to the terms of the contract or to the work to be performed thereunder of the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alterations or additions to the terms of the Contract or the work or to the Plans and Specifications.

Said Principal and Surety hereby for themselves and their families waive and renounce the benefit of all homestead and exemption laws of this or any other state or the laws of the United States, as against any claim or judgment based upon the obligations of this bond.

It is agreed that this bond is executed pursuant to and in accordance with the provisions of Chapter 44A. Article 3 of the North Carolina General Statutes, and is intended to be and shall be construed to be a bond on compliance with the requirements thereof, except and to the extent that this bond provides Owner with greater or additional rights than those set forth in Chapter 44A, Article 3. The payment bond required to exempt an Owner under this part shall be furnished by the Contractor in at least the amount of the original contract price before commencing the construction of the improvement under the direct contract. The bond shall be executed as surety by a surety insurer authorized to do business in this state and shall be conditioned that the Contractor shall promptly make payments for labor, services, and material to all lienors under the Contractor's direct contract. Any form of bond given by a Contractor conditioned to pay for labor,

subsection. IN WITNESS WHEREOF, said Principal and Surety have thereunto affixed their hands and seals \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_, either in person or by agents fully authorized. As to Principal: Signed, sealed and delivered in the presence of: Principal Witness By:\_\_\_\_\_\_ (L.S.) Notary Public State of \_\_\_\_\_ County of \_\_\_\_\_ As to Surety: Signed, sealed and delivered in the presence of: Surety Witness By:\_\_\_\_\_\_(L.S.) Notary Public State of \_\_\_\_\_ County of \_\_\_\_\_

services, and material used to improve real property shall be deemed to include the condition of this

#### **PAYMENT BOND**

KNOW ALL M	IEN BY THESE PRESENT	S, THAT WE	of
the State of	and County of	here	inafter, known as
the Principal, and		, a corporation chartered and	existing under the
laws of the State of		and duly authorized to business in	the State of North
Carolina as Surety, a	are held and firmly bound	d unto the Greater Asheville Regiona	al Airport Authority
hereinafter known as	the Owner, in the penal sur	m of	
Dollars (\$		) to be paid to the (	Owner, for the use
and benefit of all pers	sons doing work or furnishi	ing skill, tools, machinery or materials	, or subcontracting
under or for the purpo	se of the hereinafter name	ed contract, for which payment, well an	d truly to be made,
we hereby bind ourse	elves, our heirs, executors	s, administrators, successors and ass	ignees, jointly and
severally, by these pre	esents.		

This obligation is, however, subject to the following conditions:

The above bound Principal has entered into a contract with the Owner under which agrees to furnish all the labor and material and do all work necessary to construct all improvements described in these contract documents under certain terms, conditions, and stipulations and in accordance with the plans and specifications for the project, which are hereto attached and made a part of this obligation.

NOW should the above named Principal and all subcontractors, if any, to whom any portion of the work provided for in the attached contract is sublet and all assignees of the said Principal and of such subcontractors shall promptly make payments to all persons supplying him or them with labor, materials, or supplies for or in the prosecution of the work provided for in such Contract, or in any amendment or extension of or addition to said contract, and for the payment of reasonable attorney's fees, incurred by the claimant or claimants in suits on said bond, then the above obligation shall be void; otherwise, to remain in full force and effect.

And the Surety to this bond, for value received agrees that no change, extensions of time, alterations or additions to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alterations or additions to the terms of the Contract or the work to the Plans and Specifications.

Said Principal and Surety hereby for themselves and their families waive and renounce the benefit of all homestead and exemption laws of this or any other state or the laws of the United States, as against any claim or judgement based upon the obligations of this bond.

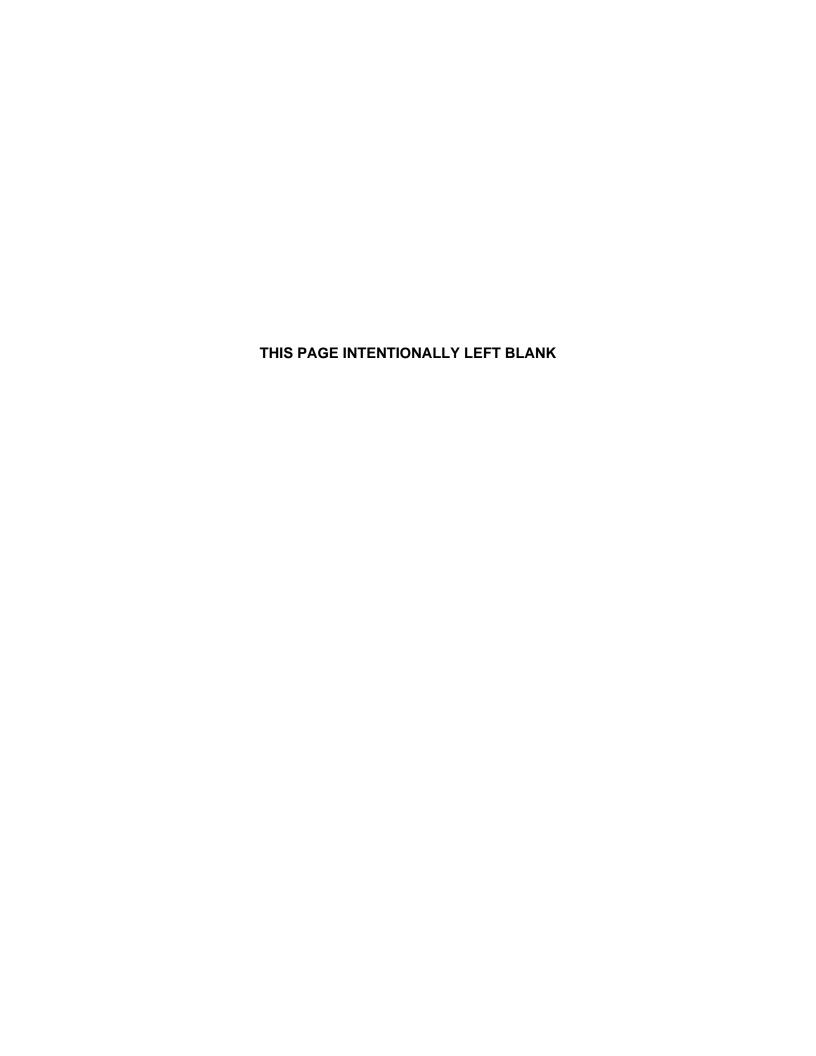
It is agreed that this bond is executed pursuant to and in accordance with the provisions of Chapter 44A, Article 3 of the North Carolina General Statutes, and is intended to be and shall be construed to be a bond on compliance with the requirements thereof. The payment bond required to exempt an Owner under this part shall be furnished by the Contractor in at least the amount of the original contract price before commencing the construction of the improvement under the direct contract. The bond shall be executed as surety by a surety insurer authorized to do business in this state and shall be conditioned that the Contractor shall promptly make payments for labor, services, and material to all lienors under the Contractor's direct contract. Any form of bond given by a Contractor conditioned to pay for labor, services, and material used to improve real property shall be deemed to include the condition of this subsection.

IN WITNESS WHEREOF, said Principal day of		
As to Principal:		
Signed, sealed and delivered in the presence of:	Principal	
Witness	_	
Notary Public	Ву:	(L.S.)
State of	_	
County of	_	
As to Surety:		
Signed, sealed and delivered in the presence of:	Surety	
Witness	_	
Notary Public	By:	(L.S.)
State of	_	
County of	_	
Approved as to form:		
Owner's Attorney	_	

## **FINAL RELEASE OF LIEN**

KNOWN ALL MEN BY THESE PRESENTS, that	t the undersigned, for and in consideration of the payment
Dollars (\$ ), paid	by the Greater Asheville Regional Airport Authority,
hereinafter referred to as "Owner", receipt of w	which is hereby acknowledged as total compensation for
hereby fully and completely discharge and releas	r Bid Schedule(s), does se the Owner from and waives any and all debts, accounts,
	es of action, suits, bonds, judgments, claims and demands
whatsoever, in law or in equity, which the under	ersigned ever had, now has or might hereafter have on
account of labor performed, material furnished o	or services rendered, directly or indirectly, for the Contract
between the parties dated	, 20, known as
	except
	ising out of or relating to said Contract which have been
	Contract Documents prior to this data and identified by the
	r Payment and are either in arbitration or court litigation, as
the case may be, in accordance with the Contrac	ct Documents.
The undersigned further covenants that subcont	tractors, suppliers, and material suppliers, and any or all
	vice or labor used directly or indirectly in the prosecution of
the work provided for in the Contract, have been	
,,	
The undersigned agrees to maintain in full force	ce and effect the provisions of the Contract Documents
respecting the guaranty against defective work, a	and any other special guaranties required by the Contract
Documents, for the terms provided in the Contract	ct Documents, which terms shall begin to run from the date
specified in the Contract Documents.	
	ne statements contained in the foregoing Release are true
and correct.	
IN WITNESS WHEREOF, I have hereunto set m	ny hand and seal this day of, 20
,	· — · — —
WITNESSES:	
	CONTRACTOR
	By:
STATE OF	_ Title:
51A1E 01	
COUNTY OF	_
Sworn to and subscribed before me this	_ day of, 20
(NOTABY OF AL)	
(NOTARY SEAL)	NOTARY PUBLIC
	My Commission Expires:





#### **ACCESS TO RECORDS AND REPORTS**

(49 CFR Part 18.36(i), 49 CFR Part 18.42)

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration, and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

#### **AFFIRMATIVE ACTION REQUIREMENT**

(41 CFR Part 60-4, Executive Order 11246)

# NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade (8.5%)

Goals for female participation in each trade (6.9%)

These goals are applicable to all of the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor is also subject to the goals for both federally funded and non-federally funded construction regardless of the percentage of federal participation in funding.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole purpose of meeting the contractor's goals, shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The contractor shall provide written notification to the Director, Office of Federal Contract Compliance Programs (OFCCP), within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of subcontract; and the geographical area in which the subcontract is to be performed.
- 4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **Asheville**, **NC**.

#### **BREACH OF CONTRACT TERMS**

(49 CFR Part 18.36(i)(1))

Any violation or breach of terms of this contract on the part of the contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

#### **BUY AMERICAN CERTIFICATION**

(49 USC § 50101)

The contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP-funded projects are produced in the United States, unless the FAA has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must submit the appropriate Buy America certification (see proposal forms) with all bids or offers on AIP funded projects. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive.

#### **CIVIL RIGHTS - GENERAL**

(49 USC § 47123)

#### **General Civil Rights Provisions**

The contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the contractor and subtier contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

#### **CIVIL RIGHTS - TITLE VI ASSURANCES**

(49 USC § 47123)

Title VI Solicitation Notice (Appendix 4, FAA Order 1400.11, Nondiscrimination in Federally-Assisted Programs at the Federal Aviation Administration)

The Greater Asheville Regional Airport Authority, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Title VI Clauses for Compliance with Nondiscrimination Requirements (Appendix A of Appendix 4 of FAA Order 1400.11, Nondiscrimination in Federally-Assisted Programs at the Federal Aviation Administration)

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply
  with the Title VI List of Pertinent Nondiscrimination Statutes and Authorities, as they may be
  amended from time to time, which are herein incorporated by reference and made a part of this
  contract.
- 2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the

contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

- 5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

# Title VI List of Pertinent Nondiscrimination Authorities (Appendix E of Appendix 4 of FAA Order 1400.11, Nondiscrimination in Federally-Assisted Programs at the Federal Aviation Administration)

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;

- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

# **CLEAN AIR AND WATER POLLUTION CONTROL**

(49 CFR § 18.36(i)(12))

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 U.S.C. § 740-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

# CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

(49 CFR § 18.36(i)(6))

### 1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

### 2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) above, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 above, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 above.

### 3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 above.

### 4. Subcontractors.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section.

# **COPELAND "ANTI-KICKBACK" ACT**

(49 CFR § 18.36(i)(4), 29 CFR Parts 3 & 5)

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

### **DAVIS BACON REQUIREMENTS**

(49 CFR § 18.36(i)(5))

### 1. Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their

representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 2. Withholding.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or quarantee of funds until such violations have ceased.

### 3. Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the

registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be provided under § 5.5(a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (2) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying or transcription by authorized representatives of the Sponsor, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor,

applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

### 4. Apprentices and Trainees.

- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work

performed until an acceptable program is approved.

- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- 5. Compliance With Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

### 6. Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance With Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

- 10. Certification of Eligibility.
- (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

# DEBARMENT AND SUSPENSION (NON-PROCUREMENT)

(2 CFR part 180 (Subpart C), 2 CFR part 1200, DOT Order 4200.5 DOT Suspension & Debarment Procedures & Ineligibility)

### CERTIFICATE REGARDING DEBARMENT AND SUSPENSION (BIDDER OR OFFEROR)

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that at the time the bidder or offeror submits its proposal that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

# CERTIFICATION REGARDING DEBARMENT AND SUSPENSION (SUCCESSFUL BIDDER REGARDING LOWER TIER PARTICIPANTS)

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

- Checking the System for Award Management at website: http://www.sam.gov
- 2. Collecting a certification statement similar to the Certificate Regarding Debarment and Suspension (Bidder or Offeror), above.
- 3. Inserting a clause or condition in the covered transaction with the lower tier contract

If the FAA later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

### **DISADVANTAGED BUSINESS ENTERPRISE**

(49 CFR Part 26)

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with their proposal on the forms provided herein:

- (1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- (2) A description of the work that each DBE firm will perform;
- (3) The dollar amount of the participation of each DBE firm listed under (1)
- (4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal;
- (5) If Bidder or Offeror cannot meet the advertised project DBE goal; evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR Part 26.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in their commitment. This Bidder or Offeror must submit the DBE's written confirmation of participation within 5 days after bid opening.

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the Greater Asheville Regional Airport Authority to practice nondiscrimination based on race, color, sex or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

Contract Assurance (§ 26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

**Prompt Payment (§26.29)** - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 7 days from the receipt of each payment the prime contractor receives from the Greater Asheville Regional Airport Authority. The prime contractor agrees further to return retainage payments to each subcontractor within 7 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Greater Asheville Regional Airport Authority. This clause applies to both DBE and non-DBE subcontractors.

# **ENERGY CONSERVATION REQUIREMENTS**

(49 CFR Part 18.36(i)(13))

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201et seq).

### **EQUAL OPPORTUNITY CLAUSE AND SPECIFICATIONS**

(41 CFR § 60-1.4, Executive Order 11246)

### **EQUAL OPPORTUNITY CLAUSE**

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

# STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

- 1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
  - d. "Minority" includes:
    - (1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
    - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not

excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

- 4. The contractor shall implement the specific affirmative action standards provided in paragraphs 18.7a through 18.7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.
- 6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or female sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such a superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor

- shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- Conduct, at least annually, an inventory and evaluation at least of all minority and female
  personnel, for promotional opportunities and encourage these employees to seek or to
  prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (18.7a through 18.7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 18.7a through 18.7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority.

Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally,) the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

- 10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 18.7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

# FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

(29 USC § 201, et seq.)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

The contractor has full responsibility to monitor compliance to the referenced statute or regulation. The [contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division

### LOBBYING AND INFLUENCING FEDERAL EMPOLYEES

(49 CFR Part 20, Appendix A)

The bidder or offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

# NONSEGREGATED FACILITIES REQUIREMENT

(41 CFR § 60-1.8)

### PROHIBITION of SEGREGATED FACILITIES

- (a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.
- (b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.
- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

# **OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970**

(20 CFR part 1910)

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

### PROCUREMENT OF RECOVERED MATERIALS

(2 CFR Section 200.322, 40 CFR Part 247)

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use of products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- a) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or,
- b) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at <a href="https://www.epa.gov/epawaste/conserve/tools/cpg/products/">www.epa.gov/epawaste/conserve/tools/cpg/products/</a>.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

# **RIGHT TO INVENTIONS**

(49 CFR part 18.36(i)(8))

All rights to inventions and materials generated under this contract are subject to requirements and regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

### **TERMINATION OF CONTRACT**

(49 CFR part 18.36(i)(2))

### **Termination for Convenience (Construction & Equipment Contracts)**

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

- 1. Contractor must immediately discontinue work as specified in the written notice.
- Terminate all subcontracts to the extent they relate to the work terminated under the notice.
- 3. Discontinue orders for materials and services except as directed by the written notice.
- 4. Deliver to the owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work and as directed in the written notice.
- 5. Complete performance of the work not terminated by the notice.
- 6. Take action as directed by the owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- a) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination:
- documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- c) reasonable and substantiated claims, costs and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
- d) reasonable and substantiated expenses to the contractor directly attributable to Owner's termination action

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

# **Termination for Default (Construction)**

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights and remedies associated with Owner termination of this contract due default of the Contractor.

### TRADE RESTRICTION

(49 CFR part 30)

#### **Trade Restriction Clause**

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror -

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (U.S.T.R.);
- has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the U.S.T.R; and
- c. has not entered into any subcontract for any product to be used on the Federal on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- (1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R. or
- (2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or
- (3) who incorporates in the public works project any product of a foreign country on such U.S.T.R. list;

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by U.S.T.R, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

# **VETERAN'S PREFERENCE**

(49 USC § 47112(c))

In the employment of labor (excluding executive, administrative, and supervisory positions), the contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 U.S.C. 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

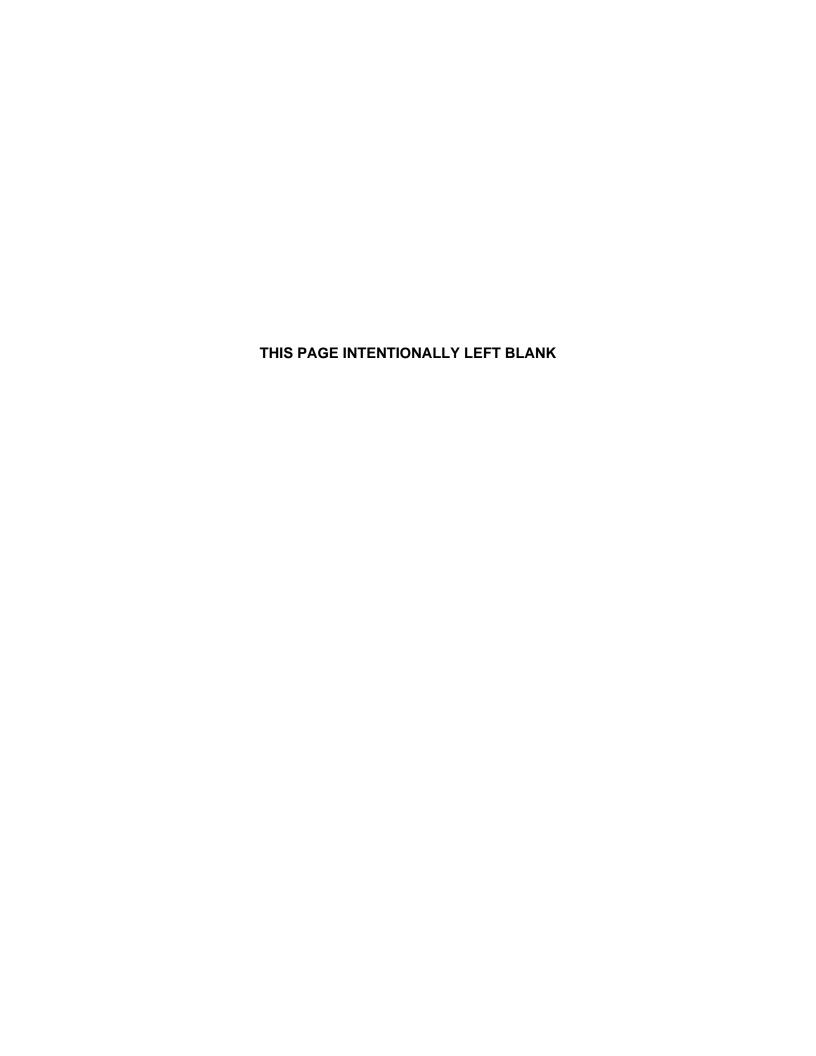
### **TEXTING WHILE DRIVING**

(Executive Order 13513, DOT Order 3902.10)

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), the FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 and involve driving a motor vehicle in performance of work activities associated with the project.





# **GENERAL PROVISIONS**

### **SECTION 10**

### **DEFINITION OF TERMS**

Whenever the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be interpreted as follows:

**10-01 AASHTO**. The American Association of State Highway and Transportation Officials, the successor association to AASHO.

**10-02 ACCESS ROAD**. The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.

**10-03 ADVERTISEMENT**. A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.

**10-04 AIRPORT IMPROVEMENT PROGRAM (AIP)**. A grant-in-aid program, administered by the Federal Aviation Administration (FAA).

**10-05 AIR OPERATIONS AREA (AOA)**. For the purpose of these specifications, the term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.

**10-06 AIRPORT**. Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; and airport buildings and facilities located in any of these areas, and includes a heliport.

**10-07 ASTM INTERNATIONAL (ASTM)**. Formerly known as the American Society for Testing and Materials (ASTM).

10-08 AWARD. The Owner's notice to the successful bidder of the acceptance of the submitted bid.

**10-09 BIDDER**. Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.

**10-10 BUILDING AREA**. An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.

**10-11 CALENDAR DAY**. Every day shown on the calendar. The total contract duration set forth in the Contract Documents includes normal inclement weather days encountered at the Project site, as well as observed holidays listed below. The Contractor shall be charged for each calendar day during the term of construction including observed holidays defined below and inclement weather days normally encountered at the Project site. Normal inclement weather days are established as the average days per month that the project site receives more than 0.5" of preciptation based on previous three (3) years of weather data from the National Oceanographic and Atmospheric Administration (NOAA):

Month	Normal inclement weather days	Month	Normal inclement weather days
January	3	July	6
February	1	August	4
March	1	September	3
April	4	October	2
May	4	November	2
June	5	December	4

Baseline Normal Inclement Weather Days
NOAA Weather Station – Asheville Regional Airport, NC

If the Contractor is unable to work at least 50% of the normal work day on pre-determined controlling work items due to abnormal inclement weather conditions (at least 0.5" of precipitation observed in a 24-hour period or inclement winter weather conditions that preclude work), the Contractor may not be charged a calendar day. The Contractor is responsible for submitting all data and records to justify not being charged a calendar day due to inclement weather. An extension in contract time will only be granted if the number of inclement weather days in the contract duration exceeds the number of baseline normal inclement weather days as provided in the table above.

Contract time shall be based upon calendar days counting from the effective date of the Notice to Proceed and including Saturdays, Sundays, observed holidays defined below, and other non-work days.

The number of days denoted in the Contract for contact time includes all weekend days and observed holidays. Observed Legal Holidays for which a calendar day shall be charged, but which the Contractor shall not be allowed to work area as follows:

New Year's Day Memorial Day and the Saturday/Sunday prior to Memorial Day July 4th Labor Day and the Saturday/Sunday prior to Labor Day Thanksgiving and the Friday and Saturday after Thanksgiving Christmas Day

**10-12 CHANGE ORDER**. A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work, covered by a change order, shall be within the scope of the contract. Also called a Contract Amendment (CA).

**10-13 CONTRACT**. The written agreement covering the work to be performed. The awarded contract shall include, but is not limited to: The Advertisement; The Contract Form; The Proposal; The Performance Bond; The Payment Bond; any required insurance certificates; The Specifications; The Plans, and any addenda issued to Bidders.

10-14 CONTRACT ITEM (PAY ITEM). A specific unit of work for which a price is provided in the contract.

**10-15 CONTRACT TIME**. The number of calendar days, stated in the proposal, allowed for completion of the contract, including authorized time extensions.

**10-16 CONTRACTOR**. The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.

- **10-17 CONTRACTOR'S LABORATORY.** The Contractor's quality control organization in accordance with the Contractor Quality Control Program.
- **10-18 CONSTRUCTION SAFETY AND PHASING PLAN (CSPP).** The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
- **10-18a DRAINAGE SYSTEM**. The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
- **10-19 ENGINEER**. The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering inspection of the contract work and acting directly or through an authorized representative. The Engineer shall be understood to be the Engineer of the Owner or the Owner's duly authorized representative.
- **10-19a EQUIPMENT**. All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.
- **10-20 EXTRA WORK**. An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.
- **10-21 FAA**. The Federal Aviation Administration of the U.S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his/her duly authorized representative.
- **10-22 FEDERAL SPECIFICATIONS**. The Federal Specifications and Standards, Commercial Item Descriptions, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government.
- **10-22a FOD**. Foreign object debris (FOD) is any object located in an inappropriate location in the airport environment that has the capacity to injure airport or air carrier personnel and damage aircraft. The contractor shall take necessary measures to prevent and eliminate FOD.
- **10-23 FORCE ACCOUNT.** Force account work is planning, engineering, or construction work done by the Sponsor's employees. It is also construction performed by the Contractor through the use of material, equipment, labor, and supervision which includes an allowance for overhead and profit where no bid item or established payment provision is provided within the contract documents.
- **10-24 INSPECTOR**. An authorized representative of the Engineer assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
- **10-25 INTENTION OF TERMS.** Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Owner.

Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.

**10-26 LABORATORY**. The official testing laboratories of the Owner or such other laboratories as may be designated by the Engineer. Also referred to as "Engineer's Laboratory" or "quality assurance laboratory."

- **10-27 LIGHTING**. A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
- **10-27A LIQUIDATED DAMAGES.** Monetary damages paid by the Contractor to the Owner for each calendar day or night after the applicable time has elapsed until the work is completed and accepted by the Owner and Engineer. Refer to Section 80 for a listing of liquidated damages applicable to this contract.
- **10-28 MAJOR AND MINOR CONTRACT ITEMS**. A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.
- 10-29 MATERIALS. Any substance specified for use in the construction of the contract work.
- **10-29A NIGHT TIME WORK HOURS.** Night time work hours on the airfield will be required when construction operations includes work on a runway or work immediately adjacent to a runway or locations where traffic cannot be diverted around a specific taxiway complex. Night work hours will generally be defined as from 0000 hours to 0530 hours each night. In order to open the airfield to aircraft operation, the Contractor shall have an affected pavement swept and cleaned; all affective pavement and infield areas graded to FAA standards; and all affected airfield electrical components operational as before work began. Only the Owner or their designated representative has the authority to determine if the work area is acceptable for aircraft operations. Liquidated damages detailed in Section 80 of these General Provisions will be applied for the Contractor's exceeding the time limit for night work.
- **10-30 NOTICE TO PROCEED**. A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
- **10-31 OWNER**. The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract.
- **10-32 PAVEMENT**. The combined surface course, base course, and subbase course, if any, considered as a single unit.
- **10-33 PAYMENT BOND**. The approved form of security furnished by the Contractor and his or her surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
- **10-34 PERFORMANCE BOND**. The approved form of security furnished by the Contractor and his or her surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
- **10-35 PLANS**. The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.
- **10-36 PROJECT**. The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
- **10-37 PROPOSAL**. The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
- **10-38 PROPOSAL GUARANTY**. The security furnished with a proposal to guarantee that the bidder will enter into a contract if his or her proposal is accepted by the Owner.
- **10-38A RESIDENT PROJECT REPRESENTATIVE (RPR).** An authorized representative of the Owner assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.

- **10-39 RUNWAY**. The area on the airport prepared for the landing and takeoff of aircraft.
- **10-40 SPECIFICATIONS**. A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
- **10-41 SPONSOR**. A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport. Same as definition above of "Owner."
- **10-42 STRUCTURES**. Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
- **10-43 SUBGRADE**. The soil that forms the pavement foundation.
- **10-44 SUPERINTENDENT**. The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.
- **10-45 SUPPLEMENTAL AGREEMENT.** A written agreement between the Contractor and the Owner covering (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25%, such increased or decreased work being within the scope of the originally awarded contract; or (2) work that is not within the scope of the originally awarded contract.
- **10-46 SURETY**. The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
- **10-47 TAXIWAY**. For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
- **10-48 WORK**. The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.

**END OF SECTION 10** 

### **SECTION 20**

### PROPOSAL REQUIREMENTS AND CONDITIONS

**20-01 ADVERTISEMENT (Notice to Bidders).** The Owner, or their authorized agent, shall publish the advertisement at such places and at such times as are required by local law or ordinances. The published advertisement shall state the time and place for submitting sealed proposals; a description of the proposed work; instructions to bidders as to obtaining proposal forms, plans, and specifications; proposal guaranty required; and the Owner's right to reject any and all bids. If the Owner prequalifies bidders, they shall publish the advertisement at such places and at such times as are required by local law or ordinances.

**20-02 QUALIFICATION OF BIDDERS**. Each bidder shall furnish the Owner satisfactory evidence of his or her competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the Owner satisfactory evidence of his or her financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether his or her financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that he or she is prequalified with the State Highway Division and is on the current "bidder's list" of the state in which the proposed work is located. Such evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

Each bidder shall submit "evidence of competency" and "evidence of financial responsibility" to the Owner at the time of bid opening.

**20-03 CONTENTS OF PROPOSAL FORMS**. The Owner shall furnish bidders with proposal forms. All papers bound with or attached to the proposal forms are necessary parts and must not be detached.

The plans, specifications, and other documents designated in the proposal form shall be considered a part of the proposal whether attached or not.

**20-04 ISSUANCE OF PROPOSAL FORMS**. The Owner reserves the right to refuse to issue a proposal form to a prospective Bidder should such Bidder be in default for any of the following reasons:

- **a.** Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- **b.** Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Owner) at the time the Owner issues the proposal to a prospective Bidder.
  - c. Contractor default under previous contracts with the Owner.
  - **d.** Unsatisfactory work on previous contracts with the Owner.
  - **e.** Contractor has an interest in any litigation or arbitration or other type claim against the Owner or Engineer.

**20-05 INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES**. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result

of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as hereinafter provided in the subsection 40-02 titled ALTERATION OF WORK AND QUANTITIES of Section 40 without in any way invalidating the unit bid prices.

**20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE**. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which the bidder may make or obtain from his or her examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

**20-07 PREPARATION OF PROPOSAL.** The bidder shall submit his or her proposal on the forms furnished by the Owner. All blank spaces in the proposal forms must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals for which they propose to do for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall sign the proposal correctly and in ink. If the proposal is made by an individual, his or her name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state under the laws of which the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of his or her authority to do so and that the signature is binding upon the firm or corporation.

**20-08 RESPONSIVE AND RESPONSIBLE BIDDER.** A responsive bid conforms to all significant terms and conditions contained in the Sponsor's invitation for bid. It is the Sponsor's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 49 CFR § 18.36(b)(8). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

**20-09 IRREGULAR PROPOSALS**. Proposals shall be considered irregular for the following but not limited to reasons:

**a.** If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.

- **b.** If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- **c.** If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the Bidder is not required to furnish a unit price.
- **d.** If the proposal contains unit prices that are obviously unbalanced unbalanced as interpreted by the Owner and Engineer.
  - e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

- **20-10 BID GUARANTEE**. Each separate proposal shall be accompanied by a certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such check, or collateral, shall be made payable to the Owner. The proposal guarantee shall be in the amount of 5% of the maximum bid price submitted.
- **20-11 DELIVERY OF PROPOSAL.** Each proposal submitted shall be placed in a sealed envelope plainly marked with the project number, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.
- **20-12 WITHDRAWAL OR REVISION OF PROPOSALS**. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by **email** before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.
- **20-13 PUBLIC OPENING OF PROPOSALS**. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by email request) or received after the time specified for opening bids shall be returned to the bidder unopened.
- **20-14 DISQUALIFICATION OF BIDDERS**. A Bidder shall be considered disqualified for any of the following but not limited to reasons:
- **a.** Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.
- **b.** Evidence of collusion among Bidders. Bidders participating in such collusion shall be disqualified as Bidders for any future work of the Owner until any such participating Bidder has been reinstated by the Owner as a qualified Bidder.
- **c.** If the Bidder is considered to be in "default" for any reason specified in the subsection titled ISSUANCE OF PROPOSAL FORMS of this section.
- **d**. Where the Bidder has an interest in any litigation or arbitration or other type claim against the Owner or Engineer.
  - **e**. Lack of competency as revealed by the Statement of Bidder's Qualifications.
- **f.** Uncompleted work which, in the judgment of the Owner, will hinder or prevent the prompt completion of additional work, if awarded.

**g.** Previous projects where, in the judgment of the Owner, the Bidder performed unsatisfactorily and did not complete and close out the project in a timely manner resulting in the Owner not being able to close out the project with various funding agencies and resulting in the Owner potentially or actually loosing planned funding for other projects.

**END OF SECTION 20** 

## **SECTION 30**

## AWARD AND EXECUTION OF CONTRACT

**30-01 CONSIDERATION OF PROPOSALS**. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a Bidder's proposal for any of the following reasons:

- a. If the proposal is irregular as specified in the subsection titled IRREGULAR PROPOSALS of Section 20.
- **b.** If the Bidder is disqualified for any of the reasons specified in the subsection titled DISQUALIFICATION OF BIDDERS of Section 20.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

**30-02 AWARD OF CONTRACT**. The award of a contract, if it is to be awarded, shall be made within 90 calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

Award of the contract shall be made by the Owner to the lowest, qualified Bidder whose proposal conforms to the cited requirements of the Owner.

**30-03 CANCELLATION OF AWARD**. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with the subsection titled APPROVAL OF CONTRACT of this section.

**30-04 RETURN OF PROPOSAL GUARANTY**. All proposal guaranties, except those of the three (3) lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the subsection 30-01 titled CONSIDERATION OF PROPOSALS of this section. Proposal guaranties of the three lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section.

**30-05 REQUIREMENTS OF CONTRACT BONDS**. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

**30-06 EXECUTION OF CONTRACT**. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section, within 15 calendar days from the date of written notice of award to the successful bidder.

**30-07 APPROVAL OF CONTRACT**. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

**30-08 FAILURE TO EXECUTE CONTRACT**. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the 15 calendar day period specified in the subsection titled EXECUTION OF CONTRACT of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidation of damages to the Owner.

**END OF SECTION 30** 

## **SECTION 40**

## SCOPE OF WORK

**40-01 INTENT OF CONTRACT**. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, supplies, and incidentals required to complete the work in accordance with the plans, specifications, and terms of the contract.

**40-02 ALTERATION OF WORK AND QUANTITIES**. The Owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. Unless otherwise specified herein, the Engineer shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost or the total cost of any major contract item by more than 25% (total cost being based on the unit prices and estimated quantities in the awarded contract). Alterations that do not exceed the 25% limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations as if the altered work had been a part of the original contract. These alterations that are for work within the general scope of the contract shall be covered by "Change Orders" issued by the Engineer. Change orders for altered work shall include extensions of contract time where, in the Engineer's opinion, such extensions are commensurate with the amount and difficulty of added work.

Should the aggregate amount of altered work exceed the 25% limitation hereinbefore specified, such excess altered work shall be covered by supplemental agreement. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

Supplemental agreements shall be approved by the FAA and shall include all applicable Federal contract provisions for procurement and contracting required under AIP. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds.

For AIP contracts, all supplemental agreements shall be approved by the FAA and shall include valid wage determinations of the U.S. Secretary of Labor when the amount of the supplemental agreement exceeds \$2,000. However, if the Contractor elects to waive the limitations on work that increases or decreases the originally awarded contract or any major contract item by more than 25 percent, the supplemental agreement shall be subject to the same U.S. Secretary of Labor wage determination as was included in the originally awarded contract.

**40-03 OMITTED ITEMS**. The Engineer may, in the Owner's best interest, omit from the work any contract item, except major contract items. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with the subsection titled PAYMENT FOR OMITTED ITEMS of Section 90.

**40-04 EXTRA WORK**. Should acceptable completion of the contract require the Contractor to perform an item of work for which no basis of payment has been provided in the original contract or previously issued change orders or supplemental agreements, the same shall be called "Extra Work." Extra Work that is within the general scope of the contract shall be covered by written change order. Change orders for such Extra Work shall contain agreed unit prices for performing the change order work in accordance with the

requirements specified in the order, and shall contain any adjustment to the contract time that, in the Engineer's opinion, is necessary for completion of such Extra Work.

When determined by the Engineer to be in the Owner's best interest, the Engineer may order the Contractor to proceed with Extra Work as provided in the subsection titled PAYMENT FOR EXTRA WORK of Section 90. Extra Work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a Supplemental Agreement as defined in the subsection titled SUPPLEMENTAL AGREEMENT of Section 10.

Any claim for payment of Extra Work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

**40-05 MAINTENANCE OF TRAFFIC.** It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration.

- **a.** It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to his or her own operations and the operations of all subcontractors as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in the subsection titled CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS in Section 70.
- **b.** With respect to his or her own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport.
- **c.** When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall be responsible for the repair of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (<a href="http://mutcd.fhwa.dot.gov/">http://mutcd.fhwa.dot.gov/</a>), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. The Contractor shall be responsible for snow removal on all on-site haul routes utilized for this project.
- **40-06 REMOVAL OF EXISTING STRUCTURES**. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Engineer shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the Engineer in accordance with the provisions of the contract.

Except as provided in the subsection titled RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK of this section, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be used in the

work as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

**40-07 RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK**. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be either embankment or waste, the Contractor may at his or her option either:

- **a.** Use such material in another contract item, providing such use is approved by the Engineer and is in conformance with the contract specifications applicable to such use; or,
  - **b.** Remove such material from the site, upon written approval of the Engineer; or
  - c. Use such material for the Contractor's own temporary construction on site; or,
  - d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the Engineer's approval in advance of such use.

Should the Engineer approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at his or her own expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the Engineer approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of his or her exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

**40-08 FINAL CLEANING UP**. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property Owner.

**END OF SECTION 40** 

## **SECTION 50**

## **CONTROL OF WORK**

**50-01 AUTHORITY OF THE ENGINEER**. The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. The Engineer shall decide all questions that may arise as to the interpretation of the specifications or plans relating to the work. The Engineer shall determine the amount and quality of the several kinds of work performed and materials furnished which are to be paid for the under contract.

The Engineer does not have the authority to accept pavements that do not conform to FAA specification requirements.

**50-02 CONFORMITY WITH PLANS AND SPECIFICATIONS**. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans or specifications.

If the Engineer finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications but that the portion of the work affected will, in his or her opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the Engineer will advise the Owner of his or her determination that the affected work be accepted and remain in place. In this event, the Engineer will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. The Engineer's determination and recommended contract price adjustments will be based on sound engineering judgment and such tests or retests of the affected work as are, in the Engineer's opinion, needed. Changes in the contract price shall be covered by contract change order or supplemental agreement as applicable.

If the Engineer finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the Engineer's written orders.

For the purpose of this subsection, the term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the Engineer's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the Engineer's opinion, such compliance is essential to provide an acceptable finished portion of the work.

For the purpose of this subsection, the term "reasonably close conformity" is also intended to provide the Engineer with the authority, after consultation with the FAA, to use sound engineering judgment in his or her determinations as to acceptance of work that is not in strict conformity, but will provide a finished product equal to or better than that intended by the requirements of the contract, plans and specifications.

The Owner shall keep the FAA advised of the Engineer's determinations as to acceptance of the work that is not in reasonably close conformity with the contract, plans, and specifications. Change orders or supplemental agreements must bear the written approval of the FAA. FAA approval is required before performing change order work in excess of \$10,000.

The Engineer will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

**50-03 COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS.** The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the Engineer for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, he shall immediately call upon the Engineer for his/her interpretation and decision, and such decision shall be final.

**50-04 COOPERATION OF CONTRACTOR**. The Contractor will be supplied with five copies each of the plans and specifications. The Contractor shall have available on the work at all times one copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the Engineer and his or her inspectors and with other contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as his or her agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Engineer or his or her authorized representative.

**50-05 COOPERATION BETWEEN CONTRACTORS**. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct the work so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his or her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange his or her work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join his or her work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

**50-06 CONSTRUCTION LAYOUT AND STAKES**. The Contractor shall furnish, at his expense, all horizontal and vertical control, all staking and layout of construction work called for on the plans and in accordance with the technical specifications. The Engineer and Owner shall not be responsible for such work. However, the Owner and Engineer reserve the right to check all said lines, grades, and

measurements with their appointed surveyor(s). Should the Owner's surveyor detect errors in said lines, grades, and measurements, the Contractor shall pay for all said surveying costs and subsequent surveying costs performed to verify correction of errors found in said lines, grades, and measurements.

The Contractor will be required to furnish all lines, grades and measurements from the control points necessary for the proper prosecution and control of the work contracted for under these specifications.

The Contractor must give weekly copies of the survey notes to the Engineer so that the Engineer may check them as to accuracy and method of staking. All areas that are staked by the Contractor must be checked by the Engineer prior to beginning any work in the area. The Engineer will make periodic checks of the grades and alignment set by the Contractor. In case of error on the part of the Contractor, or his/her employees, resulting in establishing grades and/or alignment that are not in accordance with the plans or established by the Engineer, all construction not in accordance with the established grades and/or alignment shall be replaced without additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses therewith. The cost thereof shall be included in the price of the bid for the various items of the Contract.

Construction Staking and Layout includes but is not limited to:

- 1. Clearing and Grubbing perimeter staking.
- 2. Rough Grade slope stakes at 100-foot stations
- 3. Drainage Swales slope stakes and flow line blue tops at 50-foot stations
- 4. Subgrade blue tops at 25-foot stations and 25-foot offset distance (maximum) for the following section locations:
  - a. Runway minimum 5 per station
  - **b.** Taxiways minimum 3 per station
  - c. Holding apron areas minimum 3 per station
  - d. Roadways minimum 3 per station
- 5. Base Course blue tops at 25-foot stations and 25-foot offset distance (maximum) for the following section locations:
  - a. Runway minimum 5 per station
  - b. Taxiways minimum 3 per station
  - **c.** Holding apron areas minimum 3 per station
- 6. Pavement areas:
  - a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100-foot stations
  - **b.** Between Lifts at 25-foot stations for the following section locations:
    - (1). Runways each paving lane width
    - (2). Taxiways each paving lane width
    - (3). Holding areas each paving lane width
  - c. After finish paving operations at 50-foot stations
    - (1). All paved areas Edge of each paving lane prior to next paving lot
  - **d.** Shoulder and safety area blue tops at 50-foot stations and at all break points with maximum of 50 foot offsets
- 7. Fence lines at 100-foot stations
- 8. Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, Visual Approach Slope Indicators (VASIs),

Precision Approach Path Indicators (PAPIs), Runway End Identifier Lighting (REIL), Wind Cones, Distance Markers (signs), pull boxes and manholes.

- 9. Drain lines, cut stakes and alignment on 25-foot stations, inlet and manholes.
- 10. Painting and Striping layout (pinned with 1.5 in PK nails) marked for paint Contractor. (All nails shall be removed after painting)
- 11. Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet per pass (that is, paving lane).

The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor.

Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the Engineer without additional cost to the Owner.

**50-07 AUTOMATICALLY CONTROLLED EQUIPMENT**. Whenever batching or mixing plant equipment is required to be operated automatically under the contract and a breakdown or malfunction of the automatic controls occurs, the equipment may be operated manually or by other methods for a period 48 hours following the breakdown or malfunction, provided this method of operations will produce results which conform to all other requirements of the contract.

**50-08 AUTHORITY AND DUTIES OF INSPECTORS**. Inspectors shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

Inspectors are authorized to notify the Contractor or his or her representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the Engineer for a decision.

**50-09 INSPECTION OF THE WORK**. All materials and each part or detail of the work shall be subject to inspection. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the Owner may be ordered removed and replaced at the Contractor's expense unless the Owner's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

The Engineer and/or his authorized representative shall have full authority to inspect all materials on the project site, test all materials at as many locations and at any frequency he deems necessary to satisfy himself that the final in-place product meets the requirements of the plans and specifications.

**50-10 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK**. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the Engineer as provided in the subsection titled CONFORMITY WITH PLANS AND SPECIFICATIONS of this section.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of the subsection titled CONTRACTOR'S RESPONSIBILITY FOR WORK of Section 70.

Work done beyond the lines shown on the plans or as established by the Engineer, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs incurred by the Owner from any monies due or to become due the Contractor.

**50-11 LOAD RESTRICTIONS**. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor shall be responsible for all damage done by his or her hauling equipment and shall correct such damage at his or her own expense.

**50-12 MAINTENANCE DURING CONSTRUCTION**. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

**50-13 FAILURE TO MAINTAIN THE WORK**. Should the Contractor at any time fail to maintain the work as provided in the subsection 50-12 titled MAINTENANCE DURING CONSTRUCTION of this section, the Engineer shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the Engineer's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be deducted from monies due or to become due the Contractor.

**50-14 PARTIAL ACCEPTANCE**. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the Engineer to make final inspection of that unit. If the Engineer finds

upon inspection that the unit has been satisfactorily completed in compliance with the contract, the Engineer may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract. Partial acceptance of any part of the work shall not constitute acceptance from a warranty standpoint. The warranty for any work completed and accepted shall not begin until the entire project is complete and accepted by the Owner.

**50-15 FINAL ACCEPTANCE.** Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The Engineer shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the Engineer will make the recommendation for final acceptance and notify the Contractor in writing of the Owner's acceptance as of the date of final inspection.

**50-16 CLAIMS FOR ADJUSTMENT AND DISPUTES.** If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the Engineer in writing of his or her intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the Engineer is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the Engineer who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

**END OF SECTION 50** 

## **SECTION 60**

#### **CONTROL OF MATERIALS**

**60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS**. The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish complete statements to the Engineer as to the origin, composition, and manufacture of all materials to be used in the work. Such statements shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the Engineer's option, materials may be approved at the source of supply before delivery is stated. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

The Contractor shall furnish airport lighting equipment that conforms to the requirements of cited materials specifications. In addition, where an FAA specification for airport lighting equipment is cited in the plans or specifications, the Contractor shall furnish such equipment that is:

- **a.** Listed in FAA Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program, and Addendum that is in effect on the date of advertisement; and,
- **b.** Produced by the manufacturer as listed in the Addendum cited above for the certified equipment part number.

**60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS**. Unless otherwise designated, all materials used in the work shall be inspected, tested, and approved by the Engineer before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Engineer shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the Engineer, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), Federal Specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids, will be made by and at the expense of the Owner.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel, including the Contractor's representative at his or her request. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the Owner. All materials being used are subject to inspection, test, or rejection at any time prior to, during, or after incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the Engineer.

The Contractor shall employ a testing organization to perform all Contractor required Quality Control tests. The Contractor shall submit to the Engineer resumes on all testing organizations and individual persons who will be performing the tests. The Engineer will determine if such persons are qualified. All the test data shall be reported to the Engineer after the results are known. A legible, handwritten copy of all test data shall be given to the Engineer daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the Engineer showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

The Owner shall pay for all passing acceptance tests. The Contractor shall pay for all failing acceptance tests. Charges for failing tests will be deducted from the Contractor's earnings at the end of the project at the time of final payment. The Contractor shall furnish, at his own expense, all necessary specimens for testing of the materials, as required by the Engineer or his authorized representative. The Contractor shall be responsible for notifying the Owner authorized testing laboratory to pick up the test samples. The Engineer reserves the right to test at any location on the project, and at any frequency he deems necessary before, during and after incorporation of all materials into the project to satisfy himself and insure that all materials meet the specified requirements. All materials utilized in the project must meet specification requirements before, during and after incorporation into the project.

**60-03 CERTIFICATION OF COMPLIANCE**. The Engineer may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the Engineer.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

- a. Conformance to the specified performance, testing, quality or dimensional requirements; and,
- **b.** Suitability of the material or assembly for the use intended in the contract work.

Should the Contractor propose to furnish an "or equal" material or assembly, the Contractor shall furnish the manufacturer's certificates of compliance as hereinbefore described for the specified brand name material or assembly. However, the Engineer shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The Engineer reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

**60-04 PLANT INSPECTION**. The Engineer or his or her authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for acceptance of the material or assembly.

Should the Engineer conduct plant inspections, the following conditions shall exist:

- **a.** The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom the Engineer has contracted for materials.
- **b.** The Engineer shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.
- **c.** If required by the Engineer, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The Engineer shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

**60-06 STORAGE OF MATERIALS**. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Engineer. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Engineer. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the Engineer a copy of the property Owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at his or her entire expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

**60-07 UNACCEPTABLE MATERIALS**. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the Engineer.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the Engineer has approved its use in the work.

**60-08 OWNER FURNISHED MATERIALS**. The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

**END OF SECTION 60** 

## **SECTION 70**

## LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

**70-01 LAWS TO BE OBSERVED**. The Contractor shall keep fully informed of all Federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all his or her officers, agents, Engineers or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

**70-02 PERMITS, LICENSES, AND TAXES**. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

**70-03 PATENTED DEVICES, MATERIALS, AND PROCESSES.** If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, Engineer, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner and Engineer for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work. The Contractor shall be required to include the Owner and Engineer as additional insureds on his insurance policies to protect the Owner and Engineer against all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright and any costs, expenses, and damages which it may be obliged to pay by reason of an infringement.

**70-04 RESTORATION OF SURFACES DISTURBED BY OTHERS**. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work.

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the Engineer.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the Engineer, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

**70-05 FEDERAL AID PARTICIPATION**. For Airport Improvement Program (AIP) contracts, the United States Government has agreed to reimburse the Owner for some portion of the contract costs. Such reimbursement is made from time to time upon the Owner's request to the FAA. In consideration of the United States Government's (FAA's) agreement with the Owner, the Owner has included provisions in this contract pursuant to the requirements of Title 49 of the USC and the Rules and Regulations of the FAA that pertain to the work.

As required by the USC, the contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator, and is further subject to those provisions of the rules and regulations that are cited in the contract, plans, or specifications.

No requirement of the USC, the rules and regulations implementing the USC, or this contract shall be construed as making the Federal Government a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

**70-06 SANITARY, HEALTH, AND SAFETY PROVISIONS**. The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his or her employees as may be necessary to comply with the requirements of the state and local Board of Health, or of other bodies or tribunals having jurisdiction.

Attention is directed to Federal, state, and local laws, rules and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to his or her health or safety.

Smoking is prohibited on all Airport property.

**70-07 PUBLIC CONVENIENCE AND SAFETY**. The Contractor shall control his or her operations and those of his or her subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to his or her own operations and those of his or her subcontractors and all suppliers in accordance with the subsection titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80 hereinafter.

**70-08 BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS**. The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs, and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area (AOAs) shall be a maximum of 18 inches high. Unless otherwise specified, barricades shall be spaced not more than 4 feet apart. Except as otherwise noted in the plans for lighted runway closure markers, no separate payment will be made for barricades, warning signs, and hazard markings.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices.

When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and associated lighting conforming to the requirements of advisory circular (AC) 150/5340-1, Standards for Airport Markings, latest change.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stock piles, and the Contractor's parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to AC 150/5370-2, Operational Safety on Airports During Construction, latest change. The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to AC 150/5370-2, latest change

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards as indicated on the plans or as directed by the Engineer prior to commencing work that requires such

GARRA GP-25 ASHEVILLE REGIONAL AIRPORT PERMANENT RUNWAY 17-35 PAVING, LIGHTING, AND NAVAIDS erection and shall maintain the barricades, warning signs, and markings for hazards until their removal is directed by the Engineer.

Open-flame type lights shall not be permitted.

**70-09 USE OF EXPLOSIVES**. Explosives may only be used for this project if approved by the Owner and AOR.

**70-10 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE**. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at his or her own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

**70-11 RESPONSIBILITY FOR DAMAGE CLAIMS**. The Contractor shall be required to include the Owner and Engineer as additional insureds on his or her insurance policies to indemnify and save harmless the Engineer and the Owner and their officers, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of his or her contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, his or her surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

**70-12 THIRD PARTY BENEFICIARY CLAUSE**. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

**70-13 OPENING SECTIONS OF THE WORK TO TRAFFIC.** Should it be necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work shall be specified herein and indicated on the plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified. The Contractor shall make his or her own estimate of the difficulties involved in arranging the work to permit such beneficial occupancy by the Owner as described in the contract drawings.

Upon completion of any portion of the work listed above, such portion shall be accepted by the Owner in accordance with the subsection 50-14 titled PARTIAL ACCEPTANCE of Section 50.

No portion of the work may be opened by the Contractor for public use until ordered by the Engineer in writing. Should it become necessary to open a portion of the work to public traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the Engineer, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at his or her expense.

The Contractor shall make his or her own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

Contractor shall be required to conform to safety standards contained AC 150/5370-2, latest change.

Contractor shall refer to the approved Construction Safety Phasing Plan (CSPP) to identify barricade requirements and other safety requirements prior to opening up sections of work to traffic.

**70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK**. Until the Engineer's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection 50-14 titled PARTIAL ACCEPTANCE of Section 50, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at his or her expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

**70-15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS**. As provided in the subsection 70-04 titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section, the Contractor shall cooperate with the Owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and the Owners are indicated as follows:

<u>Utility</u>	<b>Contact</b>
Utility Locate	811
Duke Energy - Electric	800-452-2777
PSNC Energy – Natural Gas	877-776-2427
Buncombe County Metropolitan Sewerage District	828-525-0061
AT&T	800-288-2020
City of Asheville - Water	828-251-1122
Asheville Regional Airport / FAA	828-684-2226

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of his or her plan of operations. Such notification shall be in writing addressed to THE PERSON TO CONTACT as provided in this subsection and subsection 70-04 titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section. A copy of each notification shall be given to the Engineer.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer. The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations. Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the Engineer and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the Engineer continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or his or her surety.

- **70-15.1 FAA FACILITIES AND CABLE RUNS.** The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the prosecution of the project work, shall comply with the following:
- **a.** The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.
- **b.** The Contractor shall provide notice to the FAA Air Traffic Organization (ATO)/Technical Operations/System Support Center (SSC) Point-of-Contact through the airport Owner a minimum of seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.
- **c.** If prosecution of the project work requires a facility outage, the Contractor shall contact the above named FAA Point-of-Contact a minimum of 72 hours prior to the time of the required outage.
- **d.** Any damage to FAA cables, access roads, or FAA facilities during construction caused by the Contractor's equipment or personnel whether by negligence or accident will require the Contractor to repair or replace the damaged cables, access road, or FAA facilities to FAA requirements. The Contractor shall not bear the cost to repair damage to underground facilities or utilities improperly located by the FAA.
- **e.** If the project work requires the cutting or splicing of FAA owned cables, the FAA Point-of-Contact shall be contacted a minimum of 72 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA specifications and require approval by the FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.
- **70-16 FURNISHING RIGHTS-OF-WAY**. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.
- **70-17 PERSONAL LIABILITY OF PUBLIC OFFICIALS**. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, his or her authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.
- **70-18 NO WAIVER OF LEGAL RIGHTS**. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or his or her surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill his or her obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

**70-19 ENVIRONMENTAL PROTECTION**. The Contractor shall comply with all Federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, bitumens,

chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

**70-20 ARCHAEOLOGICAL AND HISTORICAL FINDINGS**. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during his or her operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the Engineer. The Engineer will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract change order or supplemental agreement as provided in the subsection titled EXTRA WORK of Section 40 and the subsection titled PAYMENT FOR EXTRA WORK of Section 90. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of Section 80.

**END OF SECTION 70** 

## **SECTION 80**

#### PROSECUTION AND PROGRESS

**80-01 SUBLETTING OF CONTRACT**. The Owner and Engineer will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Engineer.

The Contractor shall provide copies of all subcontracts to the Engineer. The Contractor shall perform, with his organization, an amount of work equal to at least 40 percent of the total contract cost.

Should the Contractor elect to assign his or her contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

80-02 NOTICE TO PROCEED. The Notice to Proceed shall be issued by the Owner.

The Contractor shall begin the work to be performed under the contract within not more than ten (10) calendar days of the date set by the Owner in the written notice to proceed, but in any event, the Contractor shall notify the Owner and Engineer at least 48 hours in advance of the time actual construction operations will begin.

**80-03 EXECUTION AND PROGRESS**. Unless otherwise specified, the Contractor shall submit their progress schedule for the Engineer's approval within 10 calendar days after the effective date of the notice to proceed. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the Engineer at least 48 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the notice to proceed is issued by the Owner.

**80-04 LIMITATION OF OPERATIONS**. The Contractor shall control his or her operations and the operations of his or her subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct his or her operations within an AOA of the airport, the work shall be coordinated with airport operations (through the Engineer) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the Engineer and until the necessary temporary marking and associated lighting is in place as provided in the subsection titled BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS of Section 70.

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey

instructions shall be cause for suspension of the Contractor's operations in the AOA until the satisfactory conditions are provided.

Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction, latest change.

**80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION.** All Contractors' operations shall be conducted in accordance with the project Construction Safety and Phasing Plan (CSPP) and the provisions set forth within the current version of AC 150/5370-2. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a Safety Plan Compliance Document that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP unless approved in writing by the Owner or Engineer.

Contractor shall immediately comply with any safety instruction or direction issued by the Owner or Owner's Representative.

**80-05 CHARACTER OF WORKERS, METHODS, AND EQUIPMENT**. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the Engineer.

Should the Contractor fail to remove such persons or person, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the Engineer may suspend the work by written notice until compliance with such orders.

In addition, the following requirements shall apply concerning all workers utilized on the project:

- a. The Contractor shall provide and maintain, continually on the project site of the work during its progress, adequate and competent superintendence of all operations for and in connection with the work. The Contractor shall provide a capable superintendent acceptable to the Owner. Such representative shall be able to read, write and speak English fluently and shall be authorized to receive instructions from the Engineer or his authorized representative. Said superintendent shall have authority to see that the work is carried out in accordance with the Contract Documents and in a first class, thorough and workmanlike manner in every respect.
- b. Incompetent, disorderly, intemperate or incorrigible employees of any authority level shall be dismissed from the project by the Contractor or his representative when requested by the Engineer or the

Owner, and such persons shall not again be permitted to return to the work without the written consent of the Owner.

- c. The Contractor agrees to indemnify and hold the Owner and Engineer harmless from any and all loss or damages arising out of jurisdictional labor disputes or other labor troubles of any kind that may occur during the construction and performance of the Contract.
- d. The Contractor shall provide at the request of the Owner such reasonable information about his employees as may be necessary, including in part, name, address and social security number.
- e. Any employee of the Contractor or any subcontractors who violate the badging requirements or leaves unbadged individuals in the Airport Operations Area (AOA) or the Secured Identification Display Area (SIDA) without properly badged individuals will be removed from the Airport and not be allowed back onto the Airport without prior approval by the Owner. Refer to the Special Conditions for Contractor Badging Requirements.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this subsection.

**80-06 TEMPORARY SUSPENSION OF THE WORK**. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods as the Owner may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the execution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Engineer within the time period stated in the Engineer's order to resume work. The Contractor shall submit with his or her claim information substantiating the amount shown on the claim. The Engineer will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather,

for suspensions made at the request of the Owner, or for any other delay provided for in the contract, plans, or specifications.

If it should become necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

**80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME**. The number of calendar or working days allowed for completion of the work shall be stated in the proposal and contract and shall be known as the CONTRACT TIME.

- **a.** CONTRACT TIME based on CALENDAR DAYS shall consist of the number of calendar days stated in the contract counting from the effective date of the notice to proceed and including all Saturdays, Sundays, holidays, and nonwork days. All calendar days or nights elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.
- **b.** When the contract time is a specified completion date, it shall be the date on which all contract work shall be substantially completed.

If the Contractor finds it impossible for reasons beyond his or her control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, the Contractor may, at any time prior to the expiration of the contract time as extended, make a written request to the Owner for an extension of time setting forth the reasons which the Contractor believes will justify the granting of his or her request. Requests for extension of time on calendar day projects, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded what could normally be expected during the contract period. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the supporting documentation justify the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Owner may extend the time for completion by a change order that adjusts the contract time or completion date. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

**80-08 FAILURE TO COMPLETE ON TIME**. For each calendar day or increment, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section) the sum specified in the contract and proposal as liquidated damages will be deducted from any money due or to become due the Contractor or his or her surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

In addition to liquidated damages for not completing all project work within the allotted contract time, there shall be liquidated damages associated with night time airport closures, intermediate critical milestone dates, and violations assessed by North Carolina Department of Environmental Quality (NCDEQ) as a result of the Contractor's construction activities. Liquidated damages are listed in the table below.

Critical Milestone / Schedule	Liquidated Damages Cost	Allowed Duration
Night Closures	\$1,000 per 30 minute increment (or portion thereof)	12:00 AM – 5:30 AM
Notice of Violation Issued by NCDEQ	\$2,000 per calendar day from issuance of NOV until NOV is formally lifted by NCDEQ in writing	N/A
September 1, 2017 Critical Milestone: Construction of permanent Runway 17-35 and temporary runway markings to allow NAVAIDs flight inspection activities*	\$2,000 per calendar day	N/A
December 7, 2017 Critical Milestone: Runway 17-35 Open, ILS Runway 35 Approach Charted	\$2,000 per calendar day	N/A
December 15, 2017 Critical Milestone: Runway 17 Glide Slope Facility Complete	\$2,000 per calendar day	N/A
April 12, 2018 Critical Milestone: Runway 35 Glide Slope Facility Relocation Complete	\$2,000 per calendar day	N/A
Project Completion	\$2,000 per calendar day	Volume 2 Work: 276 Calendar Days Volume 3 Work: 194 Calendar Days
Project Phases Completion	\$2,000 per calendar day	As shown for on contract phasing plans for each phase.

<sup>\*</sup>The Contractor will be required to coordinate with the AOR and FAA, and potentially not be allowed to work within the temporary runway glide slope critical area and temporary runway localizert critical area during the times offlight check and equipment tune-up.

Liquidated damages will be assessed in the amount of \$1,000 per calendar day for failure to reach critical milestone dates associated with the construction of NAVAIDs, critical areas, and paving. These critical milestone dates are directly tied to the FAA's 56-day instrument approach procedure charting clcyle. Critical milestone dates will remain the same and shall be met regardless of abnormal inclement weather conditions or contract weather days. The Contractor's failure to reach a critical milestone date may result in the Contractor being charged for liquidated damages until the next charting cycle is reached (56 days later). A copy of the charting cycle has been provided below for reference.

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In addition to liquidated damages charged for failure to meet specific contract milestone and completion dates, liquidated damages will be assessed in the amount of \$1,000 per 30 minute increment of not having the airfield in an acceptable condition as approved by the Owner or Owner's Representative following night work.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a wavier on the part of the Owner of any of its rights under the contract.

A draft, preliminary checklist has been established outlying workflow and completion dates for each of the required major tasks related to the critical milestone dates. This preliminary checklist may be found on the following pages. The checklist is subject to change for any reason, including but not limited to weather, FAA flight check schedules, airport operations, FAA equipment functionality, and FAA personnel availability. The checklist will be updated and revised accordingly by the AOR and shared with the Contractor, Airport, and FAA. The checklist is not meant to be an exhaustive listing of all tasks required by the contractor to meet the critical milestones. Tasks will be modified and added to the checklist during the duration of the project. Ommission of a required task from the checklist does not relieve the Contractor from achieving the critical milestone dates listed herein and in the contract phasing plans.

# TASK NO. 1 - COMPLETE RUNWAY 17-35 CONSTRUCTION FOR FAA FLIGHT CHECK

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
Complete all runway pavement construction	ASAP	9/1/2017	Contractor		
Provide certified as- built data for runway thresholds, runway profile, localizer, PAPI's, and MALSR's.	8/1/2017	9/1/2017	Contractor		
Install temporary runway markings required for flight check on both runway ends, including runway threshold stripes, runway numbers, and runway centerline.	ASAP	9/1/2017	Contractor		
Notify contractor of the FAA flight check schedule date. Flight check date is subject to change for any reason. Duration of flight check may range from three to five days, and typically performed between 08:00 and 17:00 each day. Depending on conditions and equipment functionality, flight check may need to occur more than once.	ASAP	ASAP	RS&H		

Clear Permanent Runway 17-35 safety area of all objects, trenches, stockpiles, equipment, and personnel. No work shall occur within the Permanent Runway 17-35 safety area, Temporary Runway 17-35 safety area, active Taxiway Object Free Areas, or Runway 17/35 Localizer Critical Areas while flight check is occurring.	24 hours before flight check date	Prior to flight check	Contractor	
Remove temporary taxiway edge lights and conduit for Taxiway A6/B5, A4/B3, and A1/B1 within Permanent Runway 17-35 limits. If bid alternates awarded, remove temporary taxiway edge lights and conduit for Taxiway A5/B4 and A3/B2. Remove all lights prior to 08:00 each morning of flight check, and replace by sunset after flight check is complete each day.	Before each day of flight check	After each day of flight check	Contractor	
Clear Permanent Runway 17-35 object free area of all stockpiles, equipment, and objects.	24 hours before flight check date	Prior to flight check	Contractor	
Perform foreign object debris (FOD) check on runway. Clean runway of all dirt, debris, and rocks. Restrict all vehicle travel on permanent runway after FOD check is complete.	24 hours before flight check date	Prior to flight check	Contractor	

Instruct all contractor and subcontractor employees to remain clear of the permanent and temporary runway safety areas, active TOFA's and permanent Runway 17/35 localizer critical areas during flight check.	Daily meetings starting 48 hours before flight check date	Through end of flight check	Contractor	
Place cones or temporary barricades on all construction entrances and haul routes that cross in to the permanent runway safety area.	24 hours before flight check date	Prior to flight check	Contractor	
Notify contractor that flight check is complete	Immediately after flight check	Immediately after flight check	RS&H	

## TASK NO. 2 - TUNE TEMPORARY RUNWAY 35 GLIDE SLOPE FOR USE ON PERMANENT RUNWAY 17-35 AS "INTERIM" ILS RUNWAY 35 APPROACH

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
NOTAM Temporary Runway 35 Glide Slope out of service beginning 08:00 on 11/28/2017	11/21/2017	11/21/2017	FAA		
Contractor remain clear of glide slope critical area for Transitional Runway 35 glide slope. This is the area defined as the Temporary Runway 35 glide slope, plus all areas south of Station 85+00 and west of Runway 17-35 centerline.	11/28/2017	End of flight check	Contractor		
Tune Temporary Runway 35 glide slope antenna for use on Permanent Runway 35.	11/28/2017	12/7/2017	FAA		
Notify contractor of the FAA flight check schedule date. Flight check date is subject to change for any reason. Duration of flight check may range from one to four days, and is typically performed between 08:00 and 17:00 each day. Depending on conditions and equipment functionality, flight check may need to occur more than once.	ASAP	ASAP	RS&H		

Clear Permanent Runway 17-35 safety area of all objects, trenches, stockpiles, equipment, and personnel. No work shall occur within the Permanent Runway 17-35 safety area or the Temporary Runway 17-35 safety area while flight check is occurring.	72 hours before flight check date	Prior to flight check	Contractor	
Remove temporary taxiway edge lights and conduit for Taxiway A6/B5, A4/B3, and A1/B1 within Permanent Runway 17-35 limits. If bid alternates awarded, remove temporary taxiway edge lights and conduit for Taxiway A5/B4 and A3/B2. Remove all lights prior to 08:00 each morning of flight check, and replace by sunset after flight check is complete each day.	Before each day of flight check	After each day of flight check	Contractor	
Clear Permanent Runway 17-35 object free area of all stockpiles, equipment, and objects.	24 hours before flight check date	Prior to flight check	Contractor	
Perform foreign object debris (FOD) check on runway. Clean runway of all dirt, debris, and rocks. Restrict all vehicle travel on permanent runway after FOD check is complete.	24 hours before flight check date	Prior to flight check	Contractor	

Instruct all contractor and subcontractor employees to remain clear of the permanent and temporary runway safety areas during flight check.	Daily reminders beginning 48 hours before flight check date	Prior to flight check	Contractor	
Place cones or temporary barricades on all construction entrances and haul routes that cross in to the permanent runway safety area.	24 hours before flight check date	Prior to flight check	Contractor	
Notify contractor that flight check is complete	Immediately after flight check	Immediately after flight check	RS&H	

# TASK NO. 3 - CONVERT INTERIOR CONNECTOR TAXIWAYS FOR USE ON PERMANENT RUNWAY

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
Complete all work outside active AOA, including Taxiway A2 and areas north of Taxiway A6, including runway, blast pad, and Taxiways A7 and A8.	ASAP	11/30/17	Contractor		
NOTAM Airport closed.	12/5/17 00:00	12/5/17 05:30	AVL		
NOTAM Taxiway A4/B3 closed. If bid alternates awarded: NOTAM Taxiway A3/B2 & A5/B4 closed.	12/5/17 00:00	12/7/17 05:30	AVL		
Install and maintain barricades along the Taxiway A object free area across Taxiway A4. If bid alternates awarded: Install and maintain barricades along the Taxiway A object free area at Taxiway A3 & A5.	12/5/17 00:00	12/7/17 00:00	Contractor		
Install and maintain barricades along the Temporary Runway 17-35 safety area across Taxiway B3.  If bid alternates awarded: Install and maintain barricades along the Temporary Runway 17-35 safety area at Taxiway B2 & B4.	12/5/17 00:00	12/7/17 00:00	Contractor		
Remove temporary edge lights and jumpers between Taxiway A4/B3. If bid alternates awarded: Remove temporary edge lights and jumpers between Taxiway A3/B2 and A5/B4.	12/5/17 00:00	12/5/17 05:30	Contractor		
Blackout and de- energize guidance signs for Taxiways A4/B3. If bid alternates are awarded: Blackout and	12/5/17 00:00	12/5/17 05:30	Contractor		

de-energize guidance signs for Taxiways A3/B2				
and A5/B4.				
Install permanent				
Runway 17-35 pavement				
markings between				
Taxiways A4/B3.	10/5/1	10/-/1-		
If bid alternates awarded:	12/5/17	12/7/17	Contractor	
Install permanent	00:00	05:30		
Runway 17-35 pavement				
markings between				
Taxiways A3/B2 and A5/B4.				
NOTAM Taxiway A edge lights out of service on				
west side of taxiway at				
Taxiway A4 intersection.				
If bid alternates awarded:	12/5/17	12/7/17		
NOTAM Taxiway A edge	00:00	05:30		
lights out of service on	00.00	00.00		
west side of taxiway at				
Taxiway A3 and A5				
intersections.				

# TASK NO. 4 - RUNWAY CONVERSION - THURSDAY, DECEMBER 7

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
Ensure ALL guidance sign panels for sign panel replacement are delivered, correct, and correctly sized (field- verified) for existing signs	ASAP	Six weeks prior to runway conversion	Contractor		
NOTAM Airport Closed.	12/6/17 22:00	12/7/15 06:00	AVL		
NOTAM Temporary Runway 17-35 Permanently Closed.	12/6/17 22:00	N/A	AVL		
Remove temporary edge lights and jumpers between Taxiways A1/B1, A6/B5, and along Taxiways A2, A3, A5, and the north side of Taxiway A6. (If bid alternates awarded, Taxiway A edge lights west of the taxiway at intersections with A3 and A5 will already be removed.)	12/6/17 22:00	12/7/15 06:00	Contractor		
Remove taxiway edge striping and centerline striping on permanent Runway 17-35	12/6/17 22:00	12/7/15 06:00	Contractor		
Install permanent Runway 17-35 pavement markings between Taxiways A1/B1 and A6/B5. Install permanent taxiway markings to connect Taxiway A at the A6 intersection to the north.	12/6/17 22:00	12/7/15 06:00	Contractor		
Relocate at least four of the runway distance remaining signs from temporary runway to permanent runway.	12/6/17 22:00	12/7/15 06:00	Contractor		
Remove Temporary Runway 17 PAPI and complete grading within this area.	12/6/17 22:00	12/7/15 06:00	Contractor		

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
Remove barricades along Taxiway A at intersections with Taxiway A3, A4, and A5.	12/6/17 22:00	12/7/15 06:00	Contractor		
Install vinyl yellow X's on temporary Runway 17-35	12/6/17 22:00	12/7/17 06:00	Contractor		
Install and maintain lighted yellow X's on temporary Runway 17-35 during daylight hours	12/6/17 22:00	12/21/17	Contractor		
Install and maintain barricades along the Permanent Runway 17-35 safety area across Taxiways B1, B3, and B5.  If bid alternates awarded, install and maintain barricades along the Permanent Runway 17-35 area across Taxiways B2 and B4.	12/6/17 22:00	After Taxiway B Conversion	Contractor		
Maintain MALSR system turned on 24 hr/day	12/7/17 06:00	12/21/17 05:30	FAA		
Instruct all contractor and subcontractor employees to remain clear of the permanent runway safety area.	Daily meetings starting 12/7/17	Through end of project	Contractor		
Place cones or temporary barricades on all construction entrances and haul routes that cross in to the permanent runway safety area.	12/6/17 22:00	Through end of project	Contractor		

# TASK NO. 5 - INSTALL RUNWAY 17 GLIDE SLOPE FACILITY

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
Install GS equipment into new FAA GS shelter.	11/1/17	12/5/17	FAA		
Installation of Runway 17 glide slope facility with equipment.	12/7/17	12/8/17	Contractor		
Complete installation of Runway 17 glide slope antenna, and RVR facility.	12/7/17	12/11/17	Contractor		
Ensure Runway 17 glide slope critical area is seeded, graded smooth and per plan, stable, and free of all objects and rills.	ASAP	12/9/17	Contractor		
Tune up Runway 17 glide slope antenna.	12/11/17	ASAP	FAA		
Instruct all contractor and subcontractor employees to remain clear of the permanent Runway 17 glide slope critical area prior to flight check.	Daily meetings starting 48 hours before flight check date	Through end of flight check	Contractor		
Flight check Runway 17 glide slope antenna.	TBD	TBD	FAA		
Notify contractor that flight check is complete.	Immediately after flight check	Immediately after flight check	RS&H		
Chart Runway 17 ILS Approach	3/29/18	3/29/18	FAA		

# TASK NO. 6 - RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY

SUBTASK DESCRIPTION	DATE TO BEGIN	DATE TO COMPLETE	RESPONSIBLE ENTITY	RESPONSIBLE INDIVIDUAL	DATE CONFIRMED COMPLETE
Relocate temporary Runway 35 localizer shelter with equipment to Permanent Runway 35 glide slope facility.	4/2/18	ASAP	Contractor		
Complete installation of Runway 35 glide slope antenna and RVR facility.	4/2/18	4/12/18	Contractor		
Ensure Runway 35 glide slope critical area is seeded, graded smooth, stable, and free of all objects and rills.	4/2/18	4/12/18	Contractor		
Tune up Runway 35 glide slope antenna.	4/12/2018	ASAP	FAA		
Instruct all contractor and subcontractor employees to remain clear of the permanent Runway 35 glide slope critical area prior to flight check.	Daily meetings starting 48 hours before flight check date	Through end of flight check	Contractor		
Flight check Runway 35 glide slope antenna.	TBD	TBD	FAA		
Notify contractor that flight check is complete.	Immediately after flight check	Immediately after flight check	RS&H		
Chart Runway 35 ILS Approach	5/24/2018	5/24/2018	FAA		

**80-09 DEFAULT AND TERMINATION OF CONTRACT**. The Contractor shall be considered in default of his/her contract and such default will be considered as cause for the Owner to terminate the contract for any of the following, but not limited to, reasons if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or
- **b.** Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or
- **c.** Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
  - d. Discontinues the execution of the work, or
- **e.** Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
  - f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
  - g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or
  - h. Makes an assignment for the benefit of creditors, or
  - i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Engineer consider the Contractor in default of the contract for any reason above, the Engineer shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the Engineer of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

**80-10 TERMINATION FOR NATIONAL EMERGENCIES**. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown

by receipted bills and actual cost records at such points of delivery as may be designated by the Engineer.

Termination of the contract or a portion thereof shall neither relieve the Contractor of his or her responsibilities for the completed work nor shall it relieve his or her surety of its obligation for and concerning any just claim arising out of the work performed.

**80-11 WORK AREA, STORAGE AREA AND SEQUENCE OF OPERATIONS**. The Contractor shall obtain approval from the Engineer prior to beginning any work in all areas of the airport. No operating runway, taxiway, or Air Operations Area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate his/her work in such a manner as to insure safety and a minimum of hindrance to flight operations. All Contractor equipment and material stockpiles shall be stored a minimum of 400 feet from the centerline of an active runway. No equipment will be allowed to park within the approach area of an active runway at any time. No equipment shall be within 250 feet of the centerline of an active runway at any time.

**END OF SECTION 80** 

# **SECTION 90**

## **MEASUREMENT AND PAYMENT**

**90-01 MEASUREMENT OF QUANTITIES**. All work completed under the contract will be measured by the Engineer, or his or her authorized representatives, using United States Customary Units of Measurement or the International System of Units.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions. Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

In computing volumes of excavation the average end area method or other acceptable methods will be used.

The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.

The term "ton" will mean the short ton consisting of 2,000 lb avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designed by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard may be weighed, and such weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured by the gallon or ton. When measured by volume, such volumes will be measured at 60°F or will be corrected to the volume at 60°F using ASTM D1250 for asphalts or ASTM D633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, may be used for computing quantities.

Cement will be measured by the ton or hundredweight.

Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account work as provided in the subsection 90-05 titled PAYMENT FOR EXTRA WORK of this section.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted. Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales.

Scales shall be accurate within 1/2% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one-tenth of 1% of the nominal rated capacity of the scale, but not less than 1 pound. The use of spring balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector can safely and conveniently view them.

Scale installations shall have available ten standard 50-pound weights for testing the weighing equipment or suitable weights and devices for other approved equipment.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales "overweighing" (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of one-half of 1%.

In the event inspection reveals the scales have been underweighing (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the Engineer. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

**90-02 SCOPE OF PAYMENT**. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of the subsection 70-18 titled NO WAIVER OF LEGAL RIGHTS of Section 70.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

**90-03 COMPENSATION FOR ALTERED QUANTITIES**. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in the subsection 40-02 titled ALTERATION OF WORK AND QUANTITIES of Section 40 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from his or her unbalanced allocation of overhead and profit among the contract items, or from any other cause.

**90-04 PAYMENT FOR OMITTED ITEMS**. As specified in the subsection 40-03 titled OMITTED ITEMS of Section 40, the Engineer shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the Engineer omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Engineer's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Engineer's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the Engineer's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

**90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK**. Extra work, performed in accordance with the subsection 40-04 titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

a. Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

- b. Comparison of Record. The Contractor and the Engineer shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor and the Engineer or their duly authorized representatives.
- c. Statement. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with duplicate itemized statements of the cost of such force account work detailed as follows:
- (1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman including supplemental benefits, payroll taxes, insurance premiums and other reasonable charges that are paid by the Contractor pursuant to existing written agreements with employees and/or labor organizations.
- (2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

For Contractor self-owned equipment, the maximum rate paid for equipment will be determined based upon the following factors:

- (i) The base hourly rates shall be the daily rate as listed in the current Rental Rates for Construction Equipment prepared by Associated Equipment Distributors latest edition, divided by eight (8). Where no daily rate is listed, the daily rate will be determined by dividing the monthly rate by 10.
- (ii) The first 20 hours will be paid at 90 percent of the above based hourly rate. For 21 to 40 hours, the rate will be 80 percent of the above base hourly rate. For over 40 hours, the rate will be 45 percent of the above base hourly rate.
- (iii) The number of hours to be paid for shall be the number of hours that the equipment or plant is actually used on a specified force account job.
- (iv) For rented equipment, such equipment will be paid for based upon rental cost as approved by the Engineer. Invoices showing rental charges must be submitted to the Engineer for such payment.
- (v) For use of all equipment when, in the opinion of the Contractor and as approved by the Engineer, suitable equipment is not available on the site, the movement of required equipment to and from the site will be paid for at actual cost.
- (vi) Equipment to be used by the Contractor shall be specifically described and be of suitable size and suitable capacity required for the work to be performed. In the event the Contractor elects to use equipment of a higher rental value than that suitable for the work, payment will be made at the rate applicable to the suitable equipment. The equipment actually used and the suitable equipment paid for will be recorded as part of the record for force account work. The Engineer shall determine the suitability of the equipment. If there is a differential in the rate of pay of the operator of oversize or higher rate equipment, the rate paid for the operator will likewise be that for the suitable equipment.
- (vii) In the event that a rate is not established in the Associated Equipment Distributors Rental Rates, latest edition, for a particular piece of equipment or plant, the Owner shall establish a rate for that piece of equipment or plant that is consistent with its cost and use.
  - (3) Quantities of materials, prices, and extensions.
  - (4) Transportation of materials to the site.
- (5) Cost of property damage, liability and workman's compensation insurance premiums, unemployment insurance contributions, and social security tax.

- (6) Profit and Overhead. Profit and overhead amount shall be combined and computed at no more than fifteen (15) percent of the following:
- (i) Total Direct Labor Cost (actual hours worked multiplied by the basic hourly wage rate) plus supplemental benefits payments, payroll taxes, insurance payments and other labor related fringe benefit payments as defined in (1) above, but not including the overtime additive payments. Profit and overhead shall not be paid on the premium portion of overtime.
  - (ii) Total Cost of Materials as defined in (3) and (4) above.
- (iii) If any of the work is performed by a subcontractor, the Contractor shall be paid the actual and reasonable cost of such subcontracted work computed as outlined in (1) through (5) above, or on such other basis as may be approved by the Owner. Contractor's profit and overhead on subcontractor's work shall be computed at fifteen (15) percent as limited in this section. Subcontractor's profit and overhead amount shall be computed at five (5) percent of materials and direct labor to cover the subcontractor's profit, superintendence, administration, insurance and other overhead. For purposes of computing profit and overhead, only one level or tier of subcontractors will be allowed.
  - (7) Overhead shall be defined to include the following items:
    - (i) Premium on bond.
- (ii) Premium on insurance required by the State, Workmen's Compensation Insurance, public liability and property damage insurance, unemployment insurance, federal old-age benefits, other payroll taxes and such reasonable charges that are paid by the Contractor pursuant to written agreement with his employee.
- (iii) All salary and expenses of executive officers, supervising officers or supervising employees.
  - (iv) All clerical or stenographic employees.
- (v) All charges for minor equipment such as small tools, including shovels, picks, axes, saws, bars, sledges, lanterns, jacks, cables, pails, wrenches, etc. and other miscellaneous supplies and services.
  - (vi) All drafting room accessories such as paper, tracing cloth, blueprinting, etc.

Statements shall be accompanied and supported by a receipted invoice for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

**90-06 PARTIAL PAYMENTS**. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the Engineer, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with the subsection titled PAYMENT FOR MATERIALS ON HAND of this section. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. The Owner must ensure prompt and full payment of retainage from the prime contractor to the subcontractor within 30 days after the

subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

From the total of the amount determined to be payable on a partial payment, 10 percent of such total amount will be deducted and retained by the Owner until the final payment is made, The balance 90 percent of the amount payable, less all previous payments, shall be certified for payment.

When at least 95 percent of the work has been completed, the Engineer shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done.

The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection 90-09 titled ACCEPTANCE AND FINAL PAYMENT of this section.

The amount of retainage withheld from the Contractor's monthly partial payments shall be 10%.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

**90-07 PAYMENT FOR MATERIALS ON HAND.** Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

- **a.** The material has been stored or stockpiled in a manner acceptable to the Engineer at or on an approved site.
- **b.** The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- **c.** The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.
- **d.** The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.
- **e.** The Contractor has furnished the Owner evidence that the material so stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of his or her responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used. No partial payment will be made for stored or stockpiled living or perishable plant materials. The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this subsection.

**90-08 ACCEPTANCE AND FINAL PAYMENT**. When the contract work has been accepted in accordance with the requirements of the subsection titled FINAL ACCEPTANCE of Section 50, the Engineer will prepare the final estimate of the items of work actually performed. The Contractor shall approve the Engineer's final estimate or advise the Engineer of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the Engineer shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the Engineer's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the Engineer's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

After the Contractor has approved, or approved under protest, the Engineer's final estimate, and after the Engineer's receipt of the project closeout documentation required in subsection 90-11 Project Closeout, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

Should elements of work require delay in final payment due to seasonal or other reasons, the Owner may retain or withhold an agreed upon amount from items of work associated with the delayed items and hold that retainage, even after final payment less the retained amounts, until the Contractor has fulfilled the elements of work delayed to the satisfaction of the Owner. The Owner shall release the retained amount after all associated work for which the delay item has been accepted by the Owner.

If the Contractor has filed a claim for additional compensation under the provisions of the subsection titled CLAIMS FOR ADJUSTMENTS AND DISPUTES of Section 50 or under the provisions of this subsection, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

#### 90-09 CONSTRUCTION WARRANTY.

- **a.** In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.
- **b.** This warranty shall continue for a period of one year from the date of final acceptance of the work. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work.
- **c.** The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of:
  - (1) The Contractor's failure to conform to contract requirements; or
  - (2) Any defect of equipment, material, workmanship, or design furnished by the Contractor.

- **d.** The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.
- **e.** The Owner will notify the Contractor, in writing, within seven (7) days after the discovery of any failure, defect, or damage.
- **f.** If the Contractor fails to remedy any failure, defect, or damage within 14 days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- **g.** With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.
- **h.** This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.
- **90-10 PROJECT CLOSEOUT.** Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the Engineer approves the Contractor's final submittal. The Contractor shall:
- **a.** Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.
- **b.** Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.
  - c. Complete final cleanup in accordance with subsection FINAL CLEANUP of Section 40.
  - **d.** Complete all punch list items identified during the Final Inspection.
  - e. Provide complete release of all claims for labor and material arising out of the Contract.
- **f.** Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.
  - **q.** When applicable per state requirements, return copies of sales tax completion forms.
  - h. Manufacturer's certifications for all items incorporated in the work.
  - i. All required record drawings, as-built drawings or as-constructed drawings.
  - i. Project Operation and Maintenance (O&M) Manual.
  - k. Security for Construction Warranty.
  - **I.** Equipment commissioning documentation submitted, if required.

# **END OF SECTION 90**

#### **SECTION 100**

## CONTRACTOR QUALITY CONTROL PROGRAM

**100-01 GENERAL.** When the specification requires a Contractor Quality Control Program, the Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

- **a.** Adequately provide for the production of acceptable quality materials.
- **b.** Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
  - c. Allow the Contractor as much latitude as possible to develop his or her own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, their understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed and accepted by the Engineer and a written finding of no objection to the Quality Control Program is provided by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed and a written finding of no objection to the Quality Control Program is provided by the Engineer.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

Paving projects over \$250,000 shall have a Quality Control (QC)/Quality Assurance (QA) workshop with the Engineer, Contractor, subcontractors, testing laboratories, and Owner's representative and the FAA prior to or at start of construction. The workshop shall address QC and QA requirements of the project specifications. The Contractor shall coordinate with the Airport and the Engineer on time and location of the QC/QA workshop.

#### 100-02 DESCRIPTION OF PROGRAM.

- a. General description. The Contractor shall establish a Quality Control Program to perform quality control inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.
- **b. Quality Control Program.** The Contractor shall describe the Quality Control Program in a written document that shall be reviewed and approved by the Engineer prior to the start of any production, construction, or off-site fabrication. The written Quality Control Program shall be submitted to the Engineer for review and approval at least **5** calendar days before the preconstruction conference. The Contractor's Quality Control Plan and Quality Control testing laboratory must be approved in writing by the Engineer prior to the Notice to Proceed (NTP).

The Quality Control Program shall be organized to address, as a minimum, the following items:

- a. Quality control organization
- **b.** Project progress schedule
- c. Submittals schedule
- d. Inspection requirements
- e. Quality control testing plan
- f. Documentation of quality control activities
- g. Requirements for corrective action when quality control and/or acceptance criteria are not met

The Contractor is encouraged to add any additional elements to the Quality Control Program that is deemed necessary to adequately control all production and/or construction processes required by this contract.

The cost of development, administration and/or performance of the Quality Control Program shall not be paid for separately but shall be included in various other bid items.

**100-03 QUALITY CONTROL ORGANIZATION.** The Contractor Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. If necessary, different technicians can be used for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the Quality Control Program, the personnel assigned shall be subject to the qualification requirements of paragraph 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The quality control organization shall, as a minimum, consist of the following personnel:

a. **Program Administrator.** The Program Administrator shall be a full-time *on-site* employee of the Contractor, or a consultant engaged by the Contractor. The Program Administrator shall have a minimum of five (5) years of experience in airport and/or highway construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

Additional qualifications for the Program Administrator shall include at least one of the following requirements:

- (1) Professional Engineer with one (1) year of airport paving experience.
- (2) Engineer-in-training with two (2) years of airport paving experience.
- (3) An individual with three (3) years of highway and/or airport paving experience, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.
- (4) Construction materials technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).
  - (5) Highway materials technician certified at Level III by NICET.
  - (6) Highway construction technician certified at Level III by NICET.
- (7) A NICET certified engineering technician in Civil Engineering Technology with five (5) years of highway and/or airport paving experience.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications. The Program Administrator shall report directly to a responsible officer of the construction firm. The Program Administrator may supervise the Quality Control Program on more than one project provided that person can be at the job site within two (2) hours after being notified of a problem.

**b. Quality control technicians.** A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be either Engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II or higher construction materials technician or highway construction technician and shall have a minimum of two (2) years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator and shall perform the following functions:

- (1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by subsection 100-06.
- (2) Performance of all quality control tests as required by the technical specifications and subsection 100-07.
  - (3) Performance of density tests for the Engineer when required by the technical specifications.

Certification at an equivalent level, by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

- **c. Staffing levels.** The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.
- **100-04 PROJECT PROGRESS SCHEDULE.** The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or other format, or as otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

**100-05 SUBMITTALS SCHEDULE.** The Contractor shall submit a detailed listing of all submittals (for example, mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include:

- a. Specification item number
- b. Item description
- c. Description of submittal
- d. Specification paragraph requiring submittal
- e. Scheduled date of submittal

**100-06 INSPECTION REQUIREMENTS.** Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by subsection 100-07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

- **a.** During plant operation for material production, quality control test results and periodic inspections shall be used to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment used in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and used.
- **b.** During field operations, quality control test results and periodic inspections shall be used to ensure the quality of all materials and workmanship. All equipment used in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The Program shall document how these and other quality control functions will be accomplished and used.

**100-07 QUALITY CONTROL TESTING PLAN.** As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- a. Specification item number (for example, P-401)
- **b.** Item description (for example, Plant Mix Bituminous Pavements)
- c. Test type (for example, gradation, grade, asphalt content)
- **d.** Test standard (for example, ASTM or American Association of State Highway and Transportation Officials (AASHTO) test number, as applicable)
- **e.** Test frequency (for example, as required by technical specifications or minimum frequency when requirements are not stated)
  - f. Responsibility (for example, plant technician)
  - **g.** Control requirements (for example, target, permissible deviations)

The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by subsection 100-08.

**100-08 DOCUMENTATION.** The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

- **a. Daily Inspection Reports.** Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:
  - (1) Technical specification item number and description
  - (2) Compliance with approved submittals
  - (3) Proper storage of materials and equipment
  - (4) Proper operation of all equipment
  - (5) Adherence to plans and technical specifications
  - (6) Review of quality control tests
  - (7) Safety inspection.

The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible quality control technician and the Program Administrator. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record.

- **b. Daily test reports.** The Contractor shall be responsible for establishing a system that will record all quality control test results. Daily test reports shall document the following information:
  - (1) Technical specification item number and description
  - (2) Test designation
  - (3) Location
  - (4) Date of test
  - (5) Control requirements
  - (6) Test results
  - (7) Causes for rejection
  - (8) Recommended remedial actions
  - (9) Retests

Test results from each day's work period shall be submitted to the Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator.

**100-09 CORRECTIVE ACTION REQUIREMENTS.** The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

**100-10 SURVEILLANCE BY THE ENGINEER.** All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

#### 100-11 NONCOMPLIANCE.

- **a.** The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his or her authorized representative to the Contractor or his or her authorized representative at the site of the work, shall be considered sufficient notice.
- **b.** In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:
- (1) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.
  - (2) Order the Contractor to stop operations until appropriate corrective actions are taken.

**END OF SECTION 100** 

# **SECTION 105**

#### MOBILIZATION

**105-1 DESCRIPTION.** The work covered by this section consists of preparatory work and operations, including but not limited to those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for providing the items required by the General Provisions, Supplementary Conditions, and General Requirements including but not limited to: the establishment of all temporary offices, buildings, staging areas, haul routes, and other facilities necessary for work on the project; surveying and construction staking; all barricades, barricade lights, and other phasing and detour devices; taxiway and runway closures; performance bond, labor and materials bond; insurance; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site. This item also includes all work outside the limits of construction that is necessary to restore areas disturbed by the Contractor to their original condition including, but not limited to, pavement rehabilitation, grading, seeding, mulching, cleaning, and disposal.

**105-1.1 POSTED NOTICES.** Prior to commencement of construction activities the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) - DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Owner.

**101-1.2 AOR'S FIELD OFFICE**. This item shall include setup and maintenance of a Field Office for the use of and occupancy by the Owner's Resident Project Representative and other authorized personnel.

- a. The field office will be supplied by the Owner. The Contractor shall be responsible for relocating it from its current site on Airport property to the location as indicated on the plans. The Contractor is responsible for inspecting the current location and condition of the unit during the pre-bid meeting or by appointment and including all necessary costs for relocation as part of the bid.
- b. The Contractor will be responsible for restoring the existing site including smooth grading, seeding and mulching. All utilities shall be disconnected and capped appropriately.
- c. The Contractor shall be responsible for moving, proper blocking and tie-downs conforming to local ordinances and laws and installing a gravel parking area in front of the field office. The gravel parking area shall be 40' x 50' with a gravel access road 12' wide to the main access roadway. The Contractor shall provide positive drainage around the office with no standing water during or after rainfall events. The Contractor shall also provide a set of stairs and landing with the appropriate handrails to the threshold of the trailer entrance meeting all applicable codes. If the trailer has multiple entrances, the Contractor shall provide a set of stairs at each door.
- d. The Contractor shall be responsible for all utility connections and service including electrical service, and telephone service for two lines (one voice and one fax). Provisions shall be made for a sanitary sewer holding tank that will be emptied weekly at the Contractor's expense. A water cooler shall be supplied and kept stocked with water bottles at all times.

The Contractor shall be responsible for payment of utility and service expenses for the duration of the project.

e. The Contractor shall provide a janitorial service on a weekly basis including trash collection and disposal for the duration of the project.

**105-2 BASIS OF MEASUREMENT AND PAYMENT.** Partial payments for Item GP-105-2.1 "Mobilization" will be made with the first and second partial pay estimates paid on the contract, and will be made at the rate of 50 percent of the lump sum price for "Mobilization" on each of these partial pay estimates, less the retainage provided for in the Contract, provided the amount bid for "Mobilization" does not exceed 5 percent of the total amount bid for the contract. Where the amount bid for the item of "Mobilization" exceeds 5 percent of the total amount bid for the contract, 2-1/2 percent of the total amount bid will be paid on each of the first two partial pay estimates, and that portion exceeding 5 percent of the total amount bid for the contract will be paid on the last partial pay estimate. All such payments will be made less the retainage provided for in the Contract

Payment shall be made under:

Item GP-105-2.1 – Mobilization

-- per Lump Sum (LS)

**END OF SECTION 105** 

#### **SECTION 110**

# METHOD OF ESTIMATING PERCENTAGE OF MATERIAL WITHIN SPECIFICATION LIMITS (PWL)

**110-01 GENERAL.** When the specifications provide for acceptance of material based on the method of estimating percentage of material within specification limits (PWL), the PWL will be determined in accordance with this section. All test results for a lot will be analyzed statistically to determine the total estimated percent of the lot that is within specification limits. The PWL is computed using the sample average (X) and sample standard deviation ( $S_n$ ) of the specified number (n) of sublots for the lot and the specification tolerance limits, L for lower and U for upper, for the particular acceptance parameter. From these values, the respective Quality index,  $Q_L$  for Lower Quality Index and/or  $Q_0$  for Upper Quality Index, is computed and the PWL for the lot for the specified n is determined from Table 1. All specification limits specified in the technical sections shall be absolute values. Test results used in the calculations shall be to the significant figure given in the test procedure.

There is some degree of uncertainty (risk) in the measurement for acceptance because only a small fraction of production material (the population) is sampled and tested. This uncertainty exists because all portions of the production material have the same probability to be randomly sampled. The Contractor's risk is the probability that material produced at the acceptable quality level is rejected or subjected to a pay adjustment. The Owner's risk is the probability that material produced at the rejectable quality level is accepted.

It is the intent of this section to inform the Contractor that, in order to consistently offset the Contractor's risk for material evaluated, production quality (using population average and population standard deviation) must be maintained at the acceptable quality specified or higher. In all cases, it is the responsibility of the Contractor to produce at quality levels that will meet the specified acceptance criteria when sampled and tested at the frequencies specified.

**110-02 METHOD FOR COMPUTING PWL.** The computational sequence for computing PWL is as follows:

- **a.** Divide the lot into n sublots in accordance with the acceptance requirements of the specification.
- **b**. Locate the random sampling position within the sublot in accordance with the requirements of the specification.
- **c.** Make a measurement at each location, or take a test portion and make the measurement on the test portion in accordance with the testing requirements of the specification.
  - **d.** Find the sample average (X) for all sublot values within the lot by using the following formula:

$$X = (x_1 + x_2 + x_3 + \dots x_n) / n$$

Where: X = Sample average of all sublot values within a lot  $x_1$ ,  $x_2 = Individual$  sublot values n = Number of sublots

**e.** Find the sample standard deviation (S<sub>n</sub>) by use of the following formula:

$$S_n = [(d_1^2 + d_2^2 + d_3^2 + \dots d_n^2)/(n-1)]^{1/2}$$

Where:  $S_n = Sample$  standard deviation of the number of sublot values in the set  $d_1$ ,  $d_2 = Deviations$  of the individual sublot values  $x_1, x_2, ...$  from the average value X that is:  $d_1 = (x_1 - X), d_2 = (x_2 - X), ..., d_n = (x_n - X)$ 

#### n = Number of sublots

**f.** For single sided specification limits (that is, L only), compute the Lower Quality Index  $Q_L$  by use of the following formula:

$$Q_L = (X - L) / S_n$$

Where: L = specification lower tolerance limit

Estimate the percentage of material within limits (PWL) by entering Table 1 with  $Q_L$ , using the column appropriate to the total number (n) of measurements. If the value of  $Q_L$  falls between values shown on the table, use the next higher value of PWL.

**g.** For double-sided specification limits (that is, L and U), compute the Quality Indexes  $Q_L$  and  $Q_U$  by use of the following formulas:

$$Q_{L} = (X - L) / S_{n}$$

$$AND$$

$$Q_{U} = (U - X) / S_{n}$$

Where: L and U = specification lower and upper tolerance limits

Estimate the percentage of material between the lower (L) and upper (U) tolerance limits (PWL) by entering Table 1 separately with  $Q_L$  and  $Q_U$ , using the column appropriate to the total number (n) of measurements, and determining the percent of material above  $P_L$  and percent of material below  $P_U$  for each tolerance limit. If the values of  $Q_L$  fall between values shown on the table, use the next higher value of  $P_L$  or  $P_U$ . Determine the PWL by use of the following formula:

$$PWL = (P_U + P_L) - 100$$

Where: P<sub>L</sub> = percent within lower specification limit

P<sub>U</sub> = percent within upper specification limit

## **EXAMPLE OF PWL CALCULATION**

**Project:** Example Project **Test Item:** Item P-401, Lot A.

# A. PWL Determination for Mat Density.

1. Density of four random cores taken from Lot A.

A-1 = 96.60 A-2 = 97.55 A-3 = 99.30

A-4 = 98.35

n = 4

2. Calculate average density for the lot.

 $X = (x_1 + x_2 + x_3 + ... x_n) / n$  X = (96.60 + 97.55 + 99.30 + 98.35) / 4X = 97.95 percent density

3. Calculate the standard deviation for the lot.

$$\begin{split} S_n &= \left[ ((96.60 - 97.95)^2 + (97.55 - 97.95)^2 + (99.30 - 97.95)^2 + (98.35 - 97.95)^2) \right) / (4 - 1) \right]^{1/2} \\ S_n &= \left[ (1.82 + 0.16 + 1.82 + 0.16) / 3 \right]^{1/2} \\ S_n &= 1.15 \end{split}$$

4. Calculate the Lower Quality Index Q<sub>L</sub> for the lot. (L=96.3)

 $Q_L = (X - L) / S_n$   $Q_L = (97.95 - 96.30) / 1.15$  $Q_L = 1.4348$ 

**5.** Determine PWL by entering Table 1 with  $Q_L = 1.44$  and n = 4.

$$PWL = 98$$

#### B. PWL Determination for Air Voids.

1. Air Voids of four random samples taken from Lot A.

A-1 = 5.00 A-2 = 3.74A-3 = 2.30

A-4 = 3.25

2. Calculate the average air voids for the lot.

 $X = (x_1 + x_2 + x_3 ... n) / n$  X = (5.00 + 3.74 + 2.30 + 3.25) / 4X = 3.57 percent

**3.** Calculate the standard deviation  $S_n$  for the lot.

$$\begin{split} S_n &= \left[ \left( (3.57 - 5.00)^2 + (3.57 - 3.74)^2 + (3.57 - 2.30)^2 + (3.57 - 3.25)^2 \right) / \left( 4 - 1 \right) \right]^{1/2} \\ S_n &= \left[ \left( 2.04 + 0.03 + 1.62 + 0.10 \right) / 3 \right]^{1/2} \\ S_n &= 1.12 \end{split}$$

**4.** Calculate the Lower Quality Index Q<sub>L</sub> for the lot. (L= 2.0)

$$Q_L = (X - L) / S_n$$

$$Q_L = (3.57 - 2.00) / 1.12$$

$$Q_L = 1.3992$$

**5.** Determine  $P_L$  by entering Table 1 with  $Q_L = 1.41$  and n = 4.

$$P_{L} = 97$$

**6.** Calculate the Upper Quality Index  $Q_U$  for the lot. (U= 5.0)

$$Q_U = (U - X) / S_n$$

$$Q_U = (5.00 - 3.57) / 1.12$$

$$Q_U = 1.2702$$

**7.** Determine  $P_U$  by entering Table 1 with  $Q_U = 1.29$  and n = 4.

$$P_{U} = 93$$

8. Calculate Air Voids PWL

$$PWL = (P_L + P_U) - 100$$

$$PWL = (97 + 93) - 100 = 90$$

### **EXAMPLE OF OUTLIER CALCULATION (REFERENCE ASTM E 178)**

**Project:** Example Project **Test Item:** Item P-401, Lot A.

#### A. Outlier Determination for Mat Density.

1. Density of four random cores taken from Lot A arranged in descending order.

A-3 = 99.30

A-4 = 98.35

A-2 = 97.55

A-1 = 96.60

- 2. Use n=4 and upper 5 percent significance level of to find the critical value for test criterion = 1.463.
- **3.** Use average density, standard deviation, and test criterion value to evaluate density measurements.
  - a. For measurements greater than the average:

If (measurement - average)/(standard deviation) is less than test criterion,

then the measurement is not considered an outlier

For A-3, check if (99.30 - 97.95) / 1.15 is greater than 1.463.

Since 1.174 is less than 1.463, the value is not an outlier.

**b.** For measurements less than the average:

If (average - measurement)/(standard deviation) is less than test criterion,

then the measurement is not considered an outlier.

For A-1, check if (97.95 - 96.60) / 1.15 is greater than 1.463.

Since 1.435 is less than 1.463, the value is not an outlier.

NOTE: In this example, a measurement would be considered an outlier if the density were:

Greater than  $(97.95 + 1.463 \times 1.15) = 99.63$  percent; OR

less than  $(97.95 - 1.463 \times 1.15) = 96.27$  percent.

#### **ROUNDING RULE**

A. If the digit following the last digit to be kept is 0, 1, 2, 3, or 4, strike out that digit and all the following digits.

Example: For the number 28.69248539, if only three decimal places are being kept the number becomes 28.692.

B. If the digit following the last digit to be kept is 6, 7, 8, or 9, increase the last digit to be kept by 1 and strike out all the following digits.

Example: For the number 28.69248539, if only one decimal place is being kept the number becomes 28.7.

C. If the digit following the last digit to be kept is 5 and there are digits other than zero to the right of 5, increase the last digit to be retained by 1 and strike out all following digits.

Example: For the number 28.69248539, if five decimal places are being kept the number becomes 28.69249.

D. If the digit following the last digit to be kept is 5 and there are no digits other than zero beyond 5, increase the last digit to be retained by 1 if it is odd or leave it unchanged if it is even.

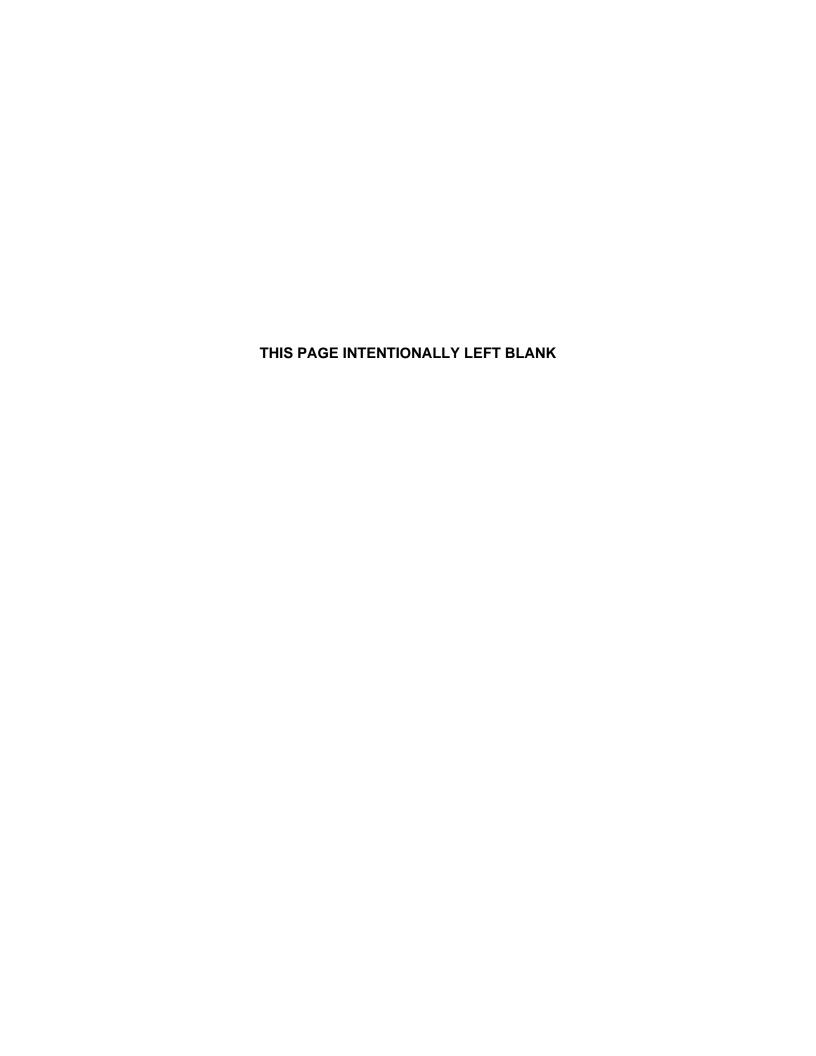
Example: For the number 28.69248500, if five decimal places are being kept the number becomes 28.69248.

Table 1. Table for Estimating Percent of Lot Within Limits (PWL)

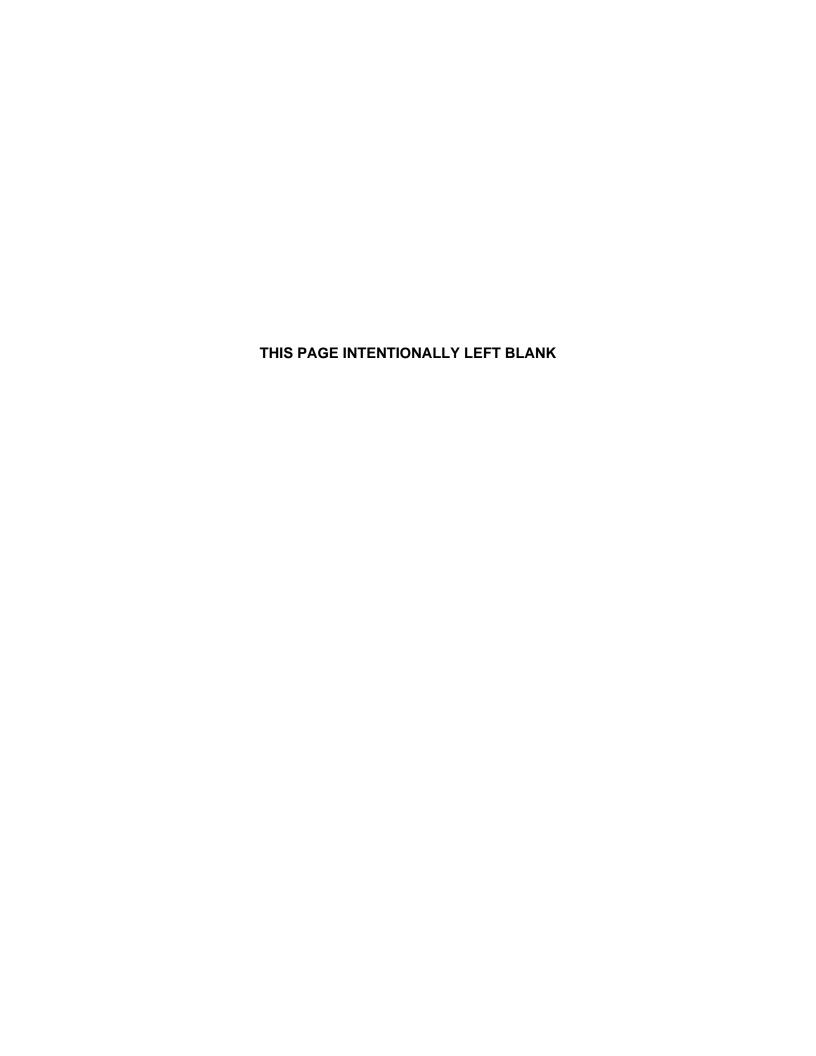
Percent Within	Positive Values of Q (Q <sub>L</sub> and Q <sub>U</sub> )									
Limits (P∟ and P∪)	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10		
99	1.1541	1.4700	1.6714	1.8008	1.8888	1.9520	1.9994	2.0362		
98	1.1524	1.4400	1.6016	1.6982	1.7612	1.8053	1.8379	1.8630		
97	1.1496	1.4100	1.5427	1.6181	1.6661	1.6993	1.7235	1.7420		
96	1.1456	1.3800	1.4897	1.5497	1.5871	1.6127	1.6313	1.6454		
95	1.1405	1.3500	1.4407	1.4887	1.5181	1.5381	1.5525	1.5635		
94	1.1342	1.3200	1.3946	1.4329	1.4561	1.4717	1.4829	1.4914		
93	1.1269	1.2900	1.3508	1.3810	1.3991	1.4112	1.4199	1.4265		
92	1.1184	1.2600	1.3088	1.3323	1.3461	1.3554	1.3620	1.3670		
91	1.1089	1.2300	1.2683	1.2860	1.2964	1.3032	1.3081	1.3118		
90	1.0982	1.2000	1.2290	1.2419	1.2492	1.2541	1.2576	1.2602		
89	1.0864	1.1700	1.1909	1.1995	1.2043	1.2075	1.2098	1.2115		
88	1.0736	1.1400	1.1537	1.1587	1.1613	1.1630	1.1643	1.1653		
87	1.0597	1.1100	1.1173	1.1192	1.1199	1.1204	1.1208	1.1212		
36	1.0448	1.0800	1.0817	1.0808	1.0800	1.0794	1.0791	1.0789		
35 35	1.0288	1.0500	1.0467	1.0435	1.0413	1.0399	1.0389	1.0382		
84	1.0119	1.0200	1.0124	1.0071	1.0037	1.0015	1.0000	0.9990		
33	0.9939	0.9900	0.9785	0.9715	0.9671	0.9643	0.9624	0.9610		
82	0.9749	0.9600	0.9452	0.9367	0.9315	0.9281	0.9258	0.9241		
81	0.9550	0.9300	0.9123	0.9025	0.8966	0.8928	0.8901	0.8882		
80	0.9342	0.9000	0.8799	0.8690	0.8625	0.8583	0.8554	0.8533		
79	0.9124	0.8700	0.8478	0.8360	0.8291	0.8245	0.8214	0.8192		
78	0.8897	0.8400	0.8160	0.8036	0.7962	0.7915	0.7882	0.7858		
77	0.8662	0.8100	0.7846	0.7716	0.7640	0.7590	0.7556	0.7531		
76	0.8417	0.7800	0.7535	0.7401	0.7322	0.7271	0.7336	0.7331		
75 75	0.8165	0.7500	0.7226	0.7089	0.7009	0.6958	0.6922	0.6896		
74	0.7904	0.7200	0.6921	0.7089	0.7003	0.6649	0.6613	0.6587		
73	0.7636	0.6900	0.6617	0.6477	0.6396	0.6344	0.6308	0.6282		
72	0.7360	0.6600	0.6316	0.6176	0.6095	0.6044	0.6008	0.5982		
71	0.7077	0.6300	0.6016	0.5878	0.5798	0.5747	0.5712	0.5686		
70	0.6787	0.6000	0.5719	0.5582	0.5798	0.5454	0.5712	0.5394		
69	0.6490	0.5700	0.5719	0.5290	0.5213	0.5454	0.5419	0.5394		
68	0.6490	0.5400	0.5423	0.3290	0.3213	0.3164	0.3130	0.4820		
							0.4560	_		
67 66	0.5878	0.5100 0.4800	0.4836 0.4545	0.4710	0.4638	0.4592 0.4310	0.4360	0.4537		
66	0.5563			0.4424	0.4355			0.4257		
65	0.5242	0.4500	0.4255	0.4139	0.4073	0.4030	0.4001	0.3980		
64	0.4916	0.4200	0.3967	0.3856	0.3793	0.3753	0.3725	0.3705		
63	0.4586	0.3900	0.3679	0.3575	0.3515	0.3477	0.3451	0.3432		
62	0.4251	0.3600	0.3392	0.3295	0.3239	0.3203	0.3179	0.3161		
61	0.3911	0.3300	0.3107	0.3016	0.2964	0.2931	0.2908	0.2892		
60	0.3568	0.3000	0.2822	0.2738	0.2691	0.2660	0.2639	0.2624		
59	0.3222	0.2700	0.2537	0.2461	0.2418	0.2391	0.2372	0.2358		
58	0.2872	0.2400	0.2254	0.2186	0.2147	0.2122	0.2105	0.2093		
57	0.2519	0.2100	0.1971	0.1911	0.1877	0.1855	0.1840	0.1829		
56	0.2164	0.1800	0.1688	0.1636	0.1607	0.1588	0.1575	0.1566		
55	0.1806	0.1500	0.1406	0.1363	0.1338	0.1322	0.1312	0.1304		
54	0.1447	0.1200	0.1125	0.1090	0.1070	0.1057	0.1049	0.1042		
53	0.1087	0.0900	0.0843	0.0817	0.0802	0.0793	0.0786	0.0781		
52	0.0725	0.0600	0.0562	0.0544	0.0534	0.0528	0.0524	0.0521		
51	0.0363	0.0300	0.0281	0.0272	0.0267	0.0264	0.0262	0.0260		
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		

Percent Within	in Negative Values of Q (Q∟ and Q∪)							
Limits (P∟ and P∪)	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10
49	-0.0363	-0.0300	-0.0281	-0.0272	-0.0267	-0.0264	-0.0262	-0.0260
48	-0.0725	-0.0600	-0.0562	-0.0544	-0.0534	-0.0528	-0.0524	-0.0521
47	-0.1087	-0.0900	-0.0843	-0.0817	-0.0802	-0.0793	-0.0786	-0.0781
46	-0.1447	-0.1200	-0.1125	-0.1090	-0.1070	-0.1057	-0.1049	-0.1042
45	-0.1806	-0.1500	-0.1406	-0.1363	-0.1338	-0.1322	-0.1312	-0.1304
44	-0.2164	-0.1800	-0.1688	-0.1636	-0.1607	-0.1588	-0.1575	-0.1566
43	-0.2519	-0.2100	-0.1971	-0.1911	-0.1877	-0.1855	-0.1840	-0.1829
42	-0.2872	-0.2400	-0.2254	-0.2186	-0.2147	-0.2122	-0.2105	-0.2093
41	-0.3222	-0.2700	-0.2537	-0.2461	-0.2418	-0.2391	-0.2372	-0.2358
40	-0.3568	-0.3000	-0.2822	-0.2738	-0.2691	-0.2660	-0.2639	-0.2624
39	-0.3911	-0.3300	-0.3107	-0.3016	-0.2964	-0.2931	-0.2908	-0.2892
38	-0.4251	-0.3600	-0.3392	-0.3295	-0.3239	-0.3203	-0.3179	-0.3161
37	-0.4586	-0.3900	-0.3679	-0.3575	-0.3515	-0.3477	-0.3451	-0.3432
36	-0.4916	-0.4200	-0.3967	-0.3856	-0.3793	-0.3753	-0.3725	-0.3705
35	-0.5242	-0.4500	-0.4255	-0.4139	-0.4073	-0.4030	-0.4001	-0.3980
34	-0.5563	-0.4800	-0.4545	-0.4424	-0.4355	-0.4310	-0.4280	-0.4257
33	-0.5878	-0.5100	-0.4836	-0.4710	-0.4638	-0.4592	-0.4560	-0.4537
32	-0.6187	-0.5400	-0.5129	-0.4999	-0.4924	-0.4877	-0.4844	-0.4820
31	-0.6490	-0.5700	-0.5423	-0.5290	-0.5213	-0.5164	-0.5130	-0.5105
30	-0.6787	-0.6000	-0.5719	-0.5582	-0.5504	-0.5454	-0.5419	-0.5394
29	-0.7077	-0.6300	-0.6016	-0.5878	-0.5798	-0.5747	-0.5712	-0.5686
28	-0.7360	-0.6600	-0.6316	-0.6176	-0.6095	-0.6044	-0.6008	-0.5982
27	-0.7636	-0.6900	-0.6617	-0.6477	-0.6396	-0.6344	-0.6308	-0.6282
26	-0.7904	-0.7200	-0.6921	-0.6781	-0.6701	-0.6649	-0.6613	-0.6587
25	-0.8165	-0.7500	-0.7226	-0.7089	-0.7009	-0.6958	-0.6922	-0.6896
24	-0.8417	-0.7800	-0.7535	-0.7401	-0.7322	-0.7271	-0.7236	-0.7211
23	-0.8662	-0.8100	-0.7846	-0.7716	-0.7640	-0.7590	-0.7556	-0.7531
22	-0.8897	-0.8400	-0.8160	-0.8036	-0.7962	-0.7915	-0.7882	-0.7858
21	-0.9124	-0.8700	-0.8478	-0.8360	-0.8291	-0.8245	-0.8214	-0.8192
20	-0.9342	-0.9000	-0.8799	-0.8690	-0.8625	-0.8583	-0.8554	-0.8533
19	-0.9550	-0.9300	-0.9123	-0.9025	-0.8966	-0.8928	-0.8901	-0.8882
18	-0.9749	-0.9600	-0.9452	-0.9367	-0.9315	-0.9281	-0.9258	-0.9241
17	-0.9939	-0.9900	-0.9785	-0.9715	-0.9671	-0.9643	-0.9624	-0.9610
16	-1.0119	-1.0200	-1.0124	-1.0071	-1.0037	-1.0015	-1.0000	-0.9990
15	-1.0288	-1.0500	-1.0467	-1.0435	-1.0413	-1.0399	-1.0389	-1.0382
14	-1.0448	-1.0800	-1.0817	-1.0808	-1.0800	-1.0794	-1.0791	-1.0789
13	-1.0597	-1.1100	-1.1173	-1.1192	-1.1199	-1.1204	-1.1208	-1.1212
12	-1.0736	-1.1400	-1.1537	-1.1587	-1.1613	-1.1630	-1.1643	-1.1653
11	-1.0864	-1.1700	-1.1909	-1.1995	-1.2043	-1.2075	-1.2098	-1.2115
10	-1.0982	-1.2000	-1.2290	-1.2419	-1.2492	-1.2541	-1.2576	-1.2602
9	-1.1089	-1.2300	-1.2683	-1.2860	-1.2964	-1.3032	-1.3081	-1.3118
8	-1.1184	-1.2600	-1.3088	-1.3323	-1.3461	-1.3554	-1.3620	-1.3670
7	-1.1269	-1.2900	-1.3508	-1.3810	-1.3991	-1.4112	-1.4199	-1.4265
6	-1.1342	-1.3200	-1.3946	-1.4329	-1.4561	-1.4717	-1.4829	-1.4914
5	-1.1405	-1.3500	-1.4407	-1.4887	-1.5181	-1.5381	-1.5525	-1.5635
4	-1.1456	-1.3800	-1.4897	-1.5497	-1.5871	-1.6127	-1.6313	-1.6454
3	-1.1496	-1.4100	-1.5427	-1.6181	-1.6661	-1.6993	-1.7235	-1.7420
2	-1.1524	-1.4400	-1.6016	-1.6982	-1.7612	-1.8053	-1.8379	-1.8630
1	-1.1541	-1.4700	-1.6714	-1.8008	-1.8888	-1.9520	-1.9994	-2.0362

# **END OF SECTION 110**







#### SPECIAL CONDITIONS

#### **SECTION 1**

#### PROJECT INFORMATION

**1. CONTRACT PROVISIONS.** The General Provisions and these Special Conditions are applicable to all divisions and sections of the Contract Documents and Specifications. It shall be the Contractor's responsibility to so inform all parties who should be bound or influenced thereby.

In the event there are discrepancies between the technical specifications, general provisions, general conditions and the special conditions, the interpretation most advantageous to the Owner shall apply.

2. **DESCRIPTION OF WORK.** The proposed Work includes the following:

The project will include, but is not limited to, site preparation and NAVAIDs installation to accommodate the construction of a new permanent Runway 17-35. Project includes furnishing all labor, materials, services and equipment required for soil cement stabilization, crushed aggregate base course, asphalt paving, grading, erosion control, drainage, access road construction, erosion control, airfield lighting, airfield signage, vault modifications, NAVAIDs, and other work items.

- 3. LOCATION OF THE WORK. The site of the proposed Work is at the Asheville Regional Airport, Fletcher, NC.
- 4. **DEFINITIONS.** The following terms when used in the Contract Documents shall mean the following:
- **A. AIRPORT OWNER'S REPRESENTATIVE (AOR)**. The term "Airport Owner's Representative" in the Contract Documents means any authorized representative of the Greater Asheville Regional Airport Authority including Authority staff, Program Manager, Construction Manager, Resident Project Representative and Design Engineer of Record.
- **B. ADDENDA**. Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents or the Contract Documents.
- **C. BID**. The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work and services to be performed.
- **D. CONTRACT AMENDMENT (CA)**. A CA is a written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work, covered by a change order, shall be within the scope of the contract.
- **E. CONSTRUCTION MANAGER (CM).** The authorized representative or entity under contract with the Owner and responsible for administering and inspecting the construction work as set forth in the contract.
  - F. DAY. Unless otherwise defined shall mean "calendar" day.
- **G. DRAWINGS**. The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by the Engineer and are referred to in the Contract Documents.

**H. FIELD DIRECTIVE**. A written order issued by the Airport Owner's Representative which orders minor changes in the work consistent with the intent of the Contract Documents but which does not involve a change in the Contract Price or the Contract Time.

The Airport Owner's Representative may authorize minor changes in the work not involving an adjustment in the contract price or the contract time, which are consistent with the overall intent of the Contract Documents. These may be accomplished by a field order and shall be binding on the Owner, and also on the Contractor who shall perform the change promptly. If the Contractor believes that a field order justifies an increase in the contract price or contract time, the Contractor shall make a claim under Section 50, Subsection 50-16, Claims for Adjustment and Disputes of the General Provisions before doing the Work.

- I. FURNISH or INSTALL or PROVIDE or SUPPLY. Unless specifically limited in the context, the word "Furnish" or the word "Install" or the word "Provide" or the word "Supply" or any combination or similar directive or usage thereof, shall mean FURNISHING AND INCORPORATION IN THE WORK including all necessary labor, materials, equipment, and anything necessary to perform the work indicated.
- **J. GOOD REPAIR**. Good repair shall be construed to mean any defect, functional or structural deterioration (except that from ordinary and reasonable use) which appreciably reduces the effectiveness or efficiency of the work or improvement for the purpose intended, or any serious departure from the standards of original construction described in the Contract Documents, shall be remedied by the Contractor. Such remedy will be made without further cost to the Owner, including in part, all damages caused by such defect, deficiency, deterioration or departure, and by its repair, replacement or correction.

### K. MAY. Permissive.

- **L. REFERENCE TO TRADE OR SUBCONTRACTORS.** When only one principal contract exists for all work covered by the Contract Documents, reference to trade or subcontractors in the Contract Documents shall not create any contractual relationship between the Owner and any trade or subcontractor, with whom the principal contractor may subcontract.
- **M. SAMPLES**. Samples are physical examples furnished or constructed by the Contractor to illustrate materials, equipment, workmanship or finishes, and to establish standards by which the work will be judged.
- **N.** "SHALL" IMPLIED. In the interest of conciseness, some sentences, statements, and clauses used in the specifications exclude any form of the verb "shall" normally expressed in a verb phrase with verbs such as "furnish", "install", "provide", "perform", "construct", "erect", "comply", "apply", "submit", or similar "verb", but any such sentences, statements, and clauses shall be interpreted to include the applicable form of the phrase "The Contractor shall" and the requirements described therein shall be interpreted as mandatory elements of the Contract.
  - **O. SHALL**. Mandatory.
- **P. SUBCONTRACTOR**. Party supplying labor and material or any labor for work at the site of the project for, and under separate contract or agreement with the Contractor. Nothing contained in the Contract Documents shall create any contractual relationship between the Owner and any subcontractor.
- **Q. SUBSTANTIAL COMPLETION**. When the work is sufficiently complete so it may be safely, conveniently and beneficially utilized by the Owner for all of the purposes for which it was intended.
  - R. WILL. Mandatory.
- **S. SEDIMENT**. Soil and other debris that have eroded and have been transported by runoff water or wind.

- **T. SOLID WASTES**. Rubbish, debris, and other discarded solid materials, except hazardous waste as defined in paragraph entitled, "Hazardous Waste," resulting from industrial, commercial, and agricultural operations and from community activities.
- **U. RUBBISH**. Combustible and noncombustible wastes including paper, boxes, glass, crockery, metal, lumber, cans, and bones.
- **V. DEBRIS**. Combustible and noncombustible wastes such as ashes and waste materials resulting from construction or maintenance and repair work, leaves, and tree trimmings.
  - W. CHEMICAL WASTES. Salts, acids, alkalies, herbicides, pesticides, and organic chemicals.
  - **X. SEWAGE**. Waste characterized as domestic sanitary sewage.
  - Y. GARBAGE. Refuse and scraps resulting from consumption of food.
- **Z. HAZARDOUS WASTES**. Hazardous substances as defined in 40 CFR 261 or as defined by applicable state and local regulations.
  - **AA. OILY WASTES**. Petroleum products and bituminous materials.
- **AB. HAZARDOUS MATERIALS**. As defined in DOT Regulation 49 CFR 171 and listed in CFR 172.
  - AC. HAZARDOUS SUBSTANCES. As defined in EPA PL 96-510.
- **5. PROPOSAL REQUIREMENTS.** In addition to those herein before described items to be submitted with the Bidder's Proposal, the bidder shall submit, with his proposal, a list of all subcontractors the bidder proposes to use on the work of this Contract.

After the Owner accepts the bidder's proposal and such bidder is awarded a Contract, the successful bidder may not substitute a subcontractor listed in the proposal without the prior written approval of the Owner. Such approval shall be obtained at least ten calendar days prior to the date scheduled for that subcontractor to begin work.

**6. ACCESS TO THE WORK.** Access to the work shall be via the access routes designated on the Contract Layout Plan. The Contractor shall identify access routes with suitable signs, barricades and similar equipment. The entire access route and construction site shall be kept free and clean of all debris at all times and maintained in good repair by the Contractor. All damage to the access route caused by the actions of the Contractor or his agents shall be immediately repaired to the satisfaction of the Owner.

No separate payment will be made for complying with the requirements of this paragraph "ACCESS TO THE WORK." No other access to the work site will be permitted without written approval by the Owner and Airport Owner's Representative. Contractor's vehicles and equipment, including vehicles and equipment of the subcontractors and others coming under the Contractor's control, will not be permitted to traverse other airfield areas or pavements without written approval of the Owner and Airport Owner's Representative. Contractor's vehicles, equipment and materials may be stored in the area designated on the Plans. Upon completion of the work, the storage area shall be cleaned up and returned to its original condition to the satisfaction of the Owner. No separate payment will be made for cleanup and restoration of the storage area. Personal services, such as canteen trucks, will not be permitted beyond this area and drivers of vehicles being operated beyond this area shall be subject to loss of permission to enter the construction site.

### 7. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

- **A.** Shop drawings are drawings, diagrams, schedules and other data specially prepared for the work by the Contractor or any subcontractor, manufacturer, supplier or distributor to illustrate some portion of the work.
- **B.** Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams or other information furnished by the Contractor to illustrate a material, product or system for some portion of the work.
- **C.** Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the work will be judged.
- **D.** The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate contractor, all shop drawings, product data and samples required by the Contract Documents.
- **E.** By approving and submitting shop drawings, product data and samples, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the Contract Documents.
- **F.** The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Airport Owner's Representative's approval of shop drawings, product data or samples unless the Contractor has specifically informed the Airport Owner's Representative's in writing of such deviation at the time of submission and the Airport Owner's Representative has given written approval of the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Airport Owner's Representative's approval thereof.
- **G.** The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples to revisions other than those requested by the Airport Owner's Representative on previous submittals.
- **H.** No portion of the work requiring submission of a shop drawing, product data or sample shall be commenced until the submittals have been approved by the Airport Owner's Representative as provided in the General Provisions, Section 50. All such portions of the work shall be in accordance with approved submittals.
- **I.** The Contractor shall not reproduce the Engineer's project drawings for shop drawing use without prior written approval of the Engineer.
- J. The Contractor shall submit **five (5)** hard copies, or at Airport Owner's Representative's option, an electronic copy and one print of all shop drawings required for the work of the various trades unless greater quantities are specifically requested for certain equipment. Receipt of less than the required number of copies will be cause for withholding the shop drawings, product data or samples from being checked until receipt of the necessary additional copies. The Contractor's letter of submittal must conform to the typical Contractor's "Transmittal Letter" which is available from the Airport Owner's Representative. Each drawing or part of the drawings, product data or samples shall be listed separately on the letter and identified as indicated thereon. Failure to do this will cause rejection of the submittal. The Airport Owner's Representative will return to the Contractor the same transmittal letter, with the shop drawings, product data or samples disposition noted thereon along with the shop drawings, product data or samples when the review is completed. The Contractor shall forward separate transmittal letters for submitting each group of shop drawings, product data or samples common to a specification section.

- **K.** In checking shop drawings, product data or samples prior to submittal, the Contractor is requested to note corrections or comments on the shop drawings, product data or samples in green pen.
- **L.** Drawings returned to the Contractor will be stamped "Approved," "Approved as Noted," "Returned for Corrections," or "Not Approved." Drawings stamped "Approved as Noted" need not be returned for further approval if the notations are acceptable to the Contractor and subcontractors. Drawings stamped "Returned for Corrections" or "Not Approved" shall require new submission. Comments and corrections by the Airport Owner's Representative will be made in red pen on blue or black line prints.
- **M.** Samples shall be submitted to the attention of **RS&H**, accompanied with the same transmittal letter prescribed for shop drawings. Checking by Contractor of product data and samples before transmittal is required the same as for shop drawings.

### 8. PROJECT DOCUMENTATION.

**A.** Project Drawings: The successful Contractor will be furnished, at no charge, four (4) copies of the Drawings and Specifications. Additional copies may be purchased at actual cost of reproduction.

A field set of Plans and Specifications shall remain on the job site at all times and shall be available at all times to the Airport Owner's Representative.

The Contractor shall immediately include plainly and conspicuously on the field set of drawings, and at appropriate paragraphs in the specifications, all changes or corrections made by addenda, field orders and change orders as they are issued.

Approved copies of all shop drawings, product data, samples and other submittals are to be kept on the job site at all times and shall be available at all times to the Airport Owner's Representative.

Changes and deviations from the existing conditions shall be submitted in writing for approval prior to installation. In no case shall any unspecified equipment or materials be installed without prior approval of the Airport Owner's Representative.

### **B.** Record Documents:

- (1) Definition: Record documents are defined to include those documents or copies relating directly to performance of the work, which the Contractor is required to prepare or maintain for the Owner's records, recording the work as actually performed. In particular, record documents show changes in the work in relation to the way in which shown and specified by original Contract Documents; and show additional information of value to the Owner's records, but not indicated by original Contract Documents. Record documents include newly prepared drawings (if any are specified), marked-up copies of contract drawings, shop drawings, specifications, addenda, field orders, change orders, marked-up product data submittals, record samples, field records for variable and concealed conditions such as excavations and foundations, and miscellaneous record information on work which is otherwise recorded only schematically or not at all.
- **(2)** Record Drawings: The Contractor shall maintain a set of record drawings at the job site. The record drawings shall be kept legible and current and shall be available for inspection at all times by the Airport Owner's Representative. The Contractor shall show all changes or work added on these record drawings in a contrasting color.
- (a) Mark-Up Procedure: During progress of the work, maintain a blue-line or black-line set of contract drawings and shop drawings, with mark-up of actual installations which vary substantially from the work as originally shown. Mark whatever drawing is most capable of showing actual physical condition, fully and accurately. When shop drawings are marked up, cross-reference on contract drawings at corresponding location. Mark with erasable colored pencil, using separate colors where

feasible to distinguish between changes for different categories of Work at same general location. Mark-up important additional information that was either shown schematically or omitted from the original drawings. Give particular attention to information on work concealed, which would be difficult to identify or measure and record at a later date. Note alternate numbers, field orders or change order numbers and similar identification. Require each person preparing mark-ups to initial and date mark-ups and indicate name of firm. Label each sheet "PROJECT RECORD" in 1-1/2-inch high letters.

In showing changes in the work, use the same legends as used on the original drawings. Indicate exact locations by dimensions and exact elevations by job datum. Give dimensions from a permanent point.

- **(b)** Preparation of Record Drawings: In preparation for Certification of Substantial Completion on last major portion of the work, review completed mark-up of record drawings and shop drawings with Airport Owner's Representative. The Airport Owner's Representative will then proceed with preparation of a full set of corrected record contract drawings. The Airport Owner's Representative will date each updated drawing and label each sheet "RECORD DRAWING" in 1-1/2-inch high letters. Printing as required herein is the responsibility of the Airport Owner's Representative.
- (3) Record drawings shall contain the names, addresses and phone numbers of the Contractor and all subcontractors.
- (4) The Airport Owner's Representative shall be the sole judge of the acceptability of the record drawings. Receipt and acceptance of the record drawings is a prerequisite for Final Payment.

### **C.** Record Specifications:

- (1) During the progress of the work, the Contractor shall maintain one copy of the specifications, including addenda, field orders, change orders and similar modifications issued in printed form during construction, marked-up variations (of substance) in actual work in comparison with text of specifications and modifications as issued at the jobsite. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise by readily discernable at a later date by direct observation. Note related record drawing information and product data, where applicable. Upon completion of mark-up, the Contractor shall submit all data to the Airport Owner's Representative for the Owner's records. Label front cover "PROJECT RECORD" in 1-1/2-inch high letters.
- (2) Where the record specifications is printed on one side of page only, mark variation on blank left-hand pages of the record specifications, facing printed right-hand pages containing original text affected by variation.
- **D.** Record Product Data: During progress of the work, maintain one copy of each product data submittal, and mark-up significant variations in the actual work in comparison with submitted information. Include both variations in product as delivered to site, and variations from manufacturer's instructions and recommendations for installation. Give particular attention to concealed products and portions of the work that cannot otherwise be readily discerned at a later date by direct observation. Note related field orders and change orders and mark-up of record drawings and specifications. Upon completion of mark-ups, submit complete set of product data submittal to the Airport Owner's Representative for the Owner's records. Label each data submittal "PROJECT RECORD" in 1-1/2-inch high letters.
- **E.** Record Sample Submittal: Immediately prior to date(s) of substantial completion, the Airport Owner's Representative will meet with the Contractor at the work site and will determine if any of the submitted samples maintained by the Contractor during progress of the work are to be transmitted to the Owner for record purposes. The Contractor shall comply with the Airport Owner's Representative instructions for packaging, identification marking and delivery to the Owner's sample storage space. Dispose of other samples in a legal manner specified for disposal as surplus and waste materials, unless otherwise indicated by Airport Owner's Representative.

- **F.** Miscellaneous Record Submittals: Refer to other sections of these specifications for requirements of miscellaneous recordkeeping and submittals in connection with actual performance of the work. Immediately prior to date(s) of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Airport Owner's Representative for the Owner's records. Categories of requirements resulting in miscellaneous work records are recognized to include, but not be limited to, the following:
- (1) Required field records on excavations, foundations underground construction, wells and similar Work.
- **(2)** Accurate survey showing locations and elevations of underground lines, including invert elevations of drainage piping, valves, tanks and manholes.
  - (3) Surveys establishing lines and levels of buildings, where applicable.
  - (4) Soil treatment certification.
- (5) Inspection and Test Reports: Where not processed as shop drawings or product data.
  - (6) Concrete mix design record.
  - (7) Asphaltic concrete mix design record.
  - (8) Concrete block certification, where applicable.
- **G.** Project Closeout: Closeout is hereby defined to include general requirements near end of contract time, in preparation for final acceptance, final payment, normal termination of Contract, occupancy by the Owner and similar actions evidencing completion of the work. Specific requirements for individual units or work are specified in other sections. Time of closeout is directly related to substantial completion, and therefore may be a single-time period for the entire work or a series of time periods for individual parts of the work which have been certified as substantially complete at different dates. The time variation, if any, shall be applicable to other provisions of this section.
  - H. Prerequisites to Substantial Completion:
- (1) Prior to requesting the Airport Owner's Representative's inspection for Certification of Substantial Completion, for either entire work or portions thereof, complete the following and list no exceptions in request.
- (a) In progress payment request coincident with, or first following date claimed, show 100 percent completion for the portion of work claimed as "Substantially Completed," or list incomplete items, value of incompletion and reasons for being incomplete.
- **(b)** Include supporting documentation for completion as indicated in the Contract Documents.
  - **(c)** Submit statement showing accounting of changes to the Contract sum.
  - (d) Advise the Owner of pending insurance change-over requirements.
- **(e)** Obtain and submit releases enabling Owner's full and unrestricted use of the work and access to services and utilities, including, where required, occupancy permits, operating certificates and similar releases.
- (f) Deliver tools, spare parts, extra stocks of materials and similar physical items to the Owner.

- **(g)** Make final change-over of locks and transmit keys, where applicable, to the Owner, and advise the Owner's authorized representatives of change-over in security provisions.
- **(h)** Complete start-up testing of systems, and instructions to the Owner's operating-maintenance personnel. Discontinue, or change over, and remove from project site any temporary facilities and services, along with construction tools and facilities, mock-ups and similar elements.
- (2) Inspection Procedures: Upon receipt of the Contractor's request, the Airport Owner's Representative will proceed with the inspection or advise the Contractor of prerequisites not fulfilled. Following initial inspection, the Airport Owner's Representative will prepare the Certificate of Substantial Completion or advise the Contractor of work which must be performed prior to issuance of the certificate and repeat the inspection when requested and assured that work has been substantially completed. Results of completed inspection(s) will form initial "punch list" for Final Acceptance. If the Airport Owner's Representative performs more than one initial inspection and one follow-up inspection and it is determined that additional follow-up inspections are required, the cost of the Airport Owner's Representative's time and travel expenses to perform such additional follow-up inspections shall be charged to the Contractor and the costs deducted from the Contractor's earnings.

### I. Prerequisites to Final Acceptance:

- (1) Prior to requesting the Airport Owner's Representative's final inspection for Certification of Final Acceptance as required by the General Provisions, the Contractor shall complete the following and list known exceptions in the request:
- (a) Submit certified copy of the Airport Owner's Representative's final punch list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, endorsed and dated by the Airport Owner's Representative.
- **(b)** Submit final meter readings for utilities, measured record of stored fuel, and similar data as of time of Substantial Completion or when Owner took possession of and responsibility for corresponding elements of the Work.
- **(c)** Complete final cleaning up requirements, including touch-up of marred surfaces.
  - (d) Touch-up and otherwise repair and restore marred exposed finishes.
- (2) Reinspection Procedures: Following Substantial Completion, the Contractor shall correct or remedy all punch list items to the satisfaction of the Airport Owner's Representative and Owner within a two (2)-week period after the date of Substantial Completion. If subsequent inspections are necessary after the two-week period in order to eliminate all deficiencies, the cost of all subsequent inspections with respect to the Owner's and Airport Owner's Representative's time and expenses shall be paid by the Contractor. When ready, the Contractor shall request in writing, a final reinspection of the work. Upon completion of reinspection, the Airport Owner's Representative will prepare Certificate of Final Acceptance or advise the Contractor of work not completed or obligations not fulfilled as required for Final Acceptance. If necessary, the above procedures will be repeated.

# **J.** Prerequisites to Final Payment:

- (1) Final Payment: Final Payment will be made after Final Acceptance of the project by the Airport Owner's Representative and Owner upon request by the Contractor on condition that the Contractor:
- (a) Furnish properly executed and completed release of claims from all material men and subcontractors who have furnished materials or labor for the work and submit supporting

documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

- **(b)** Furnish the Contractor's Affidavit of Release of Claims (2 copies) that all material, men, and subcontractors have been paid in full. In the event they have not been paid in full, the Owner shall retain a sufficient sum to pay them in full and at his option, may make direct payment to obtain complete releases of claim.
  - (c) Furnish Contractor's Final Release of Claim (2 copies).
- (d) Furnish required sets of record drawings and maintenance and operating instructions of new mechanical equipment.
- **(e)** Furnish guarantees signed by subcontractors, material suppliers and countersigned by the Contractor for operating equipment.
- **(f)** Submit specific warranties, workmanship-maintenance bonds, maintenance agreements, final certifications and similar documents.
- **(g)** Furnish a signed guarantee, in form acceptable to the Airport Owner's Representative and Owner agreeing to repair or replace, as decided by the Airport Owner's Representative, all work and materials that prove defective within one (1) year from the date of Final Acceptance, including restoration of all other Work damaged in making such repairs or replacements.
  - (h) Furnish consent of Surety to Final Payment.
- (i) Submit final progress payment application, reflecting all final changes to contract quantities and sums.
- (j) Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- **(k)** Certify that all social security, employment and all other taxes (city, state, federal government) have been paid.
- (I) Provide receipt, as applicable, of affidavits certifying all labor standards of local, state or federal requirements have been complied with by the Contractor.
- **(m)** Submit actual DBE participation percentages along with the names, addresses and phone numbers of all DBE subcontractors, material suppliers utilized in the work.
- **K.** Record Document Submittals: Specific requirements for record documents are shown in Section 10, PROJECT DOCUMENTATION. Other requirements are indicated in the General Provisions. General submittal requirements are indicated in "Submittals" sections. Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Airport Owner's Representative's reference during normal working hours.
- (1) Record Drawings: The Airport Owner's Representative shall organize record drawing sheets into manageable sets, bind with durable paper cover sheets and print suitable titles, dates and other identification on cover of each set.
- **(2)** Record Specifications: Upon completion of mark-ups, submit to the Airport Owner's Representative for the Owner's records.

- **(3)** Record Product Data: Upon completion of mark-ups, submit complete set to the Airport Owner's Representative for the Owner's records.
- (4) Record Sample Submittal: Comply with the Airport Owner's Representative's instructions for packaging, identification marking and delivery to the Owner's sample storage space.
- **(5)** Miscellaneous Record Submittals: Complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Airport Owner's Representative for the Owner's records.
- **(6)** Maintenance Manuals: Complete, place in order, properly identify and submit to the Airport Owner's Representative for the Owner's records.
- **L.** Closeout Procedures: General Operating and Maintenance Instructions: Arrange for each installer of work requiring continuing maintenance or operation to meet with the Owner's authorized representatives, at the work site, to provide basic instructions needed for proper operation and maintenance of the entire work. Include instructions by manufacturer's representatives where installers are not expert in the required procedures. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuel, identification system, control sequences; hazards, cleaning and similar procedures and facilities. For operational equipment, demonstrate start-up, shut-down, emergency operations, noise and vibration adjustments, safety, economy, efficiency adjustments and similar operations. Review maintenance and operations in relation with application warranties, agreements to maintain bonds, and similar continuing commitments.
- **9. STANDARD CONSTRUCTION FORMS.** The following forms shall be utilized in the execution of the Work and will be provided by the CM at the preconstruction meeting.
- **A.** Request for Information (RFI). An RFI shall be utilized by the Contractor to present questions or request clarifications related to the work. Upon receipt, the CM shall forward the RFI to the appropriate source who will respond to the RFI in writing with reasonable promptness to avoid or minimize delay in the progress of the Work.
- **B.** Request for Contract Amendment (RCA). A RCA shall be utilized by Contractor to formally present any request for monetary, time or contractual adjustment. The RCA shall provide justification for entitlement to the change and shall be substantiated.
- **C. Contract Amendment (CA).** A CA shall be utilized to formalize modifications to the Contract that are agreed to by the Owner and Contractor.
- **D. Field Directive (FD).** A FD shall be utilized in the absence of an agreement on a CA to express a written order by the Owner directing a change in the work, or to expedite a change in work that is time and/or schedule sensitive.
- **E. Supplemental Instruction (SI).** A SI shall be utilized by the CM to issue any changes to the contract plans or specifications. Upon receipt of an SI, the Contractor shall submit a detailed breakdown of costs (additions or deductions) to the CM if applicable. The information provided in an SI may or may not result in a contract amendment.
- **F. Construction Deficiency/Corrective Action (CDCA).** A CDCA shall be utilized by the CM to communicate in writing to the Contractor either a deficiency in the Work or other action required by the Contractor. The Contractor shall provide a written response regarding the CDCA to the CM within seven (7) days. The Owner may withhold payment from Contractor for items in nonconformance until corrective action is completed.

### 10. FINAL CLEANING.

- **A.** Provide final cleaning of the work, at time indicated, consisting of cleaning each surface or unit of work to normal "clean" condition.
- **B.** Removal of Protection: Remove temporary protection devices and facilities that were installed during course of the work to protect previous completed work during remainder of the construction period.
- **C.** Compliances: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site, or bury debris or excess materials on the Owner's property, or discharge volatile or other harmful or dangerous materials into drainage systems; remove waste materials from site and dispose of in a lawful manner.

Where extra materials of value remaining after completion of associated work have become the Owner's property, dispose of these as directed by the Owner.

**END OF SPECIAL CONDITIONS - SECTION 1** 

### **SECTION 2**

### INSURANCE REQUIREMENTS

### 1. INSURANCE AND INDEMNIFICATION

Before starting and until termination of work for, or on behalf of, the Owner, the Contractor shall procure and maintain insurance of the types and to the limits specified.

The term Owner as used in this section of the Contract is defined to mean the Greater Asheville Regional Airport Authority, itself, any subsidiaries or affiliates, elected and appointed officials, employees, volunteers, representatives and agents.

With regard to the Contractor's perform search/replace function obligations for products and completed operations, the Contractor shall be responsible for providing and maintaining insurance and contractual agreements for a minimum period of at least one (1) year subsequent to the Authority's acceptance of the products and/or services.

Insurance shall be issued by an insurer whose business reputation, financial stability and claims payment reputation is satisfactory to the Owner, for the Owner's protection only. Unless otherwise agreed, the amounts, form and type of insurance shall conform to the following minimum requirements:

### 2. WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY

The Contractor shall purchase and maintain Worker's Compensation Insurance Coverage for all Workers' Compensation obligations whether legally required or not. Additionally, the policy, or separately obtained policy, must include Employer's Liability Coverage of at least \$1,000,000 each person - accident, \$1,000,000 each person - disease, \$1,000,000 aggregate - disease. If the state requires a higher statutory limit then those limits stated then the state requirement shall apply.

# 3. COMMERCIAL GENERAL, AUTOMOBILE AND UMBRELLA LIABILITY COVERAGES

The Contractor shall purchase coverage on forms no more restrictive than the latest editions of the Commercial General Liability and Business Auto policies filed by the Insurance Services Office. The Owner, Reynolds, Smith and Hills, Inc., and AVCON, Inc. shall be listed separately as Additional Insured and such coverage shall be at least as broad as that provided to the Named Insured under the policy for the terms and conditions of this contract. The Owner shall not be considered liable for premium payment, entitled to any premium return or dividend and shall not be considered a member of any mutual or reciprocal company. Minimum limits of \$5,000,000.00 per occurrence, and per accident, combined single limit for liability must be provided, with umbrella insurance coverage making up any difference between the policy limits of underlying policies coverage and the total amount of coverage required. If the required limits of liability afforded should become impaired by reason of any claim, then the Contractor agrees to have the minimum limits reinstated under the policy.

**Commercial General Liability** coverage must be provided, including bodily injury and property damage liability for premises, operations, products and completed operations, contractual liability, independent contractors, and property damage resulting from collapse and underground (c, u) exposures. Broad Form Commercial General Liability coverage or its equivalent shall provide at least, broad form contractual liability applicable to this specific contract, as well as personal injury liability and broad form property damage liability. The coverage shall be written on occurrence-type basis.

**Business Auto Policy** coverage must be provided, including bodily injury and property damage arising out of operation, maintenance or use of owned, non-owned and hired automobiles and employee non-ownership use.

**Umbrella Liability Insurance** coverage shall not be more restrictive than the underlying insurance policy coverages. The coverage shall be written on an occurrence-type basis.

### 4. CERTIFICATES OF INSURANCE

Required insurance shall be documented in the Certificates of Insurance which provides that the Owner shall be notified at least thirty (30) days in advance of cancellation, non renewal or adverse change or restriction in coverage. Separate Certificates shall be issued to the Owner and to the Airport Owner's Representative naming each as an Additional Insured and this contract shall be listed. If required by the Owner, the Contractor shall furnish copies of the Contractor's insurance policies, forms, endorsements, jackets and other items forming a part of, or relating to such policies. Certificates shall be on the "Certificate of Insurance" form equal to, as determined by the Owner on an ACORD 25 form. Any wording in a Certificate which would make notification of cancellation, adverse change or restriction in coverage to the Owner an option shall be deleted or crossed out by the insurance carrier's or the insurance carrier's agent. The Contractor shall replace any canceled, adversely changed, restricted or non-renewed policies with new policies acceptable to the Owner and shall file with the Owner Certificates of Insurance under the new policies prior to the effective date of such cancellation, adverse change or restriction. If any policy is not timely replaced, in a manner acceptable to the Owner, the Contractor shall, upon instructions of the Owner, cease all operations under the contract until directed by the Owner, in writing, to resume operations. A Contractor's financial integrity is of interest to the Authority; therefore, subject to Contractor's right to maintain reasonable deductibles in such amounts as are approved by the Authority, Contractor shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Contractor's sole expense, insurance coverage written on an occurrence basis. by companies authorized and admitted to do business in the State of North Carolina and rated A- or better by A.M. Best Company and/or otherwise acceptable to the Authority's Risk Manager. The "Certificate Holder" address should read: Greater Asheville Regional Airport Authority, 61 Terminal Drive, Fletcher, NC, 28732, 828-684-2226.

### 5. INSURANCE OF THE CONTRACTOR PRIMARY

The Contractor required coverage shall be considered primary, and all other insurance shall be considered as excess, over and above the Contractor's coverage. The Contractor's policies of coverage will be considered primary as it relates to all provisions of the contract.

### 6. LOSS CONTROL AND SAFETY

The Contractor shall retain control over its employees, agents, servants and subcontractors, as well as control over its invitees, and its activities on and about the subject premises and the manner in which such activities shall be undertaken and to that end, the Contractor shall not be deemed to be an agent of the Owner. Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees, and property. The Contractor shall make special effort to detect hazards and shall take prompt action where loss control/safety measures should reasonably be expected.

### 7. HOLD HARMLESS

The Contractor shall hold harmless the Owner, its subsidiaries or affiliates, elected and appointed officials, employees, volunteers, representatives and agents from any and all claims, suits, actions, damages, liability and expenses in connection with loss of life bodily or personal injury, or property damage, including loss or use thereof, directly or indirectly caused by, resulting from, arising out of or occurring in connection with the performance of this Contract, whether arising solely out of the negligence of the Contractor or not. The Contractor's obligation shall not be limited by or in any way to, any insurance coverage or by any provision in or exclusion or omission from any policy of insurance.

### 8. PAY ON BEHALF OF THE OWNER

The Contractor agrees to pay on behalf of the Owner, as well as provide a legal defense for the Owner, both of which will be done only if and when requested by the Owner, for all Claims as described in the Hold Harmless paragraph. Such payment on behalf of the Owner shall be in addition to any and all other legal remedies available to the Owner and shall not be considered to be the Owner's exclusive remedy.

# 9. PAY ON BEHALF OF THE AIRPORT OWNER'S REPRESENTATIVE

The Contractor agrees to pay on behalf of the Airport Owner's Representative, as well as provide a legal defense for the Airport Owner's Representative, both of which will be done only if and when requested by the Airport Owner's Representative, for all claims as described in the Hold Harmless paragraph. Such payment on behalf of the Airport Owner's Representative shall be in addition to any and all other legal remedies available to the Airport Owner's Representative and shall not be considered to be the Airport Owner's Representative's exclusive remedy.

**END OF SPECIAL CONDITIONS - SECTION 2** 

### **SECTION 3**

### **MISCELLANEOUS**

1. PROVISIONS REQUIRED BY LAW DEEMED INSERTED. Each and every provision of law and clause required by law to be inserted in the Contract Documents shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein. If, for any reason, any such provision is not inserted in the Contract, or is not correctly inserted, then upon application of either party, the Contract shall forthwith be physically amended to make such insertion or correction.

### 2. CORRELATION OF DOCUMENTS.

- **A.** The drawings and specifications are cooperative and supplementary. Portions of the work which can be best be illustrated by the drawings may not be included in the specifications and portions best described by the specifications may not be depicted on the drawings. All items necessary or incidental to completely construct or erect the work shall be furnished, whether called for in the specifications or shown on the drawings. Anything mentioned in the specifications and not shown on the drawings, or anything shown or mentioned on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both.
- **B.** In case of disagreement between the drawings and specifications, or within either document itself, the better quality or greater quantity of work shall be estimated and included in the bid and contract price and the matter drawn to the Airport Owner's Representative's attention for decision.
- **3. NOTICE AND SERVICE THEREOF.** Where the manner of giving notice is not otherwise provided for in the Contract Documents, any notice to the Contractor from the Owner relative to any part of the Contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to the Contractor at the address given in the Contractor's proposal, or at the last business address known to him who gives the notice, or delivered in person to the Contractor or his authorized representative on the site. It is mutually agreed that such notice shall be sufficient and adequate.

### 4. SUBCONTRACTING.

- **A.** The Contractor may utilize the services of specialty or minority subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty or minority subcontractors.
- **B.** The Owner reserves the right to approve subcontractors for any work. The Contractor, if requested by the Owner, shall submit to the Owner the proposed award and such information as the Owner may require concerning any subcontractor.
- **C.** The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, or under their control, as he is for the acts and omissions of persons directly employed by him.
- **D.** The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.

**E.** Nothing contained in the Contract Documents shall create any contractual relationships between any subcontractor and the Owner.

### 5. PROTECTION OF PERSONS.

### A. The Contractor shall:

- (1) At all times protect the lives and health of his employees under the Contract;
- (2) Take all necessary precautions for the safety of all persons on or in the vicinity of the project site.
- (3) Comply with all applicable provisions of Federal, State and Municipal safety laws and building codes.
- (4) Comply with all pertinent provisions of the Manual of Accident Prevention in Construction issued by the Associated General Contractors of America, Inc., latest edition, to prevent accidents or injury to persons on or about or adjacent to the premises where the work is being performed. He shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of persons and shall post danger signs warning against the hazards created in part by features of construction such as protruding nails, rod hoists, well holes, falling materials, etc., and he shall designate a responsible member of his organization on the work site whose duty shall be the prevention of accidents;
- **(5)** Provide for all safeguards for the protection of those having Right-of-Entry during field review and observation of the work.
- **B.** The Contractor shall comply with all provisions of the "Williams-Steiger Occupational Safety and Health Act of 1970" including any amendments thereto and rules and regulations issued pursuant thereto, applicable to the Work and performance of the Contract. Where a State in which work is performed has passed legislation bearing on Occupational Safety and Health, such legislation and amendments thereto, together with rules and regulations issued pursuant thereto, shall be complied with by the Contractor.

# 6. AUTHORITY OF AIRPORT OWNER'S AUTHORIZED REPRESENTATIVE.

- **A.** The Airport Owner's Representative, through its duly authorized representatives, shall furnish engineering services during construction of the work to the extent provided in the Contract Documents. He shall observe and review the work in the process of construction or erection. Compliance with the Contract Documents shall be the Contractor's responsibility notwithstanding such observation or review. The Airport Owner's Representative has authority to recommend suspension of the work to the Owner when it appears such suspension may be necessary to accomplish the proper implementation of the intent of the Contract Documents. The authority to observe, review or recommend suspension of the work, or exercise such other authority as may be granted by the Contract Documents, shall not be construed or interpreted to mean supervision of construction, which is the Contractor's responsibility, nor make the Airport Owner's Representative responsible for providing a safe place for the performance of work by the Contractor or by the Contractor's employees, or those of suppliers or subcontractors, or for access, visits, use, work, travel, or occupancy by any other person. The Airport Owner's Representative shall also have the authority to reject any work, materials, or equipment which do not conform to the Contract Documents and to decide technical questions which arise in the execution of the work.
- **B.** The Airport Owner's Representative shall determine the amount, quality, acceptability, and fitness of the several kinds of work, materials, equipment and supplies which are to be paid for under the Contract and shall decide questions which may arise in relation to said work and its compliance with the Contract Documents. The Airport Owner's Representative's estimates and decisions shall be final and

conclusive, except as otherwise expressly provided in case any question shall arise between the parties to the Contract relative to the Contract Documents, the determination or decision of the Airport Owner's Representative shall be a condition precedent to the right of the Contractor to receive any money or payment for work under the Contract affected in any manner or to any extent by such question.

**C.** The Airport Owner's Representative shall decide the meaning and intent of any portion of the Contract Documents where the same may be found obscure or be in dispute.

### 7. "GOOD REPAIR" PERIOD.

- **A.** The Contractor hereby agrees to keep all work constructed under the Contract in good repair for a minimum period of one (1) year, unless a longer period is otherwise specified in the Contract Documents, from the date of acceptance of all of the work by the Owner. No provision of the Contract documents shall be valid which limits the "Good Repair" period to less than one (1) year from the date of acceptance of all of the work by the Owner. The work may be phased. If the work is phased, each phase of Work completed shall be inspected and approved for use by the Owner but shall not be accepted until all work for all phases is complete and a final inspection for all work has been performed.
- **B.** It is intended that this provision shall apply whether or not bond is required, as a personal obligation of the Contractor.
- **C.** The obligations of the Contractor as herein provided shall be in addition to and not in limitation of any obligations imposed upon him by special guarantees required by the Contract Documents or otherwise prescribed by law.
- **8. VARIATION FROM ESTIMATED QUANTITIES.** The Contractor may reasonably expect a variation in estimated quantities such that the total payment for the completed work may range from 75 to 125 percent of the total amount of the Contract based on the estimated quantities defined in the proposal. The Contractor will not be allowed any claims for anticipated profits, for loss of profits, or for any damages because of a difference between the estimate of any item defined in the proposal and the amount of the item actually required or for the elimination of any part of the work. Funds for construction of the work herein contemplated are limited. The Owner reserves the right to eliminate or reduce the items of the proposal or any of the work as may be required to bring the cost of the work within the limits of available funds.
- **9. WATER FOR CONSTRUCTION.** Water used for construction of this project will be furnished by the Contractor. The Contractor shall make the necessary arrangements with the Owner of the source of water for securing and/or transporting such water. No separate payment will be made for water used but the cost thereof shall be included in the various items of the proposal and bid schedule.
- **10. LIGHTS AND POWER.** The Contractor shall provide, at his own expense, temporary lighting and facilities required for the proper prosecution and inspection of the work.
- **11. COORDINATION WITH OTHERS.** In the event other contractors are doing work in the same area simultaneously with this project, the Contractor shall coordinate his proposed construction with that of the other contractors. The Contractor shall notify the Airport Owner's Representative of said coordination attempts and the results.
- 12. TESTING AND INSPECTIONS. For the purpose of determining whether the Work is acceptable (as opposed to the Contractor's quality control activities for which the Contractor is solely responsible) tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be performed at appropriate times. The Contractor shall be responsible for coordinating and scheduling all permitting agencies' tests and inspections described herein. The Owner or CM shall make arrangements for all other quality assurance tests, examinations and inspections with such testing laboratories or entities and, except as provided herein or in the technical specifications, the Owner shall bear the costs of such quality

assurance tests, examinations and inspections that the Owner so arranges. The Contractor shall give the CM timely notice of when each portion of the Work shall be ready and available for quality assurance tests, examinations and inspections. The Contractor shall provide the Owner's testing representatives reasonable access to the Work (ladders, etc.), at no additional cost, for the purpose of performing such quality assurance tests, examinations and inspections.

In the event the testing, examination and inspection, or approval procedures performed reveal that the Work fails to meet the requirements of the Contract Documents, the Contractor shall bear all costs arising from the failure, including, but not limited to, the costs to correct the Work and the costs of tests, examinations, inspections and services performed by the CM, A/E and Owner in connection with such tests, examinations, inspections, or approval procedures necessary to establish that the Contractor's work conforms with the requirements of the Contract Documents.

The contractor shall furnish, at his own expense, all necessary specimens for testing of the materials, as required by the Airport Owner's Representative. The Contractor shall be responsible for notifying the testing laboratory to pick up the test samples. Also, the Airport Owner's Representative reserves the right to test at any location on the project, and at any frequency he deems necessary before, during and after incorporation of all materials into the project to satisfy himself and ensure that all materials meet the specified requirements. All materials utilized in the project must meet specification requirements before, during and after incorporation into the project.

- **13. LINES AND GRADES.** Section 50, Item 50-06 of the General Provisions includes requirements for all lines, grades, and measurements necessary to the proper prosecution and control of the work contracted for under these specifications shall be provided by the Contractor and he shall be solely responsible for the accuracy of said lines, grades and measurements.
- **14. TRADE NAMES AND MATERIALS.** No material that has been used by the Contractor for any temporary purpose whatsoever is to be incorporated in the permanent structure without written consent of the Airport Owner's Representative.

Where materials or equipment are specified by a trade or brand name, it is not the intention of the Owner to discriminate against an equal product of another manufacturer, but rather to set a definite standard of quality or performance, and to establish an equal basis for the evaluation of bids. Where the words "equivalent", "proper", or "equal to" are used, they shall be understood to mean that the thing referred to shall be proper, the equivalent of, or equal to some other thing, in the opinion or judgment of the Airport Owner's Representative. Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. Notwithstanding that the words "or equal to" or other such expressions may be used in the plans and specifications in connection with the material, manufactured article or process, the material, manufactured article or process specifically designated shall be used, unless a substitute shall be approved in writing by the Airport Owner's Representative and the Airport Owner's Representative shall have the right to require the use of such specifically designated material, article or process.

- **15. PROPERTY LINES AND MONUMENTS.** The Contractor shall protect all property corner markers and any other monument, and when any such markers or monuments are in danger of being disturbed, they shall be properly referenced and if disturbed shall be reset at the expense of the Contractor.
- **16. FENCES AND DRAINAGE CHANNELS.** Boundary fences or other improvements removed to permit the installation of the work shall be replaced in the same location and left in a condition as good or better than that in which they were found. Existing fences not to be removed and intersecting with new fencing (fencing outside airport property) shall be connected to the new fencing in a manner acceptable to the fence owner and Airport Owner's Representative. A secure AOA perimeter shall be maintained at all times to the satisfaction of the Airport Owner's Representative. Temporary or new AOA fence shall be installed prior to removing permanent AOA fence necessary to complete the work.

Where surface drainage channels are disturbed or blocked during construction, they shall be restored to their original condition of grade and cross section after the work of construction is completed.

**17. DISPOSAL OF WASTE AND SURPLUS EXCAVATION.** All trees, stumps, trimmings, brush or other debris to be removed from the site as a preliminary to the construction work shall be removed from the property and legally disposed of in a manner approved by the Airport Owner's Representative and at a site approved by the Owner. No burning on site will be permitted.

All excavated earth in excess of that required for embankment and backfill shall be disposed of in a satisfactory manner as shown on the plans or directed by the Airport Owner's Representative or legally disposed of off-site by the Contractor.

- **18.** AIR POLLUTION. The Contractor shall comply with all Federal, State and Local Requirements.
- **19. EXISTING UTILITIES AND SERVICE LINES.** The Contractor shall be responsible for the protection of all existing utilities or service lines crossed or exposed by his construction operations. Where existing utilities or service lines are cut, broken or damaged, the Contractor shall replace or repair the utilities or service lines with the same type of original material and construction, or better, at his own cost and expense, with the exception of those items included in the bid schedule.
- **20. RECORDS OF MATERIALS PURCHASED**. By a certain time each month as defined and established at the preconstruction conference, the Contractor shall furnish to the Airport Owner's Representative, duplicate copies of all invoices for materials furnished to be incorporated into the work, plus a statement of all materials previously included on monthly estimates and incorporated into the work during the preceding month. This information is to be used to determine the value of materials on hand to be included in the monthly estimate for periodical payment.
- 21. CONTRACTOR ACCESS TO PROJECT SITE. The Contractor shall have a specific access route to the project site. This route is shown in the construction drawings. The Contractor shall use this route to bring all equipment and materials in. If the Contractor has a better route that will prevent damage to existing roads or provide safer access to the construction site, the Contractor shall supply a drawing showing the recommended route to the Owner and Airport Owner's Representative for approval at the preconstruction conference.
- **22. NIGHTTIME WORK.** The Contractor shall not perform nighttime work unless given approval in writing by the Airport Owner's Representative. The Contractor shall request in writing approval to perform nighttime work. If the Airport Owner's Representative approves said nighttime work, the Contractor shall coordinate closely with the Airport Owner's Representative and the Owner during any and all approved nighttime work. This includes any nighttime hauling of materials to the project site.

In phases of work requiring nighttime work, the Contractor shall perform said nighttime work within the time frame allotted by the Owner. The Contractor shall coordinate with the Owner and Airport Owner's Representative each day before nighttime operations to ensure all special instructions, time limitations, directives, etc. are adhered to each night of nighttime operations. The Contractor shall not enter areas requiring nighttime construction operations until cleared to do so by the Owner. Any violation will result in a fine up to \$1,000.00 for each individual and each piece of equipment committing the infraction. Violations may lead to infracting personnel being removed from the project at direction of the Owner.

23. DUST CONTROL. The Contractor shall maintain strict dust control during the project duration. There are operational areas, aircraft parked on the airport as well as commercial facilities that perform maintenance and repair work to aircraft. Therefore, it is imperative that strict dust control be maintained so that damage or nuisance to the areas and facilities described above or airport operational areas is prevented. This dust control shall also include the dust that may occur during any construction procedure.

- **24. TRIP TICKETS, INVOICES, WEIGH BILLS, ETC.** The Contractor shall be responsible for supplying any and all trip tickets, invoices, weigh bills, etc. which show the quantities actually used in the construction of the project. All said trip tickets, invoices, weigh bills, etc. shall relate directly to specific bid items. If the Contractor fails to submit said trip tickets, invoices, weigh bills, etc. to the Airport Owner's Representative or his authorized representative prior to or during the time of installation of materials into the project, any material overruns claimed by the Contractor at the end of the project shall not be accepted.
- **25. CHANGES IN THE WORK.** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Contract Amendment (CA) or Field Directive (FD). No change to the Contract scope, time or cost shall be authorized without an executed CA or FD. Any work performed or assumed by the Contractor prior to a CA or FD being executed by the Owner shall be at no cost or time to the Owner and shall be borne by the Contractor.
- **A.** If unit prices are stated in the Contractor's bid or proposal the Owner may authorize increases or decreases in quantities of any item without any change in the applicable unit price, provided that the aggregate change does not increase or decrease the Total Contract Price or the net amount of a Major Work Item by a net amount greater than twenty-five percent (25%) compared to the quantities stated in the unit price schedule in the Contract Documents at the time of award. The Contractor will not be entitled to additional overhead, insurance, bond or other project costs due to any increase that does not increase the net amount of the Total Contract Price or the net amount of a Major Work Item by a net amount of more than twenty-five percent (25%). If the cumulative or aggregate amount of the Total Contract Price or the net amount of a Major Work Item changes (either increases or decreases) by a net amount in excess of twenty-five percent (25%), then the Owner and Contractor shall mutually agree upon an increase or decrease in the unit price of the item. In the event the CM and Contractor are unable to agree upon the unit price adjustment, the Owner may issue a FD consistent with this agreement or terminate the Contract with respect to the disputed items and perform the work through separate contractors or the Owner's own forces. A Major Work Item constitutes a Work Item which represents twenty percent (20%) or more of the Total Contract Price.

For all CA's and FD's, except those based upon established unit prices, regardless of the method used to determine the adjustment of the Total Contract Price, the mark-up for overhead and profit on allowable costs which the Contractor and Subcontractors shall receive is provided in General Provisions Section 90.

- **B. Contract Amendment.** A CA is a written contract modification signed by the Owner and Contractor stating their agreement upon the following:
  - A Change in the Work.
  - 2) The amount of the adjustment in the total contract price if any.
  - 3) The amount of the adjustment in the contract time if any.
- **C. Field Directive.** A FD is a written order prepared and signed by the Owner directing a change in the Work prior to agreement of adjustment, if any, in the Total Contract Price or Contract Time, or both. A FD may also be issued to expedite a change in work as to not hinder job progress. The Owner may, by FD, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Total Contract Price or Contract Time being adjusted accordingly.

An FD shall be used when time does not allow the preparation of adequate documentation, when there is disagreement between the Owner and Contractor related to the changes in work. An FD shall be issued by the Owner in the absence of agreement on the terms of a CA. All work directed by the Owner through the issuance of an FD shall be accomplished promptly by the Contractor. The Owner may pay the Contractor for any work performed to the satisfaction of the Owner, at the sole discretion of the Owner. If an FD is agreed to by the Contractor, the corresponding back-up and justification shall be converted into a CA and executed by both parties. If an FD is not agreed to by the Contractor, the CM shall work with

the Contractor to reach agreement on dollars, time and scope and then subsequently provide documentation to convert the FD into a CA and executed by both parties. If the CM and Contractor cannot come to agreement on the dollars, time or scope of the work performed, the amount of the FD not satisfactory performed and paid by the Owner will be considered a disputed item to be resolved in accordance with the provisions of this contract.

**END OF SPECIAL CONDITIONS - SECTION 3** 

### **SECTION 4**

### ADMINISTRATION OF THE CONTRACT

### 1. ROLE OF THE ARCHITECT/ENGINEER (A/E)

- **A.** The A/E is the person or entity lawfully licensed in North Carolina to practice architecture/engineering and is referred to throughout the Contract Documents as if singular in number. The term A/E means the Architect's/Engineer's authorized representative. The A/E shall serve as the architect/engineer of record for the Project and will sign and seal the Project Drawings.
- **B.** The A/E will visit the Project at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the A/E will not be required to make exhaustive or continuous onsite inspections to check quality or quantity of the Work.
- **C.** The A/E will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The A/E's action will be taken with such reasonable promptness as to avoid or minimize delay in the Work of the Contractor or in the activities of the Owner or the CM, while allowing sufficient time in the A/E's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The A/E's review of the Contractor's submittals shall not relieve the Contractor of the obligations herein. The A/E's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the A/E, of any construction means, methods, techniques, sequences or procedures. The A/E's review of and action concerning a specific item shall not indicate approval of an assembly of which the item is a component.

### 2. ROLE OF THE CONSTRUCTION MANAGER (CM)

- **A.** The CM shall provide full-time administration of the Contract as described in the Contract Documents and shall provide for a full-time resident project representative (RPR) to observe the performance of the Work of the Contractor and who will act as the Owner's representative agent on-site.
- **B.** Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall communicate through the CM. However, the Owner and the Contractor are not precluded from direct communications. The Contractor shall copy the CM with all communications between the Owner and the Contractor if such direct communication occurs. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the CM.
- **C.** The CM will review and certify all Applications for Payment by the Contractor, including final payment.
- **D.** The CM is authorized to reject Work which does not conform to the Contract Documents. Whenever the CM considers it necessary or advisable for implementation of the intent of the Contract Documents, the CM is authorized to require additional inspection or testing of the Work, whether or not such Work is fabricated, installed or completed. However, neither the CM's authority to act under these

articles, nor a decision made by the CM in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the CM to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons performing any of the Work. The CM also has the authority to issue Notices of Noncompliance.

- **E.** The CM will receive from the Contractor and arrange for the review or approval of all Shop Drawings, Product Data and Samples, coordinate them with information received from separate contractors, if applicable, and transmit to the A/E those recommended for approval. The CM's actions will be taken with such reasonable promptness as to avoid or minimize delay in the Work or in the activities of separate contractors, the Owner, or the A/E.
- **F.** The CM will prepare Contract Amendments and Field Directives and will have authority to issue minor changes in the Work.
- **G.** The CM is the final interpreter of the technical requirements and intent of the Contract Documents and, to the extent the CM deems necessary, may consult with the A/E regarding such intent. The CM, within a reasonable period of time after receipt of a written request therefor, shall render such interpretations to the Contractor with respect to the Drawings and Specifications which the CM or A/E deem necessary for the proper execution and progress of the Work. Interpretations and decisions of the CM will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings.
- **H.** The CM will provide for coordination of the activities of separate contractors under contract with the Owner and the Owner's own forces with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with Owner's separate contractors, the CM and Owner in reviewing their respective construction schedules when directed to do so. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement.
- **I.** The CM shall, at all times, have access to the Contractor's record copy of all Contracts, Drawings, Specifications, addenda, Contract Amendments, Field Directives, approved Shop Drawings, Product Data, Samples and similar required submittals which Contractor shall maintain.
- **J.** The CM, in conjunction with the A/E, Owner, and the Contractor, will conduct inspections to determine the date or dates of Substantial Completion and the date of Final Completion, will receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract Documents and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of the Contract Documents. Receipt by the CM or Owner of warranties and related documents which vary from the requirements of the Contract Documents shall not be deemed acceptance of a modification to the Contract Documents or a waiver of any requirement of the Contract Documents.
- **K.** Neither the CM nor the A/E will have control over, charge of or be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and neither will be responsible to the Contractor for the Contractor's failure to carry out the Work in accordance with the Contract Documents. Neither the CM nor the A/E will have control over or charge of or be responsible to the Contractor for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

# 3. ROLE OF THE RESIDENT PROJECT REPRESENTATIVE (RPR)

**A.** The RPR is an individual furnished by the CM to provide on-site observations of the work in progress and field checks of materials and equipment and act as the Owner's representative on-site. The RPR shall endeavor to provide protection for the Owner against defects and deficiencies in the work; but, the furnishing of such services will not make the RPR responsible for or give the RPR control over construction means, methods, techniques, sequences or procedures or for safety precautions or

programs, or responsibility for the Contractor's failure to perform the work in accordance with the Contract Documents.

- **B.** The RPR will attend conferences and meetings with the Contractor and Owner, such as preconstruction conferences, weekly progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
- **C.** The RPR will review the progress schedule, schedule of shop drawing, product data and samples submittals and schedule of values prepared by the Contractor and consult with the CM concerning acceptability.
- **D.** The RPR will serve as the CM's liaison with the Contractor, working principally through the Contractor's superintendent and assist in understanding the intent of the Contract Documents; and assist the CM in serving as the Owner's liaison with the Contractor when the Contractor's operations affect the Owner's on-site operations.
- **E.** The RPR will assist in obtaining from the Owner additional details or information, when required for proper execution of the Work.
- **F.** The RPR will advise the CM and the Contractor of the commencement of any work requiring a shop drawing, product data or sample if the submittal has not been approved by the CM and A/E.
- **G.** The RPR will conduct on-site observations of the work in progress to assist the Owner and CM in determining if the work is in general proceeding in accordance with the Contract Documents.
- **H.** The RPR will report to the Owner and CM whenever the RPR believes that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise the Owner and CM of work that the RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
- **I.** The RPR will verify that tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that the Contractor maintains adequate records thereof; and observe, record and report to the Owner and CM appropriate details relative to the test procedures and startups.
- **J.** The RPR will accompany visiting inspectors representing public or other agencies having jurisdiction over the work, record the results of those inspections and report to the Owner and CM.
- **K.** The RPR will report to the CM when clarifications and interpretations of the Contract Documents are needed and transmit to the Contractor clarifications and interpretations as issued by the CM, Owner or A/E.
- **L.** The RPR will consider and evaluate the Contractor's suggestions for modifications in drawings or specifications and report the suggestions along with the RPR's recommendations to the Owner and CM. Transmit to the Contractor decisions as issued by the CM, Owner or A/E.
- **M.** The RPR will maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings, product data and samples, reproductions of original Contract Documents including all work directive changes, addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Contract, clarifications and interpretations of the Contract Documents, progress reports, and other work related documents.
- **N.** The RPR will keep a diary or log book, recording the Contractor hours on the job site, weather conditions, data relative to questions of work field orders, change orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures.

- **O.** The RPR will furnish daily progress reports of progress of the work and of the Contractor's compliance with the progress schedule and schedule of shop drawing, product data and sample submittals.
- **P.** The RPR will consult with the Owner and CM in advance of scheduled major tests, inspections or start of important phases of the work.
- **Q.** The RPR will draft proposed change orders and field orders, obtaining backup material from the Contractor and recommend to the Owner and CM change orders and field orders.
  - R. The RPR will report immediately to the CM and the Owner the occurrence of any accident.
- **S.** The RPR will review applications for payment with the Contractor for compliance with the established procedure for their submission and forward with recommendations to the CM and Owner, noting particularly the relationship of the payment requested to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the Work.
- **T.** The RPR will verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by the Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to the CM for review and forwarding to the Owner prior to final payment for the work.
- **U.** The RPR will submit to the Contractor a punch list of observed items requiring completion or correction before the CM issues a Certificate of Substantial Completion.
- **V.** The RPR will conduct a final inspection in the company of the CM and the Owner and the Contractor and prepare a final punch list of items to be completed or corrected.
- **W.** The RPR will observe that all items on the final punch list have been completed or corrected and make recommendations to the CM and Owner concerning acceptance.
  - **X.** Limitations of the authority of the RPR include:
    - (1). The RPR shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by the Owner.
    - (2). The RPR shall not exceed the limitations of the CM's authority as set forth in the Contract Documents.
    - **(3).** The RPR shall not undertake any of the responsibilities of the Contractor, subcontractors or the Contractor's superintendent.
    - **(4).** The RPR shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
    - **(5).** The RPR shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the work.
    - **(6).** The RPR shall not accept shop drawing, product data or sample submittals from anyone other than the Contractor.
    - (7). The RPR shall not authorize the Owner to occupy the work in whole or in part.

**(8).** The RPR shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by the Owner.

**END OF SPECIAL CONDITIONS - SECTION 4** 

### **SECTION 5**

### CONTRACTOR BADGING REQUIREMENTS

- 1) Contractor is required to provide ID badges printed on durable plastic for all employees who will be working on the construction site.
- 2) Layout and Picture ID for the badges must be approved by the Airport, which must include the minimum of: First & Last Name of individual; Company name; Picture of individual; and a Large "C" to indicate the badge was issued by the Contractor.
- 3) All workers will be required to wear badges in plain view at all times while on the construction site.
- 4) A Minimum of 5 Supervisors and/or Foreman will need to obtain an Airport Security Identification Display Area (SIDA) badge issued by the Greater Asheville Regional Airport Authority. The Contractor shall be responsible for a badging fee of \$67/badge.
- 5) No background check will be necessary for Contractor provided badges.
- 6) Background checks will be required for any SIDA badge issued by the Airport and take approximately 2-3 weeks.
- 7) Contractor will provide an updated list of all employees who are badged and working on the project site weekly <u>or</u> if any changes occur, with the changes identified clearly to the AOR. Each list must have the date of issuance on the top right. This list will be provided to the Operations Department.

### Examples:

- a. If an individual is removed from working at the job site, the list would identify that person by crossing a line through his/her name and listing the new individual (replacement) next to that spot to clearly identify the change.

  James Smith replacement: Claire Smith
- b. If an individual is removed or is no longer working on the job site without a replacement, a line will be placed through their name as shown in A). James Smith
- c. When an individual is "added" without being a replacement, this word should be noted next to their name. Claire Smith Added
- d. If no changes have occurred from one week to the next, the words "No Changes" should be posted on the top of the list near the date of issuance.
- 8) Regardless of what badge is issued, either SIDA or Contractor badge, <u>ALL workers</u> assigned to the construction site will be formally trained for procedures on working around an active airport. Training takes approximately 4 hours.

### **SECTION 6**

### CONTRACTOR CROSSING GUARD PERSONNEL REQUIREMENTS

Contractor shall provide qualified, Airport-approved personnel to serve as authorized crossing guards as depicted on the Taxiway Closure and Crossing Plans found in the contract plans. Crossing guards shall be solely responsible for ensuring Contractor equipment and personnel remain clear of aircraft operations, coordinating with Air Traffic Control as necessary.

- 1) Contractor crossing guard personnel shall meet the following minimum requirements:
  - a. Contractor crossing guards shall have a criminal record clear of felonies or misdemeanors. Each contractor crossing guard shall be required to obtain and maintain an Airport Security Identification Display Area (SIDA) badge issued by the Greater Asheville Regional Airport Authority, as described in Section 5 of these special conditions.
  - b. Each contractor crossing guard shall be at least 25 years old, fluent in English, and possess a high school diploma or GED equivalent. Contractor shall submit names and resumes for each contractor crossing guard to the AOR for review and approval.
  - c. Contractor crossing guards shall successfully complete specialized training administered by the Airport and air traffic control personnel. The Airport reserves the right to dismiss any crossing guard applicant during the training process. Successful completion of training will require each crossing guard to demonstrate knowledge and proficiency to the satisfaction of the Airport in the following areas:
    - i. Air traffic control procedures
    - ii. Radio communication procedures, phraseology
    - iii. Effective verbal communication in English
    - iv. Aircraft movement patterns
    - v. Pavement inspection and cleaning procedures
    - vi. Airport emergency procedures
  - d. Each crossing guard shall be equipped with the following:
    - i. Two-way handheld VHF aviation radio: Icom IC-A14 or approved equal. Radios shall feature a low battery indicator, programmable memory, keylock, and an internal speaker sufficient for audible reception in the construction environment. All radios shall be fully charged nightly before use.
    - ii. Cellular phone. Each crossing guard shall carry a cellular phone to allow communication with the AOR, Airport, and other contractor personnel. Each crossing guard shall have stored in their cellular phones the following numbers:
      - 1. AVL Air Traffic Control Tower
      - 2. Airport Operations
      - 3. Department of Public Safety (DPS)
      - 4. Airport Owner's Representative (AOR)
      - 5. Contractor CSSO
      - 6. Contractor Superintendent
      - 7. All subcontractors working within the safety area

Contractor shall provide and maintain a list of crossing guard names, cellular phone numbers, and taxiway crossing assignments for use by the Airport and AOR. The contractor shall immediately notify the Airport and AOR of any

- changes in taxiway crossing assignments or phone numbers of the approved taxiway crossing guards.
- Safety vest. Each crossing guard shall wear a brightly colored OSHA-approved safety vest for enhanced visibility by hauling vehicles, construction equipment, and aircraft.
- iv. Flash light and shovel. Each crossing guard shall possess an operable flash light during times of low visibility or night-time operations.
- v. Any other equipment required by the Airport for crossing guards to effectively maintain control of vehicles, equipment, and personnel crossing the active taxiway environment and ensure no foreign object debris (FOD) is left on active airfield pavement. All equipment and personal items used by the Contractor and crossing guards shall be approved by the Airport.
- 2) The Airport reserves the right to terminate contractor crossing guards at any time and for any reason, including but not limited to:
  - Failure to properly coordinate contractor vehicles crossing the active taxiway
  - b. Failure to carry, maintain, or operate equipment as required by this section
  - c. Any incident that endangers the safety and security of the runway and taxiway environment or indicates inadequate proficiency in the areas listed in item (3) of this section.

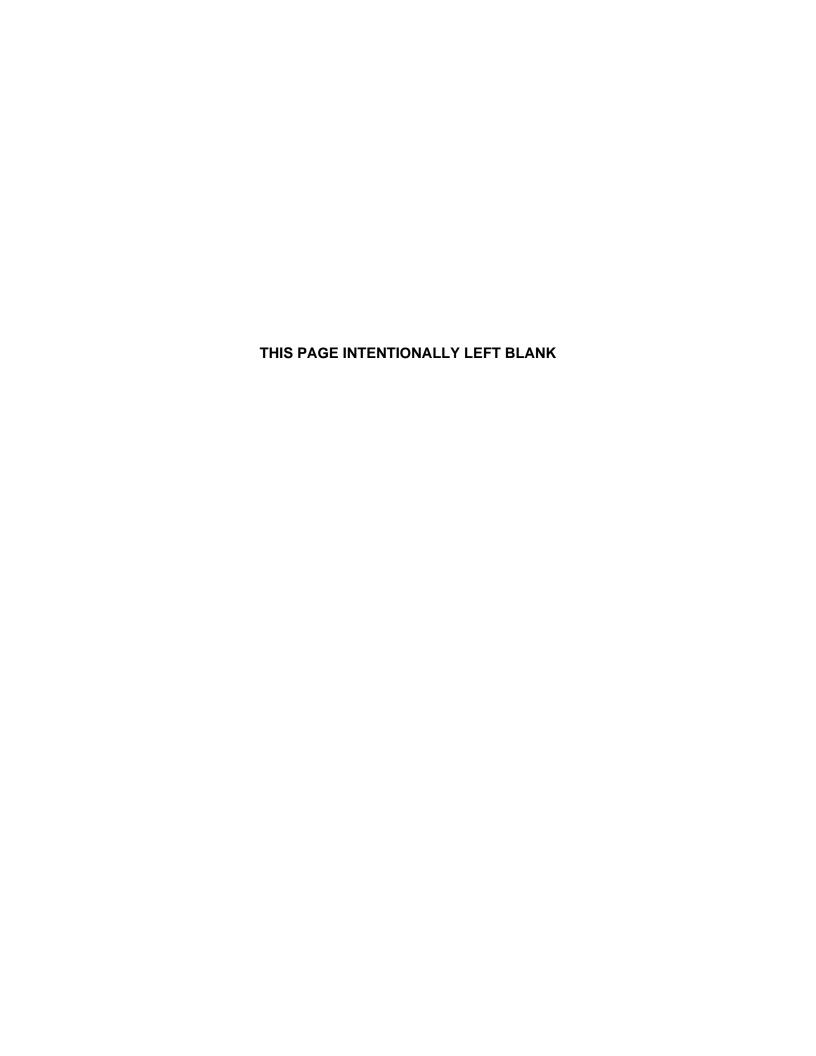
Upon the Airport's termination of a contractor crossing guard, the Contractor shall immediately suspend all construction operations within the airport operating environment until all contractor crossing guards successfully complete additional recurrent training to the satisfaction of the Airport.

3) The Contractor is entirely responsible for all damages incurred to the Airport, airlines, airport users, and airport tenants as a result of negligence by the crossing guards. These damages may include but not be limited to damage to aircraft, airport vehicles, airfield lighting, airfield signage, pavement, NAVAIDs, and fines by agencies.

# **SECTION 7**

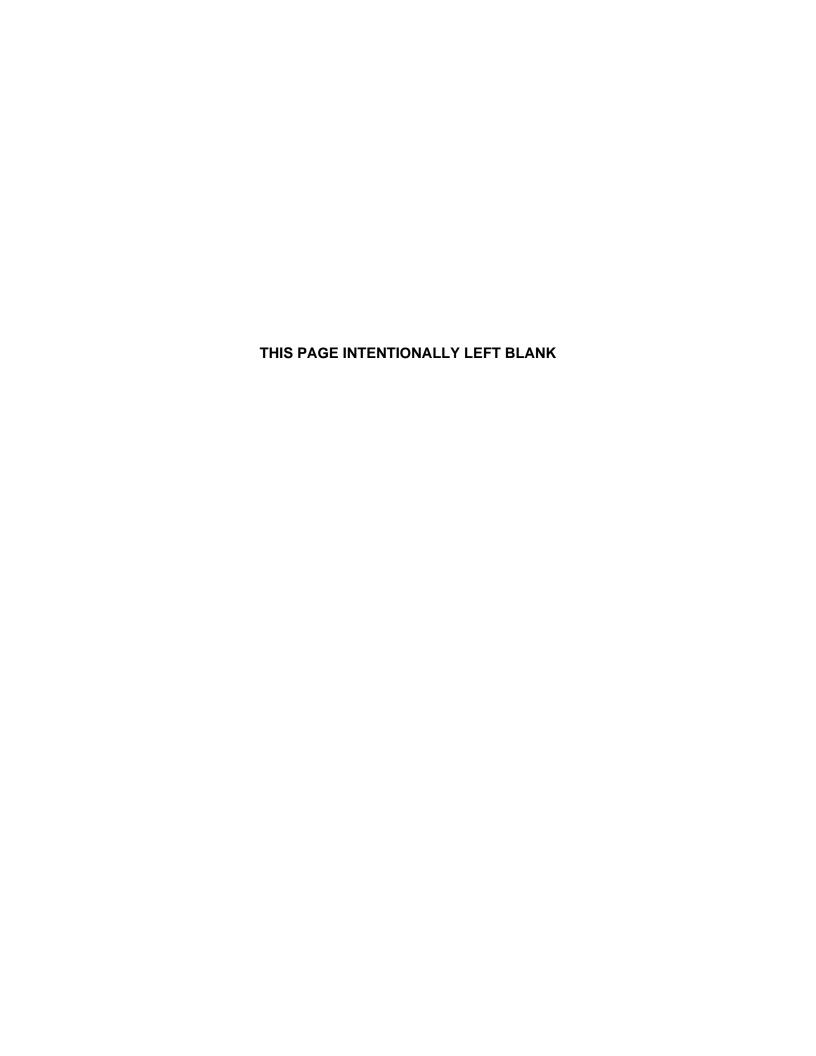
# SALES, USE TAX, AND SUBCONTRACTOR REPORTING FORMS

1.	GENERAL.	The following	sales and u	se tax a	affidavits	and su	ubcontractor	reporting t	forms are	required
to	be submitted	with the Contr	actor's pay a	applicati	ions:					



# STATE OF NORTH CAROLINA COUNTY SALES AND USE TAX REPORT SUMMARY TOTALS AND CERTIFICATION

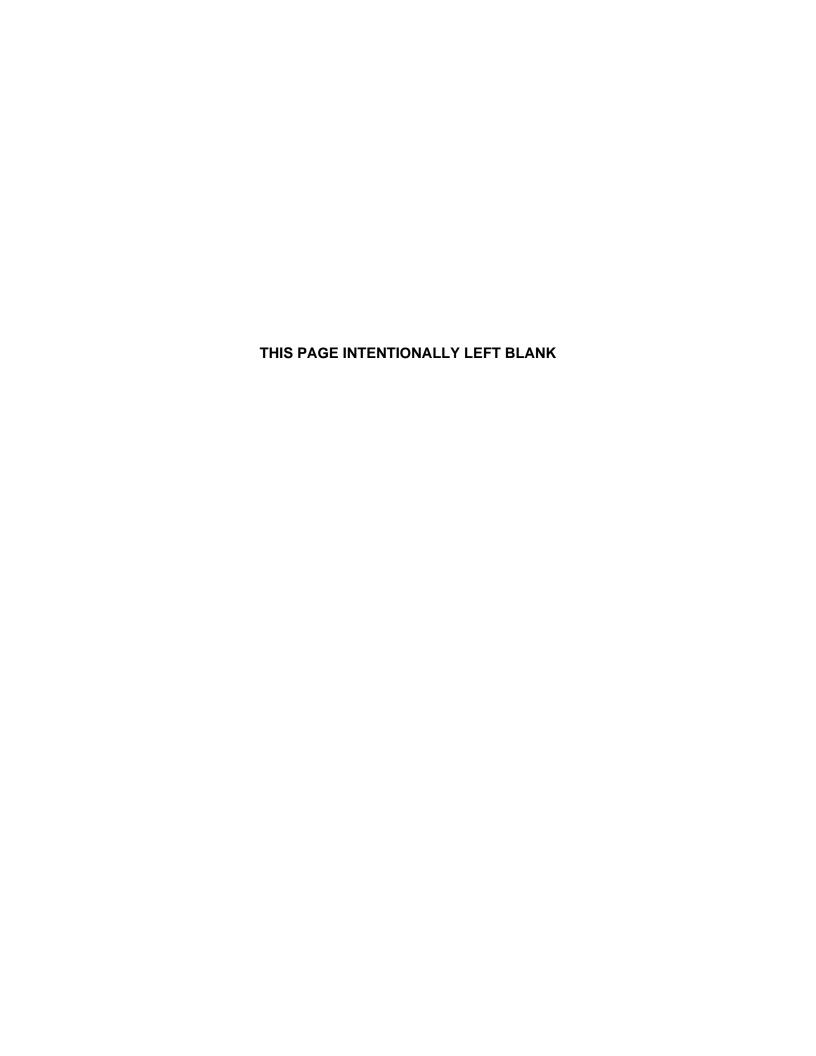
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CONTRACTOR							
SUBCONTRACTOR(S)*							
COUNTY TOTAL							
* Attach subcontractor(s) report(s) ** Must balance with Detail Sheet(s)	s) report(s) stail Sheet(s)						
I certify that the above figures do not include any tax paid on supplies, tools and equipment which were used to perform this contract and only includes those building materials, supplies, fixtures and equipment which actually became a part of or annexed to the building or structure. I certify that, to the best of my knowledge, the information provided here is true, correct, and complete.	igures do not i building mate at, to the best	nclude any tax rials, supplies, of my knowledo	paid on supplic fixtures and eq ge, the informat	es, tools and equipment which a significant which a significant provided he	uipment which vactually became re is true, corre	pment which were used to perf tually became a part of or anno- s is true, correct, and complete.	form this contract nexed to the building
Sworn to and subscribed before me,	d before me,						
This the day of		_, 20				Signed	
Nota	Notary Public		·				
My Commission Expires:	99				Print or Typ	Print or Type Name of Above	Õ
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# STATE OF NORTH CAROLINA SALES AND USE TAX REPORT DETAIL

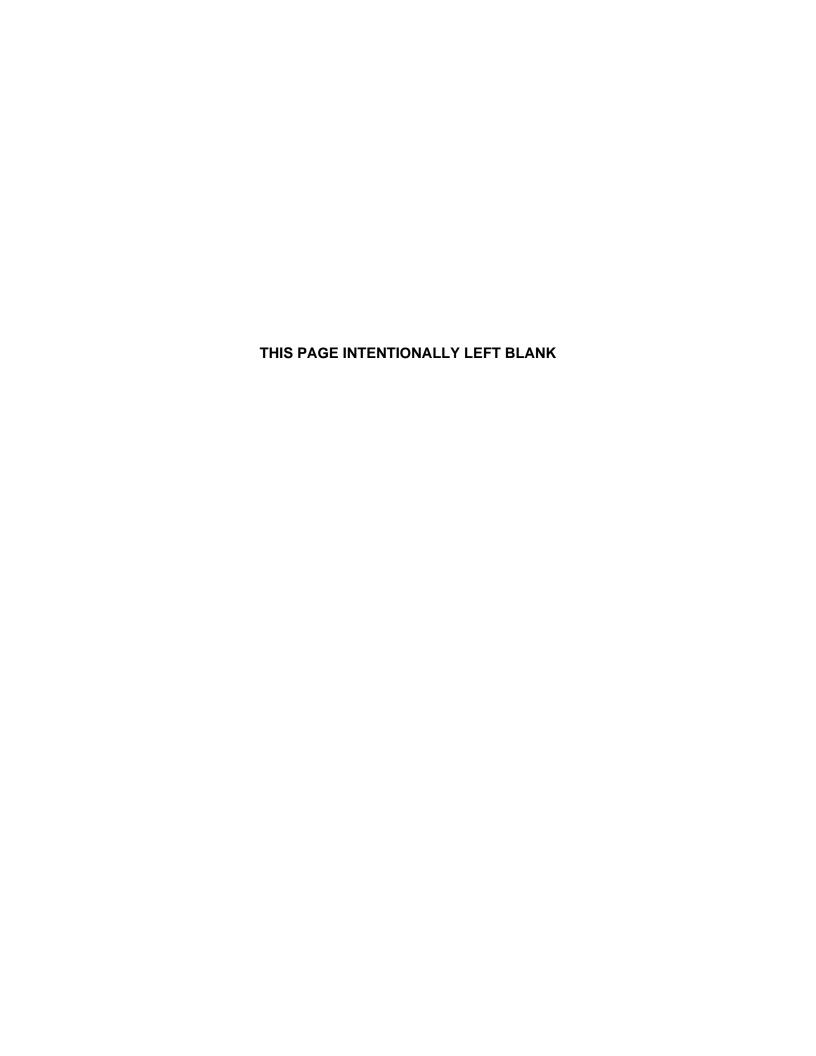
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				TOTAL:	S	

<sup>\*</sup> If this is an out-of-state vendor, the County of Sale should be the county to which the merchandise was shipped.

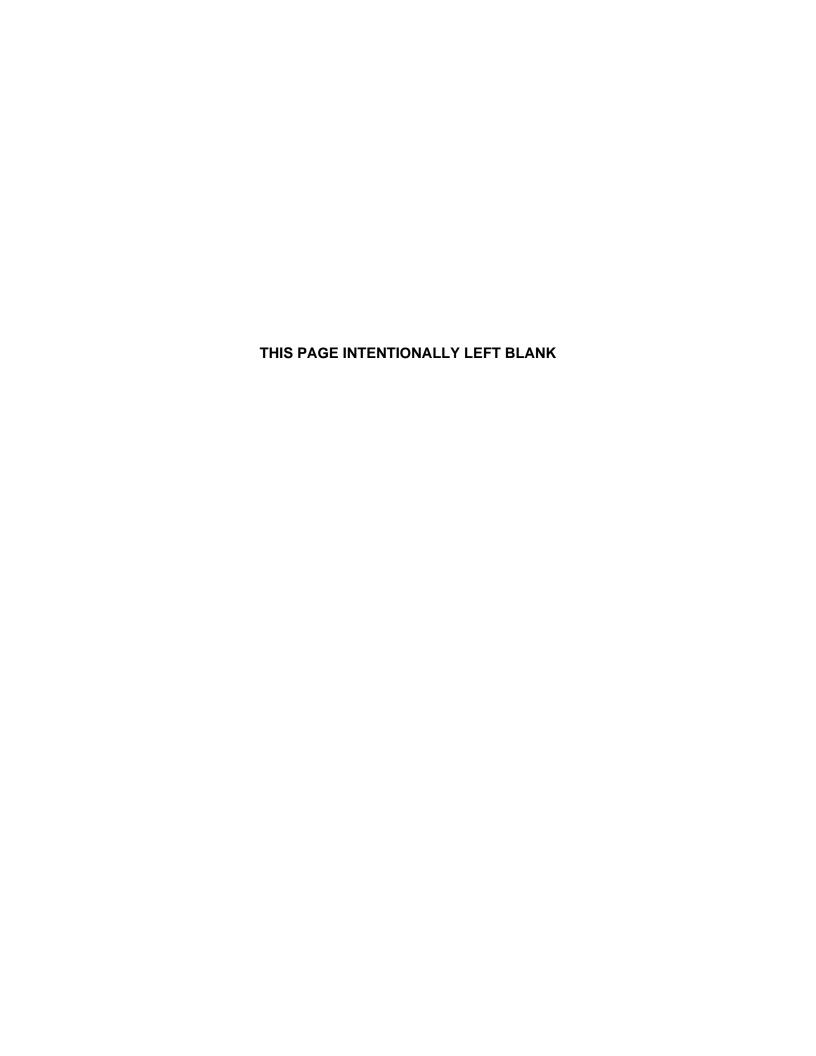


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		e:   	Notary Public Signature:	Notar			
				20		s day of	worn and subscribed before me, this
	(Seal)					Title:	reparer's Signature:
further	is contract and turers count 10	services under the 0% and Manufact	and performed work/services under this contract and further DBE is Supplier count 60% and Manufacturers count 100%.	eactually employed and passective efforts. If DBE is	າpanies were າt for their re	eclares that the above listed com has been paid the stated amour	he undersigned herby affirms and declares that the above listed companies were actually employed and performed work/services under this contract and furt hat each listed company earned and has been paid the stated amount for their respective efforts. If DBE is Supplier count 60% and Manufacturers count 100%.
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employed. THIS FORM MUST BE COMPLETED AND SUBMITTED WITH CONTRACTORS REQUEST FOR MONTHLY AND FINAL PAYMENT APPLICATIONS. \*\* \*\* Contractor shall attach a typewritten explaination of any differences in DBE participation, including any changes in DBE and Non-DBE Subcontractor companies







General Decision Number: NC160100 01/08/2016 NC100

Superseded General Decision Number: NC20150100

State: North Carolina

Construction Type: Highway

Counties: Alexander, Buncombe, Burke, Caldwell, Catawba, Haywood, Henderson and Madison Counties in North Carolina.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/08/2016

#### \* SUNC2014-002 11/13/2014

	Rates	Fringes
BLASTER	\$ 20.93	
CARPENTER	\$ 13.48	
CEMENT MASON/CONCRETE FINISHER	\$ 14.40	
ELECTRICIAN  Electrician		2.62 1.67
IRONWORKER	\$ 12.48	
LABORER  Asphalt Raker and Spreader  Asphalt Screed/Jackman  Carpenter Tender	\$ 15.38	.08

Cement Mason/Concrete Finisher Tender\$ Common or General\$ Guardrail/Fence Installer\$ Pipelayer\$ Traffic Signal/Lighting Installer\$	11.90 13.09 12.87	. 22
PAINTER	00.65	
Bridge\$	20.67	
POWER EQUIPMENT OPERATOR  Asphalt Broom Tractor\$  Bulldozer Fine\$  Bulldozer Rough\$  Concrete Grinder/Groover\$  Crane Boom Trucks\$  Crane Other\$  Crane Rough/All-Terrain\$  Drill Operator Rock\$  Drill Operator Structure\$  Excavator Fine\$  Excavator Rough\$  Grader/Blade Fine\$  Grader/Blade Rough\$  Loader 2 Cubic Yards or  Less\$  Loader Greater Than 2  Cubic Yards\$  Material Transfer Vehicle  (Shuttle Buggy)\$  Mechanic\$  Milling Machine\$  Off-Road Hauler/Water  Tanker\$  Oiler/Greaser\$  Pavement Marking Equipment.\$  Paver Asphalt\$  Paver Concrete\$  Roller Asphalt Breakdown\$  Roller Asphalt Finish\$	16.28 14.51 19.20 18.19 18.69 19.19 15.00 21.07 16.02 14.67 19.86 15.12  12.38  17.91  15.44 17.86 15.08  11.95 15.05 11.99 17.84 18.20 15.00	.08
Roller Other\$  Scraper Finish\$	12.51	.03
Scraper Rough\$  Slip Form Machine\$  Tack Truck/Distributor  Operator\$	13.83 20.38	.02
TRUCK DRIVER  GVWR of 26,000 Lbs or		
Greater\$	13.65	
GVWR of 26,000 or Less\$		

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

\_\_\_\_\_

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the

wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

-----

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

\_\_\_\_\_\_

END OF GENERAL DECISION

General Decision Number: NC150079 01/02/2015 NC79

General Decision Number: NC160079 01/08/2016 NC79

Superseded General Decision Number: NC20150079

State: North Carolina

Construction Type: Heavy

Counties: Buncombe, Haywood, Henderson and Madison Counties

in North Carolina.

#### HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/08/2016

SUNC2011-060 08/26/2011

	Rates	Fringes
CARPENTER, Includes Form Work	\$ 13.98	0.69
ELECTRICIAN	\$ 15.41	3.13
LABORER: Common or General	\$ 11.30	1.53
LABORER: Pipelayer	\$ 12.73	2.50
OPERATOR: Backhoe/Excavator/Trackhoe	\$ 15.98	2.28
OPERATOR: Bulldozer	\$ 16.00	2.48
OPERATOR: Loader	\$ 15.00	2.67
TRUCK DRIVER		1.36

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

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\_\_\_\_\_\_

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3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

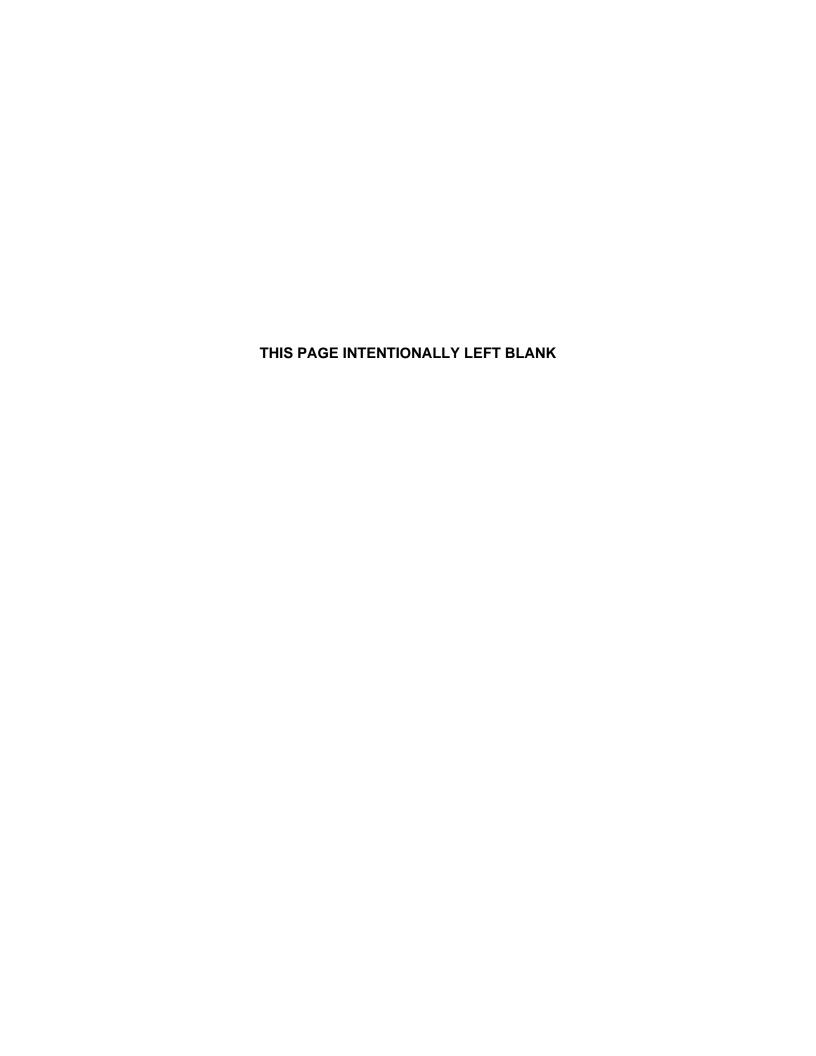
Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

\_\_\_\_\_\_

END OF GENERAL DECISION





# **ASHEVILLE REGIONAL AIRPORT**

FLETCHER, NORTH CAROLINA

CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)

PERMANENT RUNWAY 17 – 35 CONSTRUCTION BID PACKAGE 4 – PAVING, LIGHTING AND NAVAIDS

**FAA AIP Project No.:** 

**AVCON Project No.: 2014.157.01** 



Client: GREATER ASHEVILLE REGIONAL AIRPORT AUTHORITY

Prepared by:
AVCON, Inc.
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Decemeber 2016

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# CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) ASHEVILLE REGIONAL AIRPORT RUNWAY 17-35 BID PACKAGE 4 – PAVING, LIGHTING AND NAVAIDS

# **SECTION 1 - INTRODUCTION**

#### 101. GENERAL

The Asheville Regional Airport is progressing with the design and construction of a new permanent runway in order to increase the separation distance between the runway and Taxiway A, as well as to reconstruct the pavement itself. The overall intent of the project is to meet separation requirements for FAA Airplane Design Group IV (ADG-IV), Aircraft Approach Category (AAC) C and Taxiway Design Group V (TDG-V) as outlined by FAA Advisory Circular 150/5300-13A.

As part of new runway construction, a Temporary Runway will be in operation while the existing runway is being demolished and the permanent runway is constructed. Once the permanent runway is constructed, the Temporary Runway will be converted to a taxiway (Taxiway B) in order to pursue development along the western area of airport property.

The permanent runway construction has been broken into two bid packages. They are as follows:

Permanent Runway 17-35 – Bid Package 3 – Site Preparation and NAVAIDS (Bid Package 3) Permanent Runway 17-35 – Bid Package 4 – Paving and Lighting (Bid Package 4)

The Permanent Runway 17-35 – Bid Package 3 - Site Preparation and NAVAIDS was bid in February 2016 and is currently under construction. Bid Package 3 has a scope that includes demolition, excavation and embankment construction, grading, drainage, grass and concrete lined ditches, perimeter road relocation and construction, security fencing, re-vegetation (seeding and mulching), erosion and sediment control, stormwater detention, retaining wall and NAVAIDS.

The Permanent Runway 17-35 – Bid Package 4 – Paving and Lighting has a scope that includes excavation and embankment construction, grading, drainage, re-vegetation (seeding and mulching), erosion and sediment control, pavement and electrical demolition, site and drainage demolition, paving, stone, electrical installation, and NAVAIDs

For additional information on the project, reference the Project Definition Document for Airfield Re-Development Program completed by RS&H dated May, 2013 and Engineer Reports for BP-1, BP-2, and BP-3.

#### 102. SCOPE OF WORK

Grading, Excavation and embankment construction,

Re-vegetation (seeding/mulching), Drainage,

Erosion and sediment control, Pavement/Electrical demolition,

Site/drainage demolition Paving/CABC,
Electrical installation NAVAIDS
Fencing Marking
Detention Grooving

The limits of the project area are identified in Appendix A.

# SECTION 2 – CONSTRUCTION SAFETY AND PHASING PLAN

#### 201. OVERVIEW

Aviation safety is the primary consideration at airports, especially during construction. The airport operator's Construction Safety and Phasing Plan (CSPP) and the contractor's Safety Plan Compliance Document (SPCD) are the primary tools to ensure safety compliance when coordinating construction activities with airport operations. These documents identify all aspects of the construction project that pose a potential safety hazard to airport operations and outline respective mitigation procedures for each hazard. They must provide all information necessary for the Airport Operations department to conduct airfield inspections and expeditiously identify and correct unsafe conditions during construction. All aviation safety provisions included within the project drawings, contract specifications, and other related documents must also be reflected in the CSPP and SPCD.

# 202. ASSUME RESPONSIBILITY

Operational safety on the airport remains the airport operator's responsibility at all times. The airport operator must develop, certify, and submit for FAA approval each CSPP. It is the airport operator's responsibility to apply the requirements of the FAA approved CSPP. The airport operator must revise the CSPP when conditions warrant changes and must submit the revised CSPP to the FAA for approval. The airport operator must also require and approve a SPCD from the project contractor.

#### 203. SUBMIT THE CSPP

Construction Safety and Phasing Plans should be developed concurrently with the project design. Milestone versions of the CSPP should be submitted for review and approval as follows. While these milestones are not mandatory, early submission will help to avoid delays. Submittals are preferred in 8.5 x 11 in or 11 x 17 in format for compatibility with the FAA's Obstruction Evaluation / Airport Airspace Analysis (OE / AAA) process.

**A. Submit an Outline/Draft.** By the time approximately 25% to 30% of the project design is completed, the principal elements of the CSPP should be established. Airport operators are encouraged to submit an outline or draft, detailing all CSPP provisions developed to date, to the FAA for review at this Stage of the project design.

- **B.** Submit a Construction Safety and Phasing Plan (CSPP). The CSPP should be formally submitted for FAA approval when the project design is 80% to 90% complete. Since provisions in the CSPP will influence contract costs, it is important to obtain FAA approval in time to include all such provisions in the procurement contract.
- **C. Submit a Safety Plan Compliance Document (SPCD).** The contractor should submit the SPCD to the airport operator for approval to be issued prior to the Notice to Proceed.
- **D. Submit CSPP Revisions.** All revisions to the CSPP or SPCD should be submitted to the FAA for approval as soon as required changes are identified.

# 204. MEET CSPP REQUIREMENTS

- **A.** To the extent possible, the CSPP should address the items outlined in Section 204 "Meet CSPP Requirements" of the FAA AC 150/5370-2 "Operational Safety on Airports During Construction" (Latest Edition).
- B. The Safety Plan Compliance Document (SPCD) should include a general Statement by the construction contractor that he/she has read and will abide by the CSPP. In addition, the SPCD must include all supplemental information that could not be included in the CSPP prior to the contract award. The contractor Statement should include the name of the contractor, the title of the project CSPP, the approval date of the CSPP, and a reference to any supplemental information (that is, "I, Name of Contractor, have read the Title of Project CSPP, approved on Date, and will abide by it as written and with the following additions as noted:"). The supplemental information in the SPCD should be written to match the format of the CSPP indicating each subject by corresponding CSPP subject number and title. If no supplemental information is necessary for any specific subject, the Statement, "No supplemental information," should be written after the corresponding subject title. The SPCD should not duplicate information in the CSPP.

## 205. COORDINATION

Airport operators, or tenants conducting construction on their leased properties, should use predesign, pre-bid, and preconstruction conferences to introduce the subject of airport operational safety during construction (see AC 150/5300-9). The following should be coordinated as required:

#### A. PRE-DESIGN CONFERENCE/DESIGN REVIEW MEETINGS

A pre-design conference, in addition to design coordination and review meetings, has been held at AVL. In attendance were representatives from Greater Asheville Regional Airport Authority (GARAA), AVL, FAA, RS&H, Michael Baker Engineering, Inc., and AVCON, Inc. (AVCON). These meetings were used to discuss various items relating to design parameters, airport safety, routing of aircraft and equipment, sequencing of construction

operations, environmental considerations, and any other requirements pertinent to the project. This pre-design conference and design review meeting were essential in identifying and outlining potential effects and/or conflicts to airport operations during construction.

### B. PRE-BID CONFERENCE

AVL, RS&H, and AVCON will conduct a pre-bid conference to help clarify and explain construction methods, construction schedule, procedures, and safety measures required by the contract. The meeting will be held prior to the bid opening date. This meeting is intended to review the project requirements, bid procedures, answer contractor questions and conduct a site visit if needed. The typical agenda items include the following:

- a. Scope of Work
- **b.** Phasing Requirements
- **c.** Safety Requirements (CSPP and SPCD)
- **d.** Construction Duration and Liquidated Damages
- e. Construction Means and Methods
- **f.** DBE Goals and Requirements
- g. Insurance and Contract Requirements

The Pre-bid Conference will cover relevant information concerning the contractor's requirements to conform to the CSPP and for developing and submitting an SPCD for review and approval. This will include both general and specific elements required in the SPCD. In addition, information on how the contractor shall format the document to illustrate their plans for compliance with those provisions detailed out within this CSPP will also be provided.

Any changes or modifications recommended during the conference will be included in an addendum to the bid documents. A copy will be furnished to each prospective bidder. Copies of the proceedings, containing all items discussed, including responses to questions, will be made available to each of the participants, upon request.

#### C. PRE-CONSTRUCTION CONFERENCE

A pre-construction conference will be held at AVL after the award of the contract but prior to issuance of the Notice to Proceed (NTP). The meeting will be held by AVL, RS&H, and AVCON and shall be used to discuss construction schedule, operational safety, testing, quality control, quality acceptance, security, safety, labor requirements, environmental factors, and other issues. This meeting, among all parties affected by the construction, should assist in a better understanding of potential problems and possible solutions for the course of the performance of this contract. At a minimum, required attendees will include GARAA, AVL, FAA, Airport Tenants (airlines), Program Manager, Project Manager, testing laboratory representative, prime contractor, project foreman, as well as the project foreman for each subcontractor employed by the prime contractor.

Airport Staff and/or Program Manager will prepare an agenda prior to the pre-construction conference. This will include but is not limited to:

- a. Scope of the Project
- **b.** Relationship between the Airport Owner Representative (AOR) and the Contractor.
- **c.** Contractors Security and Safety Officer (CSSO)
- **d.** Relationship between the FAA and the Airport.
- **e.** Identification of the contractor's superintendent and a discussion of his/her authority and responsibilities.
- **f.** Work required prior to NTP dates.
- g. NTP Date.
- **h.** Security Requirements.
- i. CSPP and SPCD.
- **j.** Schedule of work and the need to perform specific work at various times during the project; milestones.
- **k.** Runway Closures
- **l.** Marking and Lighting Requirements

#### D. CONTRACTOR PROGRESS MEETINGS

During construction, weekly or biweekly construction meetings shall be held to discuss work progress and to address current or potential security and safety concerns. These meetings may be adjusted as necessary for specific work items. Operational safety and security shall be a Standing agenda item for discussion during these weekly/daily construction progress meetings.

The attendees for the construction meetings should be AVL, RS&H, AVCON, the contractor, contractor's superintendent, subcontractors (as needed), materials testing representative, and impacted tenants (if any).

The Airport and/or Program Manager will prepare an agenda prior to the each construction meeting and the agenda will include but may not be limited to:

- **a.** Schedules (Work to Date and 2-4 Week Look Ahead)
- **b.** Safety and Security
- c. Submittals
- **d.** RFI's
- **e.** Change Orders
- f. Pay Requests

# E. SCOPE OR SCHEDULE CHANGES

Any changes in the scope or duration of the project may necessitate revisions to the CSPP and review and approval by AVL and the FAA. The Contractor shall revise all applicable

sections of the CSPP via the SPCD. All revisions shall be submitted to AVL and FAA for review and approval.

#### F. FAA ATO/ATCT COORDINATION

Coordination with FAA ATO has been made throughout the design to schedule airway facility shutdowns and restarts. Night runway closures and the removal of Runway 35 Glide Slope will require additional coordination and communication with the FAA ATO/ACTC as construction proceeds.

#### 206. PHASING

The sequence of construction and phasing for this project was developed to minimize the operational impact to the airport while maintaining safety and security and will be coordinated with the local airport personnel and airport users. The sequenced construction phases established in this CSPP have been incorporated into the project design and are reflected in the contract drawings and specifications.

- **A. Phase Elements.** The sequence of construction for this project has been phased in order to maintain aircraft operations at an acceptable level of efficiency at the airport for the duration of this contract and to accommodate an adjacent airport project's completion. General elements of this sequencing and phasing are as follows:
  - **a. Duration of closures -** The schedule for closure of the runway/taxiway and connectors is defined within the phasing notes and plans
  - **Taxi routes** Taxi routes for aircraft will be crossed during this project. Taxiway crossing shall be established with protocols established by the airport for implementation by the contractor.
  - c. ARFF access routes Emergency ARFF access in and around the construction site will be maintained by the contractor, as required, for the duration of this project. Construction contractors must prominently mark open trenches and excavations within the construction site, with approval from Airport Operations and Engineering, and light them with red lights during hours of restricted visibility or darkness.
  - d. Construction Staging areas Reference Appendix A for Staging area locations and general safety and security notes concerning use of the Staging areas. Construction Staging areas and contractor employee parking areas are to remain outside of all Object Free and Safety Areas for all active airfield surfaces.
  - e. Construction access and haul routes Reference Appendix A. Applicable control along contractor haul routes for both safety and security must be maintained at all times. This is critically important at those locations that require the contractor to

cross or move through active airfield surfaces. Reference Section 209b Vehicle and Pedestrian Operations, Section 219 Marking and Signs for Access Routes, and Section 221 Protection of Runway and Taxiway Safety Areas of this document for additional information.

- **f. Impacts to NAVAIDs** As part of this project, the NAVAID facilities for the airfield will be impacted. The Temporary Runway 35 Glide Slope shall be taken out of service in order to tune and flight check it to the Permanent Runway 35. Once the Permanent Runway 17-35 is commissioned, the Temporary Runway 35 Localizer shall be decommissioned. The Permanent Runway Glide Slopes, MALSR, and Localizers shall also be completed and commissioned as part of this project.
- **Lighting and marking changes** Lighting and marking changes for the airfield are required as part of this project. As the project progresses, the lighting and marking of connector taxiways will be changed. Once the 8,000 foot Permanent Runway 17-35 is commissioned, the 7,000 foot Temporary Runway 17-35 shall be remarked as a taxiway.
- **h. Available runway length** The available runway length shall change as part of this project. Once the 8,000 foot Permanent Runway 17-35 is commissioned, the 7,000 foot Temporary Runway 17-35 shall be closed.
- i. **Declared distances (if applicable)** No declared distances are required for this project.
- j. Required hazard marking and lighting Low profile barricades, closed runway markings, signs, lighting and/or safety flag details and usage requirements are provided in the attached exhibits, reference Appendix A. In addition, reference Section 219 Marking and Signs for Access Routes, Section 220 Hazard Marking and Lighting, and Section 221 Protection of Runway and Taxiway Safety Areas of this document for additional information.
- **k. Lead times for required notifications** The contractor is required to coordinate this with Airport Operations. Lead times for required notifications shall be established at the pre-construction meeting or as noted on the plans, minimum shall be 48 hours.

#### **OVERALL CONSTRUCTION PHASING NOTES:**

1. Contractor shall make himself proficient in the phasing of this project including the scopes of work for each phase, sequence of phasing, phase timing, and needs and requirements for day and night work for each phase. Contractor shall make himself aware of sediment and erosion control requirements for the project as they pertain to each phase of the project. The contractor shall complete the construction phasing in the order as outlined in the plans. Any requested deviations from the outlined sequence of phasing must be submitted, in writing, to the AOR. Any deviations to the construction phasing sequence is at the sole discretion of the owner and shall be done at no additional

- cost to the owner. The airport reserves the right to change the sequence of construction, during any phase of construction, for airport operational purposes, at no cost to the owner.
- 2. Phasing and completion of similar work across multiple phases are the responsibility of the contractor and shall be considered incidental to the project. This includes, but is not limited to, grading, drainage, sediment and erosion control, seeding, and mulching. Phasing of work shall be in accordance with the plans and specifications.
- 3. Access to the site is as shown on sheet G-07. All gates to the site shall be locked at all times or shall have contractor personnel stationed at each gate as a gate guard. Any use of the airport's perimeter road that causes damage to the road shall be repaired by the contractor at no cost to the owner.
- 4. This project will require runway closures to complete the project. The contractor, personnel, and equipment shall stay clear of Runway 17-35 and Runway 17-35 runway safety areas at all times unless runway is closed for construction. Runway 17-35 shall be kept clean of foreign object debris (FOD) and debris at all times. Prior to reopening the runway, the runway will be subject to a FOD check by the owner and/or AOR and the runway shall be swept and cleaned of all debris and/or FOD by the contractor as directed by the owner and/or AOR. Any delay in opening the runway, due to construction or FOD is subject to liquidated damages.
- 5. This project will require taxiway closures to complete the project. The contractor, personnel, and equipment shall stay clear of taxiways and taxiway object free areas at all times unless the taxiway is closed for construction. All taxiways shall be kept clean of FOD and debris at all times. Prior to reopening the taxiway, the taxiway will be subject to a FOD check by the owner and/or AOR and the runway shall be swept and cleaned of all debris and/or FOD by the contractor as directed by the owner and/or AOR.
- 6. The contractor shall make all provisions necessary to have all areas open to traffic and available for use by the airport or as required by the airport. Work by the contractor shall not impact owner operations beyond impacts presented in the plans and specifications.
- 7. The contractor shall maintain positive drainage and erosion and sediment control throughout the project between phases. This is the responsibility of the contractor. Any additional measures required for this shall be incidental to the project.
- 8. Use of the existing airport perimeter road shall be limited to deliveries only or as allowed by the owner or AOR. Any damage caused by the contractor to the perimeter road shall be repaired immediately at no cost to the owner.
- 9. Contractor shall coordinate work with applicable agencies such as NCDOT, Buncombe County, and NCDEQ. All coordination with agencies shall be incidental to the project.
- 10. The contractor shall make all provisions for working in the different phases of the project, including but not limited to, tying in between phases, maintaining positive drainage, drainage installation, sediment and erosion control, temporary slopes, and benching.
- 11. No work of any kind may be performed on any active FAA facilities, FAA cables, FAA manholes, or owner communication manholes during the time periods from November 14, 2017 through November 25, 2017 and from December 16, 2018 through January 2, 2108.

- 12. Areas within limits of disturbance not shown within a specific phase shall be completed as required by the needs of the project. Erosion and sediment control shall be maintained throughout the project.
- 13. Contractor shall have cable and pipe probe/locator on hand while working around existing and active cables during construction.
- 14. Contractor shall remove all equipment and vehicles from infield phases while no construction is being performed.
- 15. The contractor shall maintain the staging and storage area and install their construction trailer at the location shown on the plans prior to starting work. The contractor shall maintain the staging and storage area throughout the duration of the project. The contractor shall coordinate the maintenance of the staging and storage area with the AOR. At the end of the project, the staging and storage area shall be removed, included all stone, graded to a smooth grade and fully vegetated unless directed by the AOR.
- 16. The Permanent Runway 17-35 Construction Bid Package 4 Paving, Lighting, and NAVAIDS project is dividing into three volumes. The volumes described below:
  - a. Volume 1 General, Phasing, and Safety Requirements Volume 1 includes all project requirements related to general project notes, phasing and safety requirements, and notes and details. All work associated with Volume 2 and 3 shall confirm to the requirements of Volume 1. In requirements of Volume 1 shall govern over any requirements set forth in Volume 2 or 3.
  - b. Volume 2 Permanent Runway 17-35 Construction Volume 2 includes all work associated with opening the permanent runway and associated taxiways as required to meet the applicable chart date set forth by the project contract documents. The work shall including grading, drainage, stone, asphalt, concrete, lighting, signage, cabling, marking, grooving, erosion and sediment control, and seeding /mulching /matting /sodding.
  - c. Volume 3 Taxiway B Conversion and NAVAID installation Volume 3 includes all work associated with the conversion of temporary Runway 17-35 to Taxiway B, installation of Permanent Runway 17 and 35 glide slopes, and erosion and sediment control close out.
  - 17. The project shall be completed per the requirements of Volume 2 and Volume 3 of the Permanent Runway 17-35 Construction Bid Package 4 Paving, Lighting, and NAVAIDS project. Each individual volume of work shall have the following calendar days for completion:
    - a. Volume 2 276 consecutive calendar days
    - b. Volume 3 194 consecutive calendar days
  - 18. Each volume of work includes milestone dates and interim construction times for phases. The contractor shall make himself proficient in the contract time requirements of all work associated with Volume 2 and 3. Contractor to refer to specifications volume no. 1 contract and bid documents "FAA General Provisions Section 80 Prosecution and Progress" for more information on milestone dates and liquidated damages.
  - 19. Runway 17-35 will be allowed to close between the hours of 12:00 am and 5:30 pm. The owner reserves the right to change the opening and closure times of the runway. On the night of the

- switchover from the temporary runway to the permanent runway, the runway will be allowed to close between the hours of 10:00 pm and 6:00 am.
- 20. Contractor shall install barricades to close areas of the airfield as directed by the AOR. These barricades shall remain on site at all times for use on the project. The contractor shall place barricades as directed by the owner and AOR. The cost for maintaining existing barricades and placement and maintenance of barricades during the project shall be incidental to the project. The contractor shall have a minimum of 265 barricades onsite at all times. If applicable, contractor shall maintain water level in low profile barricades as required by AOR.
- 21. The owner has the right, but not the obligation, to allow closure of individual taxiways along the haul route as requested by the contractor.

# **VOLUME 2 - OVERALL CONSTRUCTION PHASING NOTES:**

- 1. The intent of Volume 2 of the project is to have the Permanent Runway 17-35 opened and active on December 7, 2017, which is the commissioning date for the permanent runway. For the permanent runway to be opened by that date, phases 4A, 4B, 4C, 4D, 4E, 4F, and 4H must be completed on or before September 5, 2017. Phase 4G, 4I, 4J, and 4K shall be completed prior to the commissioning date.
- 2. The contractor shall follow all commissioning procedures and requirements of the project documents in order to open the permanent runway. The contractor shall have sufficient staff to complete all work as required by the project documents.
- 3. Once the permanent runway has been commissioned and is open and active, Temporary Runway 17-35 shall be closed permanently. This work shall include placement of lighted and vinyl runway closure markers and placement of barricades at Taxiway B1, B2, B3, B4, and B5. Placement of barricades at taxiways will change depending upon phasing and what is constructed and removed
- 4. The contractor shall immediately start removing all marking associated with Temporary Runway 17-35 and as required by the plans once the Permanent Runway 17-35 has been commissioned.
- 5. The commissioning of Permanent Runway 17-35 shall mark the completion of the work associated with Volume 2 and the start of work associated with Volume 3.
- 6. Work in Volume 2 shall require flight checks by the FAA. The contractor will not be allowed access to the permanent runway, permanent runway safety area, or associated NAVAIDS during the flight check. The contractor shall coordinate all work around required flight checks.

### **VOLUME 3 - OVERALL CONSTRUCTION PHASING NOTES:**

- 1. The intent of Volume 3 of the project is to complete the remaining work associated with the program in a manner as to not impact operations on Permanent Runway 17-35.
- 2. All work and phases within Volume 3 can be completed concurrently, however, priority needs to be placed on the completion of the Runway 17 and 35 glide slope facilities. The Runway 17 glide slope must be completed and commissioned March 29, 2018. The Runway 35 glide slope must be completed and commissioned July 19, 2018.

3. Work in Volume 3 shall require flight checks by the FAA. The contractor will not be allowed access to the permanent runway, permanent runway safety area, or associated NAVAIDS during the flight check. The contractor shall coordinate all work around required flight checks.

# PHASE 4A – SOUTH RUNWAY (STA. 90+25 TO STA. 95+00), TAXIWAY A, A1, A1/B1, A2, TAXIWAY A SHOULDERS, AND BLAST PAD

Phase 4A shall consist of work on the south side of the airfield and shall include the section of the Permanent Runway (STA. 90+25 to STA. 95+00), Taxiways A1, A2, B1, Taxiway A Shoulders and the southern Blast Pad. The work shall consist of pavement removal, miscellaneous demolition, grading, drainage, stone, paving, marking, lighting, Runway 35 MALSR, signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4A throughout the duration of the project. Phase 4A requires work within the Temporary Runway 17-35 safety area and taxiway object free areas. The Contractor shall coordinate all runway and taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the Temporary Runway 17-35 safety area and taxiway object free areas shall be Subphase 4A1. Work inside the Temporary Runway 17-35 safety area shall be Subphase 4A2. Work within the taxiway object free areas shall be Subphase 4A3. The Contractor can also work in Subphase 4A1 while working in Subphase 4A2 and 4A3. Contractor shall remain clear of Temporary Runway 17-35 at all times and Taxiway A, and Taxiway B1 while they are open and active while working within Phase 4A.

See Appendix A for work limits during this phase.

# PHASE 4B – RUNWAY (STA. 77+25 TO STA. 90+25)

Phase 4B shall consist of work in the midfield area of the project and shall include the section of the Permanent Runway (STA. 77+25 to STA. 90+25). The work shall consist of grading, stone, paving, marking, lighting and signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4B throughout the duration of the project. Phase 4B requires work within the Temporary Runway 17-35 safety area. The Contractor shall coordinate all runway closures and times with the AOR and implement all required closure procedures. Work outside of the Temporary Runway 17-35 safety area shall be Subphase 4B1. Work inside the Temporary Runway 17-35 safety area shall be Subphase 4B2. The Contractor can also work in Subphase 4B1 while working in Subphase 4B2. Contractor shall remain clear of Temporary Runway 17-35 at all times and taxiway a while they are open and active while working within Phase 4B.

See Appendix A for work limits during this phase.

# PHASE 4C - RUNWAY (STA. 42+35 TO STA. 77+25), TAXIWAY A3, A4, B2 (ADDITIVE ALTERNATE BID ITEM), B3 AND TAXIWAY A SHOULDERS

Phase 4C shall consist of work in the midfield area of the project and shall include the section of the Permanent Runway (STA. 42+35 to STA. 77+25), Taxiways A3, A4, B2 (Additive Alternate Bid Item), B3, and Taxiway A shoulders. The work shall consist of grading, drainage, stone, paving, marking,

lighting and signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4C throughout the duration of the project. Phase 4C requires work within the Temporary Runway 17-35 safety area and taxiway object free areas. The Contractor shall coordinate all runway and taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the Temporary Runway 17-35 safety area and taxiway object free areas shall be Subphase 4C1. Work inside the Temporary Runway 17-35 safety area shall be Subphase 4C2. Work inside the taxiway object free area shall be Subphase 4C3. The Contractor can also work in Subphase 4C1 while working in Subphase 4C2 and 4C3. Contractor shall remain clear of Temporary Runway 17-35 at all times and taxiway a while they are open and active while working within Phase 4C.

See Appendix A for work limits during this phase.

# PHASE 4D – RUNWAY (STA. 32+25 TO STA. 42+35), TAXIWAY A5, B4 (ADDITIVE ALTERNATE BID ITEM), AND TAXIWAY A SHOULDERS

Phase 4D shall consist of work in the midfield area of the project and shall include the section of the Permanent Runway (STA. 32+25 to STA. 42+35), Taxiways A5, B4 (Additive Alternate Bid Item) and Taxiway A shoulders. The work shall consist of pavement removal, miscellaneous demolition, grading, drainage, stone, paving, marking, lighting and signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4D throughout the duration of the project. Phase 4D requires work within the Temporary Runway 17-35 safety area and taxiway object free areas. The Contractor shall coordinate all runway and taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the Temporary Runway 17-35 safety area and taxiway object free areas shall be Subphase 4D1. Work inside the Temporary Runway 17-35 safety area shall be Subphase 4D2. Work inside the taxiway object free areas shall be Subphase 4D3. The Contractor can also work in Subphase 4D1 while working in Subphase 4D2 and 4D3. Contractor shall remain clear of Temporary Runway 17-35 at all times and Taxiway A while they are open and active while working within Phase 4D.

See Appendix A for work limits during this phase.

# PHASE 4E - RUNWAY (STA. 28+75 TO STA. 32+25), TAXIWAY A6, AND TAXIWAY A SHOULDERS

Phase 4E shall consist of work in the midfield area of the project and shall include the section of the Permanent Runway (STA. 28+75 to STA. 32+25), Taxiway A6 and Taxiway A shoulders. The work shall consist of pavement removal, miscellaneous demolition, grading, drainage, stone, paving, marking, lighting and signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4E throughout the duration of the project. Phase 4E requires work within the Temporary Runway 17-35 safety area and taxiway object free areas. The Contractor shall coordinate all runway and taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the Temporary Runway 17-35 safety area and taxiway object free areas shall be Subphase 4E1. Work inside the Temporary Runway 17-35 safety area shall be Subphase 4E2. Work inside the taxiway object free areas shall be Subphase 4E3. The Contractor can also

work in Subphase 4E1 while working in Subphase 4E2 and 4E3. Contractor shall remain clear of Temporary Runway 17-35 at all times and Taxiways A, B5 while they are open and active while working within Phase 4E.

See Appendix A for work limits during this phase.

# PHASE 4F – NORTH RUNWAY (STA. 11+00 TO STA. 28+75)

Phase 4F shall consist of work on the north side of the airfield and shall include the section of the Permanent Runway (STA. 11+00 to STA. 28+75) and the northern blast pad. The work shall consist of grading, stone, paving, marking, lighting, Runway 17 MALSR, signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4F throughout the duration of the project. Phase 4F requires work within the Temporary Runway 17-35 safety area and taxiway object free areas. The Contractor shall coordinate all runway and taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the Temporary Runway 17-35 safety area and taxiway object free areas shall be Subphase 4F1. Work inside the Temporary Runway 17-35 safety area shall be Subphase 4F2. Work inside the taxiway object free areas shall be Subphase 4F3. The Contractor can also work in Subphase 4F1 while working in Subphase 4F2 and 4F3. Contractor shall remain clear of Temporary Runway 17-35 at all times and Taxiway A while they are open and active while working within Phase 4F.

See Appendix A for work limits during this phase.

# PHASE 4G – TAXIWAY A7, TAXIWAY A8, TAXIWAY A, AND TAXIWAY A SHOULDERS

Phase 4G shall consist of work on Taxiway A7, Taxiway A8, Taxiway A, and Taxiway A shoulders. The work shall consist of grading, drainage, stone, paving, marking, lighting and signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4G throughout the duration of the project. Contractor shall remain clear of Temporary Runway 17-35 at all times and Taxiway A while they are open and active while working within Phase 4G.

See Appendix A for work limits during this phase.

# PHASE 4H – FINAL PAVING LIFT FOR THE RUNWAY AND GROOVING

Phase 4H shall consist of the paving of the final lift of asphalt on Permanent Runway 17-35 (only if the asphalt runway base bid is chosen for construction), completion of TDZ and centerline lights, and marking. Phase 4H will be removed from the project if the concrete runway alternative is awarded and all work associated with Phase 4H will be incorporated into each individual phase. The work shall consist of paving, marking, grooving, and lighting. The Contractor shall be responsible for maintaining access through Phase 4H throughout the duration of the project. Phase 4H requires work within taxiway object free areas. The Contractor shall coordinate all taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the taxiway object free areas shall be Subphase 4H1. Work inside the taxiway object free area shall be Subphase 4H2. The Contractor can also work in Subphase 4H1 while working in Subphase 4H2. Contractor shall remain clear of Temporary Runway 17-

35 at all times and all taxiways while they are open and active while working within Phase 4H.

See Appendix A for work limits during this phase.

# <u>PHASE 4I – NAVAIDS, INFIELD ELECTRICAL CABLING, ELECTRICAL VAULT AND TOWER</u> WORK

Phase 4I shall consist of the work required to complete the MALSR and localizer systems, install infrastructure for the glide slope systems, install all infield electrical not specifically tied to a phase, and work required within the electrical vault and tower. The work shall consist of trenching, conduit, cabling, electrical, airfield lighting control system, electrical vault work, and infield electrical. Phase 4I requires work within runway safety areas and taxiway object free areas. Any work for Phase 4I requiring closure of the runway or taxiways shall be completed with the associated closures required for the other phases. The Contractor shall not be allowed to close the runway or taxiways specifically for the purpose of work for Phase 4I. The Contractor shall coordinate all runway and taxiway closures and times with the AOR and implement all required closure procedures.

See Appendix A for work limits during this phase.

### PHASE 4J – TAXIWAY H AND EAST SIDE TAXIWAY A SHOULDERS

Phase 4J shall consist of work on the Taxiway H and Taxiway A shoulders along the eastern edge of Taxiway A. The work shall consist of milling, miscellaneous demolition, grading, stone, paving, crack sealing and double surface treatment, marking, lighting and signage, sediment and erosion control, seeding/mulching/matting/sodding. The Contractor shall be responsible for maintaining access through Phase 4J throughout the duration of the project. Phase 4J requires work within taxiway object free areas. The Contractor shall coordinate all taxiway closures and times with the AOR and implement all required closure procedures. Work associated with Taxiway H shall be considered Subphase 4J1. Work inside the Taxiway A object free areas, while the taxiway is closed, shall be Subphase 4J2. The Contractor can also work in Subphase 4J1 while working in Subphase 4J2.

See Appendix A for work limits during this phase.

#### PHASE 4K – BORROW AREA

Phase 4K shall consist of work within the borrow area for the project as shown on plan sheet SP-32. The work shall include grading, excavation, sediment and erosion control, seeding, and mulching. All stock piled material shall be utilized to the greatest extent possible prior to excavation of onsite materials. The AOR shall direct the Contractor on the use of specific materials around the project site including the use of better materials under the footprint of the future runway.

See Appendix A for work limits during this phase.

#### PHASE 4L – TAXIWAY B CONVERSION

Phase 4L shall consist of all work associated with the conversion of the Temporary Runway 17-35 to Taxiway B. The work shall include removal of HIRL and installation of MITL, signage installation and removal, miscellaneous electrical and electrical removal, marking removal and marking of taxiway, and seal coat. Contractor shall be responsible for maintaining access through Phase 4L through the duration of the project. Phase 4L requires work within the Permanent Runway 17-35 safety area. The Contractor shall coordinate all runway closures and times with the AOR and implement all required closure procedures. Work outside of the Permanent Runway 17-35 safety shall be Subphase 4L1 and work inside the Permanent Runway 17-35 safety area shall be Subphase 4L2. The Contractor can also work in Subphase 4L1 while working in Subphase 4L2. Contractor shall remain clear of Permanent Runway 17-35 at all times while it is open and active while working within Phase 4L.

See Appendix A for work limits during this phase.

### PHASE 4M – GLIDE SLOPE AND NAVAIDS

Phase 4M shall consist of the remaining work required to complete the Permanent Runway 17 and 35 glide slopes, including relocation and installation of shelters, installation of Runway 17 glide slope, relocating Runway 35 glide slope, flight checks and commissioning, and minor grading. The infrastructure for the Permanent Runway 17 and 35 glide slopes shall be installed as part of Volume 2. The Contractor shall complete the installation of the Permanent Runway 17-35 glide slopes per the contract documents. Completion of Runway 17 glide slope shall be Subphase 4M1, relocation and completion of Runway 35 glide slope shall be Subphase 4M2. Unless otherwise directed by the Owner, the Runway 17 glide slope shall be completed and commissioned prior to the relocation of the Runway 35 glide slope prior to the installation of the Runway 17 glide slope, the change shall be at no additional cost to the Owner.

See Appendix A for work limits during this phase.

### PHASE 4N – ELECTRICAL WORK ALONG TAXIWAY CONNECTORS AND GA RAMP

Phase 4N shall consist of work in along Taxiway E, G, H, J, and K, and the General Aviation Ramp. The work shall consist of removal and installation of new airfield lighting along the taxiways and ramp. The Contractor shall be responsible for maintaining access through Phase 4N throughout the duration of the project. Phase 4N requires work within the taxiway object free areas. The Contractor shall coordinate all taxiway closures and times with the AOR and implement all required closure procedures. Work outside of the taxiway object free areas shall be Subphase 4N1 and work inside the taxiway object free areas, while the taxiway is closed, shall be Subphase 4N2. The Contractor can also work in Subphase 4N1 while working in Subphase 4N2. Contractor shall remain clear of Permanent Runway 17-35 at all times and Taxiway A. Work cannot occur in the taxiway object free area while taxiway is open.

See Appendix A for work limits during this phase.

### PHASE 40 – GRADING, DRAINAGE, AND DETENTION FOR CLOSE OUT

Phase 4O shall consist of all remaining site work to close out the project and the Airfield Redevelopment Program. The work shall consist of removal of sediment and erosion control measures, grading, drainage, remove and installation of fence, completion of detention structures, and seeding and mulching. The Contractor shall remain clear of all active airfield pavements and safety areas while working in Phase 4O. Work in Phase 4O shall not begin until written authorization has been given by the Owner or AOR.

*See Appendix A for work limits during this phase.* 

**B.** Construction Safety Drawings. Graphical exhibits specifically indicating operational safety procedures and methods in areas affected by construction activities associated with this project have been provided with this CSPP and incorporated into the project drawing set. Reference Appendix A.

### 207. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

Runways, taxiways and other airfield surfaces shall remain in use by aircraft to the maximum extent possible without compromising safety. The performance of this contract will require the closures of Runway 17-35 on a scheduled and phased basis. These phase areas are graphically illustrated in the attached exhibits.

# TABLE 1 – OPERATION EFFECTS BID PACKAGE 4 - PAVING, LIGHTING, AND NAVAIDS

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	P	hase 4A
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4A1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Closed/Under Construction	Closed
Taxiway "A2"	Closed/Under Construction	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Closed/Under Construction	Closed
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup> Taxiway "A" connector at 35 end to be closed. Main Taxiway "A" is to remain open.

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	P	hase 4A
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4A2
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Closed/Under Construction	Closed
Taxiway "A2"	Closed/Under Construction	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Closed/Under Construction	Closed
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Taxiway "A" connector at 35 end to be closed. Main Taxiway "A" is to remain open.

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	P	hase 4A
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4A3
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Closed/Under Construction	Closed
Taxiway "A2"	Closed/Under Construction	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Closed/Under Construction	Closed
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Taxiway "A" connector at 35 end to be closed. Main Taxiway "A" is to remain open.

Project	Permanent Runway 17-35 – Paving, Lighting and NAVAIDs	
Phase	Phase 4B	
Scope of Work	Paving, Lighting and NAVAIDs	
Operational Requirements	Normal (Existing)	Subphase 4B1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Closed
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35	– Paving, Lighting and NAVAIDs
Phase	Phase 4B	
Scope of Work	Paving, Lighting and NAVAIDs	
Operational Requirements	Normal (Existing)	Subphase 4B2
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Closed
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4C	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4C1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed/Under Construction	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed/Under Construction	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4C	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4C2
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed/Under Construction	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed/Under Construction	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4C	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4C3
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed/Under Construction	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed/Under Construction	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Sections of taxiway shall require closure at night.

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4D	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4D1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Closed/Under Construction	Closed
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Closed/Under Construction	Closed
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4D	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4D2
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Closed/Under Construction	Closed
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Closed/Under Construction	Closed
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4D	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4D3
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Closed/Under Construction	Closed
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Closed/Under Construction	Closed
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Sections of taxiway shall require closure at night.

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4E	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4E1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Closed/Under Construction	Closed
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Closed
Taxiway "D1"	Up to TDG II	Closed
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4E	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4E2
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Closed/Under Construction	Closed
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Closed
Taxiway "D1"	Up to TDG II	Closed
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4E	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4E3
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Closed/Under Construction	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Closed
Taxiway "D1"	Up to TDG II	Closed
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Sections of taxiway shall require closure at night.

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4F	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4F1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase F	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4F2
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Closed
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Closed
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35	- Paving, Lighting, and NAVAIDS
Phase	Phase F	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4F3
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open*
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Closed
Taxiway "D1"	Up to TDG II	Closed
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Sections of taxiway shall require closure at night.

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase G	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4G
Temporary Runway 17-35	Up to ADG C-III	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Closed
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Closed
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4H	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4H1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4H	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4H2
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open/Closed*
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open/Closed*
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open/Closed*
Taxiway "A6/C"	Up to TDG IV	Open/Closed*
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open/Closed*
Taxiway "B2"	Up to TDG IV	Open/Closed*
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open/Closed*
Taxiway "B5"	Up to TDG IV	Open/Closed*
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Phase H2 shall require intermediate closure of taxiways as work progresses.

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4I	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4I
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4J	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4J1
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Closed
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35	- Paving, Lighting, and NAVAIDS
Phase	Phase 4J	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	SubPhase 4J2
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open/Closed*
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

<sup>\*</sup>Phase 4J2 shall require night closures of Taxiway "A".

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4K	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Phase 4K
Temporary Runway 17-35	Up to ADG C-III	Open
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Closed/Under Construction	Closed
Taxiway "A3/P"	Up to TDG IV	Open
Taxiway "A4"	Closed	Closed
Taxiway "A5/E"	Up to TDG IV	Open
Taxiway "A6/C"	Up to TDG IV	Open
Taxiway "A7"	Closed	Closed
Taxiway "A8"	Closed	Closed
Taxiway "B1"	Up to TDG IV	Open
Taxiway "B2"	Up to TDG IV	Open
Taxiway "B3"	Closed	Closed
Taxiway "B4"	Up to TDG IV	Open
Taxiway "B5"	Up to TDG IV	Open
Taxiway "D1"	Up to TDG II	Open
Taxiway "D2"	Up to TDG II	Open
Taxiway "F"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "H"	Up to TDG III	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "L"	Up to TDG IV	Open
Taxiway "N"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4L	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4L1
Permanent Runway 17-35	Up to ADG C-IV	Open
Temporary Runway 17-35	Closed	Closed
Taxiway "A"	Up to TDG V	Open
Taxiway "A1"	Up to TDG V	Open
Taxiway "A2"	Up to TDG V	Open
Taxiway "A3"	Up to TDG V	Open
Taxiway "A4"	Up to TDG V	Open
Taxiway "A5"	Up to TDG V	Open
Taxiway "A6"	Up to TDG V	Open
Taxiway "A7"	Up to TDG V	Open
Taxiway "A8"	Up to TDG V	Open
Taxiway "B"	Up to TDG V	Closed
Taxiway "B1"	Up to TDG V	Closed
Taxiway "B2"	Up to TDG V	Closed
Taxiway "B3"	Up to TDG V	Closed
Taxiway "B4"	Up to TDG V	Closed
Taxiway "B5"	Up to TDG V	Closed
Taxiway "K"	Up to TDG II	Open
Taxiway "J"	Up to TDG II	Open
Taxiway "H"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "F"	Up to TDG III	Open
Taxiway "E"	Up to TDG II	Open
Taxiway "D"	Up to TDG IV	Open
Taxiway "C"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4L	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4L2
Permanent Runway 17-35	Up to ADG C-IV	Closed
Temporary Runway 17-35	Closed	Closed
Taxiway "A"	Up to TDG V	Open
Taxiway "A1"	Up to TDG V	Open
Taxiway "A2"	Up to TDG V	Open
Taxiway "A3"	Up to TDG V	Open
Taxiway "A4"	Up to TDG V	Open
Taxiway "A5"	Up to TDG V	Open
Taxiway "A6"	Up to TDG V	Open
Taxiway "A7"	Up to TDG V	Open
Taxiway "A8"	Up to TDG V	Open
Taxiway "B"	Up to TDG V	Closed
Taxiway "B1"	Up to TDG V	Closed
Taxiway "B2"	Up to TDG V	Closed
Taxiway "B3"	Up to TDG V	Closed
Taxiway "B4"	Up to TDG V	Closed
Taxiway "B5"	Up to TDG V	Closed
Taxiway "K"	Up to TDG II	Open
Taxiway "J"	Up to TDG II	Open
Taxiway "H"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "F"	Up to TDG III	Open
Taxiway "E"	Up to TDG II	Open
Taxiway "D"	Up to TDG IV	Open
Taxiway "C"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4M	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4M1
Permanent Runway 17-35	Up to ADG C-IV	Open
Temporary Runway 17-35	Closed	Closed
Taxiway "A"	Up to TDG V	Open
Taxiway "A1"	Up to TDG V	Open
Taxiway "A2"	Up to TDG V	Open
Taxiway "A3"	Up to TDG V	Open
Taxiway "A4"	Up to TDG V	Open
Taxiway "A5"	Up to TDG V	Open
Taxiway "A6"	Up to TDG V	Open
Taxiway "A7"	Up to TDG V	Open
Taxiway "A8"	Up to TDG V	Open
Taxiway "B"	Up to TDG V	Open
Taxiway "B1"	Up to TDG V	Open
Taxiway "B2"	Up to TDG V	Open
Taxiway "B3"	Up to TDG V	Open
Taxiway "B4"	Up to TDG V	Open
Taxiway "B5"	Up to TDG V	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "J"	Up to TDG II	Open
Taxiway "H"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "F"	Up to TDG III	Open
Taxiway "E"	Up to TDG II	Open
Taxiway "D"	Up to TDG IV	Open
Taxiway "C"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS	
Phase	P	Phase 4M	
Scope of Work	Paving, Lighting, and NAVAIDS		
Operational Requirements	Normal (Existing)	Subphase 4M2	
Permanent Runway 17-35	Up to ADG C-IV	Closed	
Temporary Runway 17-35	Closed	Closed	
Taxiway "A"	Up to TDG V	Open	
Taxiway "A1"	Up to TDG V	Open	
Taxiway "A2"	Up to TDG V	Open	
Taxiway "A3"	Up to TDG V	Open	
Taxiway "A4"	Up to TDG V	Open	
Taxiway "A5"	Up to TDG V	Open	
Taxiway "A6"	Up to TDG V	Open	
Taxiway "A7"	Up to TDG V	Open	
Taxiway "A8"	Up to TDG V	Open	
Taxiway "B"	Up to TDG V	Open	
Taxiway "B1"	Up to TDG V	Open	
Taxiway "B2"	Up to TDG V	Open	
Taxiway "B3"	Up to TDG V	Open	
Taxiway "B4"	Up to TDG V	Open	
Taxiway "B5"	Up to TDG V	Open	
Taxiway "K"	Up to TDG II	Open	
Taxiway "J"	Up to TDG II	Open	
Taxiway "H"	Up to TDG II	Open	
Taxiway "G"	Up to TDG II	Open	
Taxiway "F"	Up to TDG III	Open	
Taxiway "E"	Up to TDG II	Open	
Taxiway "D"	Up to TDG IV	Open	
Taxiway "C"	Up to TDG IV	Open	

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4N	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4N1
Permanent Runway 17-35	Up to ADG C-IV	Open
Temporary Runway 17-35	Closed	Closed
Taxiway "A"	Up to TDG IV	Open
Taxiway "A1"	Up to TDG IV	Open
Taxiway "A2"	Up to TDG IV	Open
Taxiway "A3"	Up to TDG IV	Open
Taxiway "A4"	Up to TDG IV	Open
Taxiway "A5"	Up to TDG IV	Open
Taxiway "A6"	Up to TDG IV	Open
Taxiway "A7"	Up to TDG IV	Open
Taxiway "A8"	Up to TDG IV	Open
Taxiway "B"	Up to TDG V	Closed
Taxiway "B1"	Up to TDG V	Closed
Taxiway "B2"	Up to TDG V	Closed
Taxiway "B3"	Up to TDG V	Closed
Taxiway "B4"	Up to TDG V	Closed
Taxiway "B5"	Up to TDG V	Closed
Taxiway "K"	Up to TDG II	Open
Taxiway "J"	Up to TDG II	Open
Taxiway "H"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "F"	Up to TDG III	Open
Taxiway "E"	Up to TDG II	Open
Taxiway "D"	Up to TDG IV	Open
Taxiway "C"	Up to TDG IV	Open

Project	Permanent Runway 17-35 – Paving, Lighting, and NAVAIDS	
Phase	Phase 4N	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Subphase 4N2
Permanent Runway 17-35	Up to ADG C-IV	Open
Temporary Runway 17-35	Closed	Closed
Taxiway "A"	Up to TDG V	Open
Taxiway "A1"	Up to TDG V	Open
Taxiway "A2"	Up to TDG V	Open
Taxiway "A3"	Up to TDG V	Open
Taxiway "A4"	Up to TDG V	Open
Taxiway "A5"	Up to TDG V	Open
Taxiway "A6"	Up to TDG V	Open
Taxiway "A7"	Up to TDG V	Open
Taxiway "A8"	Up to TDG V	Open
Taxiway "B"	Up to TDG V	Open
Taxiway "B1"	Up to TDG V	Open
Taxiway "B2"	Up to TDG V	Open
Taxiway "B3"	Up to TDG V	Open
Taxiway "B4"	Up to TDG V	Open
Taxiway "B5"	Up to TDG V	Open
Taxiway "K"	Up to TDG II	Closed
Taxiway "J"	Up to TDG II	Closed
Taxiway "H"	Up to TDG II	Closed
Taxiway "G"	Up to TDG II	Closed
Taxiway "F"	Up to TDG III	Open
Taxiway "E"	Up to TDG II	Closed
Taxiway "D"	Up to TDG IV	Open
Taxiway "C"	Up to TDG IV	Open

Project	Permanent Runway 17-35 -	- Paving, Lighting, and NAVAIDS
Phase	Phase 4O	
Scope of Work	Paving, Lighting, and NAVAIDS	
Operational Requirements	Normal (Existing)	Phase 4O
Permanent Runway 17-35	Up to ADG C-IV	Open
Temporary Runway 17-35	Closed	Closed
Taxiway "A"	Up to TDG V	Open
Taxiway "A1"	Up to TDG V	Open
Taxiway "A2"	Up to TDG V	Open
Taxiway "A3"	Up to TDG V	Open
Taxiway "A4"	Up to TDG V	Open
Taxiway "A5"	Up to TDG V	Open
Taxiway "A6"	Up to TDG V	Open
Taxiway "A7"	Up to TDG V	Open
Taxiway "A8"	Up to TDG V	Open
Taxiway "B"	Up to TDG V	Open
Taxiway "B1"	Up to TDG V	Open
Taxiway "B2"	Up to TDG V	Open
Taxiway "B3"	Up to TDG V	Open
Taxiway "B4"	Up to TDG V	Open
Taxiway "B5"	Up to TDG V	Open
Taxiway "K"	Up to TDG II	Open
Taxiway "J"	Up to TDG II	Open
Taxiway "H"	Up to TDG II	Open
Taxiway "G"	Up to TDG II	Open
Taxiway "F"	Up to TDG III	Open
Taxiway "E"	Up to TDG II	Open
Taxiway "D"	Up to TDG IV	Open
Taxiway "C"	Up to TDG IV	Open

#### A. IDENTIFICATION OF AFFECTED AREAS

See Construction Safety Drawings and Phasing drawings in Appendix A for graphical identification of areas affected by construction operations. Of particular concern are the following:

- **a.** Closing, or partial closing, of runways, taxiways and aprons.
- **b.** Closing of Aircraft Rescue and Fire Fighting (ARFF) and Public Safety access routes: Access into, through, and/or around the project work area by ARFF and Public Safety vehicles may be reduced during construction.
- **c.** No utility impacts other than airfield electrical and drainage will be impacted by this project.
- **d.** Approach/departure surfaces affected by heights of objects: Contractor equipment used in the project and/or Staging area may be a concern. A 7460 will be issued prior to construction.
- e. Construction areas: These areas include the project work area, storage/stockpile areas, Staging areas, and contractor haul routes near active airfield surfaces. The project work area and contractor haul routes are not within active airfield surfaces. These areas are identified graphically in attached phasing exhibits.

## B. MITIGATION OF EFFECTS

This CSPP has established specific procedures necessary to maintain the safety and efficiency of airport operations.

# a. TEMPORARY CHANGES TO RUNWAY AND/OR TAXIWAY OPERATIONS

The affected runways and taxiways identified in the previous section for reduced access or identified as being closed entirely to aircraft traffic will be closed using lighted X's, barricaded by the use of low profile, lighted barricades placed as shown in the exhibits provided in Appendix A. In addition, required NOTAM's shall be issued on the various temporary changes to aircraft access through the affected areas.

# b. DETOURS FOR ARFF AND OTHER AIRPORT VEHICLES

The project work site shall remain open to all ARFF and Public Safety vehicles in emergency situations. The Contractor is required to maintain access in and around the project work area for all ARFF and Public Safety Vehicles. Proper routing of this traffic will be effectively communicated to all supervisory personnel involved in the construction project. Caution to be used while driving through work areas due to

grade changes, excavation, open trenches, and any other on-site construction activities.

## c. MAINTENANCE OF ESSENTIAL UTILITIES:

Special attention shall be given to preventing unscheduled interruption of utility services and facilities. Where required due to construction purposes, the FAA shall locate all of their underground utilities. The contractor shall locate and/or arrange for the location of all the underground utilities. When an underground cable or utility is damaged due to the Contractor's negligence the Contractor shall immediately repair the affected cable or utility at his/her own expense. Full coordination between airport Staff, field inspectors, and construction personnel will be exercised to ensure that all airport power and control cables are fully protected prior to any excavation. Locations of cabling and other underground utilities will be marked prior to beginning excavation.

## d. TEMPORARY CHANGES TO AIR TRAFFIC CONTROL PROCEDURES:

Changes to air traffic control procedures must be coordinated with airport ATO.

# 208. PROTECTION OF NAVIGATION AIDS (NAVAIDS)

Before commencing construction activity, parking vehicles, or storing construction equipment and materials near a NAVAID, coordination with the appropriate FAA ATO/Technical Operations office to evaluate the effects of construction activity and the required distances and direction from the NAVAID is required. Construction activities, materials/equipment storage, and vehicle parking near electronic NAVAIDS require special consideration since they may interfere with lines of site and signals essential to air navigation.

The Contractor shall be working around existing NAVAIDs that should be protected at all times. The NAVAIDs that the Contractor shall protect throughout the project or until the NAVAIDs is removed shall be as follows:

**Temporary Runway 35 Localizer** - To be protected throughout the duration of the project. The limits of construction shall not impact the Runway 35 Localizer Critical Area. The Temporary Runway 35 Localizer shall be decommissioned at the end of Volume 2.

**Temporary Runway 35 Glide Slope** - To be protected throughout the duration of the project. The limits of construction shall not impact the Runway 35 Glide Slope Critical Area. The Temporary Runway 35 Glide Slope shall be tuned, flight checked and commissioned for the Permanent Runway 35 at the end of Volume 2.

**Temporary Runway 17 PAPI** - To be protected throughout the duration of the project. The limits of construction shall not impact the Runway 17 PAPI until the end of Volume 2 when it will be removed.

**Temporary Runway 35 PAPI** - To be protected throughout the duration of the project. The limits of construction shall not impact the Runway 35 PAPI until the end of Volume 2 when it will be removed.

**Permanent Runway 17 Localizer** – Once the permanent runway is commissioned at the end of Volume 2, the Localizer shall be commissioned and shall be protected throughout the remainder of the project.

**Permanent Runway 17 Glide Slope** - Once the permanent runway is commissioned at the end of Volume 2, the glide slope shall be installed and commissioned as part of Volume 3 and shall be protected throughout the remainder of the project.

**Permanent Runway 17 MALSR** - Once the permanent runway is commissioned at the end of Volume 2, the MALSR shall be commissioned and shall be protected throughout the remainder of the project.

**Permanent Runway 17 PAPI** - Once the permanent runway is commissioned at the end of Volume 2, the PAPI shall be commissioned and shall be protected throughout the remainder of the project.

**Permanent Runway 35 Localizer** – Once the permanent runway is commissioned at the end of Volume 2, the Localizer shall be commissioned and shall be protected throughout the remainder of the project.

**Permanent Runway 35 Glide Slope** - Once the permanent runway is commissioned at the end of Volume 2, the glide slope shall be installed and commissioned as part of Volume 3 and shall be protected throughout the remainder of the project.

**Permanent Runway 35 MALSR** - Once the permanent runway is commissioned at the end of Volume 2, the MALSR shall be commissioned and shall be protected throughout the remainder of the project.

**Permanent Runway 35 PAPI** - Once the permanent runway is commissioned at the end of Volume 2, the PAPI shall be commissioned and shall be protected throughout the remainder of the project.

#### 209. CONTRACTOR ACCESS

All construction personnel shall be regularly reminded that within the AOA, an aircraft always has "Right of Way". The Contractor personnel shall familiarize themselves with the access routes. Project haul routes and storage and Staging areas are shown in Appendix A.

#### A. LOCATION OF STOCKPILED CONSTRUCTION MATERIALS

Stockpiled materials and equipment storage are not permitted within the RSA, ROFZ and ROFA of an operational runway or within the TSA and TOFA of an operational taxiway. Stockpiled material shall be constrained in a manner to prevent movement resulting from either aircraft jet blast or wind conditions in excess of ten miles per hour. In addition, stockpiled material shall have silt fence located around the material to prevent FOD from moving onto the airfield pavements or polluting watercourses. Stockpiled materials shall be located within the Staging and storage area or as approved by the AOR.

Open trenches or stockpiled material are not permitted within the limits of safety areas of operational runways or taxiways. Stockpiled material shall not be permitted within the protected areas of the runways, or allowed to penetrate into any of the protected airspace.

In addition, all demolished pavement materials and unclassified excavation materials shall be removed and legally disposed of off airport property and not stockpiled on airport property.

Reference Section 211 Foreign Object Debris (FOD) management and Section 221 Protection of Runway and Taxiway Safety Areas for additional information regarding stockpile management.

# B. VEHICLE AND PEDESTRIAN OPERATIONS

Vehicle and pedestrian access routes for airport construction projects must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the AOA. The Contractor should coordinate requirements for vehicle operations with airport operations.

- **a.** Construction site parking. Contractor employees shall park in an areas designated and approved by the AOR and AVL. The parking areas should provide reasonable contractor employees access to the site. Only authorized vehicles will be permitted in the secure area. Contractor employee parking shall be in the contractor Staging and storage area or as approved by the AOR.
- **construction equipment parking.** Contractor employees must park and service all construction vehicles in an area designated by the AOR or AVL outside the OFZ and never in the safety area of an active runway or taxiway. Unless a complex setup procedure makes movement of specialized equipment infeasible, inactive equipment

must not be parked on a closed taxiway or runway. Employees should also park construction vehicles outside the OFA when not in use by construction personnel (for example, overnight, on weekends, or during other periods when construction is not active). Parking areas must not obstruct the clear line of sight by the ATCT to any taxiways or runways under air traffic control nor obstruct any runway visual aids, signs, or navigation aids. The FAA must also study those areas to determine effects on airport design criteria, surfaces established by 14 CFR Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace (Part 77), and on NAVAIDs and Instrument Approach Procedures (IAP). See paragraph 213.e(1) further information.

- c. Access and haul roads. The project haul route is shown in Appendix A. Access routes used by contractor vehicles must be clearly marked to prevent inadvertent entry to areas open to airport operations. Pay special attention to ensure that if construction traffic is to share or cross any ARFF and Public Safety routes that ARFF and Public Safety right of way is not impeded at any time, and that construction traffic on haul roads does not interfere with NAVAIDs or approach surfaces of operational runways.
- **d. Marking and lighting of vehicles** in accordance with AC 150/5210-5, "Painting, Marking, and Lighting of Vehicles Used on an Airport" (Latest Edition). All contractor vehicles, including hauling vehicles, that are authorized to operate on the airport within the designated limits of construction or haul routes as defined herein, shall display in full view above the vehicle a 3'x3' or larger orange and white checkerboard flag, each checkerboard color being 1' square. When operating during periods of darkness or limited visibility, contractors vehicles shall be equipped with rotating or flashing amber lights. During such periods, hauling vehicles not so equipped shall be escorted by a vehicle so equipped.
- **e. Description of proper vehicle operations.** Contractor employees shall take training classes to properly prepare themselves to drive in authorized areas, under normal, lost communications, and emergency conditions.
- **f. Required escorts.** Vehicles that are not authorized to drive in secure airport areas on their own shall be properly escorted per AVL requirements.
- g. Training requirements for vehicle drivers. Specific training should be provided to those vehicle operators providing escorts to ensure compliance with the airport operator's vehicle rules and regulations. Specific training should be provided to those vehicle operators providing escorts. See AC 150/5210-20, Ground Vehicle Operations on Airports, for information on training and records maintenance requirements. AVL shall provide required training for vehicle drivers. No additional payment shall be made to the contractor for the training time.

h. Situational awareness. Vehicle drivers must confirm by personal observation that no aircraft is approaching their position (either in the air or on the ground) when given clearance to cross a runway, taxiway, or any other area open to airport operations. In addition, it is the responsibility of the escort vehicle driver to verify the movement/position of all escorted vehicles at any given time.

# i. Two-way radio communication procedures.

- a. General. The airport operator must ensure that tenant and construction contractor personnel engaged in activities involving unescorted operation on aircraft movement areas observe the proper procedures for communications, including using appropriate radio frequencies at airports with and without ATCT. When operating vehicles on or near open runways or taxiways, construction personnel must understand the critical importance of maintaining radio contact, as directed by the airport operator, with:
  - (i) Airport operations
  - (ii) ATCT
  - (iii) Common Traffic Advisory Frequency (CTAF), which may include UNICOM, MULTICOM.
  - (iv) Automatic Terminal Information Service (ATIS). This frequency is useful for monitoring conditions on the airport. Local air traffic will broadcast information regarding construction related runway closures and "shortened" runways on the ATIS frequency.

The airport will require all contractor personnel who will handle communications with the ATCT and airport operations to undergo training and testing procedures to ensure the personnel is knowledgeable and capable to perform the required tasks. The airport reserves the right to reject or remove any contractor personnel for any reason.

- **b.** Areas requiring two-way radio communication with the ATCT. Vehicular traffic crossing active movement areas must be controlled either by two-way radio with the ATCT, escort, flagman, signal light, or other means appropriate for the particular airport.
- c. Frequencies to be used. The airport operator will specify the frequencies to be used by the contractor, which may include the CTAF for monitoring of aircraft operations. Frequencies may also be assigned by the airport operator for other communications, including any radio frequency in compliance with Federal Communications Commission requirements. AVL is controlled by an ATCT between the hours of 6:30 am and 11:00 pm.
- **d.** The Contractor must be trained in proper radio usage, including read back requirements.

- **e.** The Contractor must be trained in proper phraseology, including the International Phonetic Alphabet.
- **f.** The Contractor shall be responsible for acquiring and maintaining a minimum of four radios onsite at all times. The Contractor shall be responsible for all cost associated with the radios and their maintenance.
- **g.** Airport Communications

CTAF: 121.1 UNICOM: 122.95 ATIS: 120.2

WX ASOS: PHONE 828-681-0131 ASHEVILLE GROUND: 121.9 [0630-2300]

ASHEVILLE TOWER: 121.1 257.8 [0630-2300]

ASHEVILLE APPROACH: 124.65(160-339) 125.8(340-159) 269.575(340-159)

351.8(160-339) [0630-2300]

ASHEVILLE DEPARTURE: 124.65(160-339) 125.8(340-159) 269.575(340-159)

351.8(160-339) [0630-2300]

CLASS C: 125.8(340-159) 351.8(160-339) CLASS C IC: 124.65(160-339) 269.575(340-159)

EMERG: 121.5 243.0

The contractor shall monitor the CTAF and Asheville Ground frequencies as required by AVL and the AOR. The contractors trained personnel shall have direct radio communication to the ATCT.

# j. Maintenance of the secured area of the airport, including:

- a. Fencing and gates. Contractors must maintain security during construction when access points are created in the security fencing to permit the passage of construction vehicles or personnel. Temporary gates should be equipped so they can be securely closed and locked to prevent access by animals and unauthorized people. Procedures should be in place to ensure that only authorized persons and vehicles have access to the AOA and to prohibit "piggybacking" behind another person or vehicle. The Department of Transportation (DOT) document DOT/FAA/AR-00/52, Recommended Security Guidelines for Airport Planning and Construction, provides more specific information on fencing. A copy of this document can be obtained from the Airport Consultants Council, Airports Council International, or American Association of Airport Executives.
- **b. Badging requirements.** Contractor shall comply with badging requirements of AVL as included in the contract documents.

c. AVL is subject to 49 CFR Part 1542, Airport Security, must meet Standards for access control, movement of ground vehicles, and identification of construction contractor and tenant personnel.

## 210. WILDLIFE MANAGEMENT

Construction contractors must carefully control and continuously remove waste or loose materials that might attract wildlife. Contractor personnel must be aware of and avoid construction activities that can create wildlife hazards on airports.

**Trash**. Food scraps from construction personnel activity must be collected.

- **A. Standing water**. Water shall not be allowed to collect and pool for more than any single 24-hour period, excluding basins.
- **B.** Tall grass and seeds. The use of millet seed in turfing and seeding operations shall not be permitted.
- **C. Poorly maintained fencing and gates.** Contractor shall immediately notify AVL or AOR of breaches in fence or gates that may allow wildlife to enter the airport operations area
- **D. Disruption of existing wildlife habitat.** Contractor shall immediately notify AVL or AOR of wildlife sightings.

# 211. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

Waste and loose materials, commonly referred to as FOD, are capable of causing damage to aircraft landing gears, propellers, and jet engines. Construction contractors must not leave or place FOD on or near active aircraft movement areas. Special care and measures shall be taken to prevent Foreign Object Debris / Damage (FOD) when working in an airport environment. The Contractor shall be held responsible for implementing an approved FOD Management Plan as a part of the SPCD. The FOD Management Plan will have procedures for prevention, regular cleanup, and containment of construction material and debris. The Contractor will ensure all vehicles related to the construction project using paved surfaces in the AOA shall be free of any debris that could create a FOD hazard. Special attention will be given to the cleaning of cracks and pavement joints. All taxiways, aprons, and runways must remain clean. Waste containers with attached lids shall be required on construction sites.

Contractors will provide their own equipment for vehicle and equipment washing and clean up. Immediate access to a power sweeper is required when construction or hauling occurs on or near any pavement area inside the AOA, unless an appropriate alternative has been approved by the AOR and Airport Operations Manager. The contractor shall also maintain paved areas outside the AOA that are affected by the construction and hauling, including airport roads and NCDOT roads.

# 212. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel, hydraulic fluid, or other chemical fluid leaks. Transport and handling of other hazardous materials on an airport also requires special procedures. To that end, the contractor is required to develop and implement spill prevention and response procedures for vehicle operations. The contractor shall incorporate these procedures into the SPCD.

# 213. NOTIFICATION OF CONSTRUCTION ACTIVITIES

Following is information and procedures for immediate notification of airport users and the FAA of any conditions adversely affecting the operational safety of the airport.

# A. Points of contact/list of responsible representatives.

Information, Compliance, and Assistance: Airport Operations:	828-209-5100
Asheville Regional Airport Staff, Mike Reisman:	828-684-2226

# **B.** Notices to Airmen (NOTAM)

Only AVL may initiate or cancel NOTAMS on airport conditions, and is the only entity that can close or open a runway or taxiway. The airport operator must coordinate the issuance, maintenance, and cancellation of NOTAMS about airport conditions resulting from construction activities with tenants and the local air traffic facility (control tower, approach control, or air traffic control center), and must provide information on closed or hazardous conditions on airport movement areas to the FAA Flight Service Station (FSS) so it can issue a NOTAM. The airport operator must file and maintain a list of authorized representatives with the FSS. Only the FAA may issue or cancel NOTAMS on shutdown or irregular operation of FAA owned facilities.

# C. Emergency notification procedures

In the event of an emergency, the contractor shall be required to contact emergency services by calling:

Department of Public Safety: 828-684-4577 (Non-Emergency)

828-687-3554 (Emergency)

911 (Emergency)

Carolinas Poison Center: 800-222-1222

In the event of an aircraft emergency, severe weather conditions, or any issue as determined by the Airport that may affect aircraft operations, the Contractor's personnel and/or equipment may be required to immediately vacate the area(s) affected. Points of contact for the various parties involved with the project shall be identified and shared at the pre-construction meeting among the various parties, reference Section 205 Pre-construction Conference. Specific emergency notification procedures shall be incorporated into the contractor's SPCD.

#### D. Coordination with ARFF Personnel

The contractor shall coordinate, through the duly appointed airport representative, with ARFF personnel, mutual aid providers, and other emergency services if construction requires the following:

- The deactivation and subsequent reactivation of water lines or fire hydrants, or
- The re-routing, blocking and restoration of emergency access routes, or
- The use of hazardous materials on the airfield.

Procedures and methods for addressing any planned or emergency response actions on the airfield concerning this project shall be established and implemented prior to the Start of construction.

# E. Notification to the FAA.

- 1. **Part 77.** Any person proposing construction or alteration of objects that affect navigable airspace, as defined in Part 77, must notify the FAA. This includes construction equipment and proposed parking areas for this equipment (i.e. Cranes, graders, other equipment) on airports. FAA Form 7460-1, Notice of Proposed Construction or Alteration, can be used for this purpose and submitted to the appropriated FAA Airports Regional or District Office.
- 2. **Part 157**. With some exceptions, Title 14CFR Part 157, Notice of Construction, Alteration, Activation, and Deactivation of Airports, requires that the airport operator notify the FAA in writing whenever a non-Federally funded project involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport. Notification involves submitting FAA Form 7480-1, Notice of Landing Area Proposal, to the nearest FAA Airports Regional or District Office. It is not anticipated that Part 157 notifications will be required for this project.
- 3. **NAVAIDS.** For emergency (short-notice) notification about impacts to both airport owned and FAA owned NAVAIDs, the contractor shall contact AVL or AOR immediately. The contractor may also contact the local FAA Facilities Office at contact: 1-828-684-7333.
  - a. Airport owned/FAA maintained. Not Applicable to this project.
  - b. FAA owned.

- (i) General. The airport operator must notify the appropriate FAA ATO Service Area Planning and Requirements (P&R) Group a minimum of 45 days prior to implementing an event that causes impacts to NAVAIDs. (Impacts to FAA equipment covered by a Reimbursable Agreement (RA) do not have to be reported by the airport operator.)
- (ii) Coordinate work for an FAA owned NAVAID shutdown with the local FAA ATO/Technical Operations office, including any necessary reimbursable agreements and flight checks. Detail procedures that address unanticipated utility outages and cable cuts that could impact FAA NAVAIDs. In addition, provide seven days' notice to schedule the actual shutdown.

# 214. INSPECTION REQUIREMENTS:

A. Daily (or more frequent) inspections. Inspections shall be conducted by the contractor at least daily, but more frequently if necessary, to ensure conformance with the CSPP. A sample checklist is provided in Appendix 4 of the FAA AC 150/5370-2 "Operational Safety on Airports During Construction" (Latest Edition). In addition to contractor's required inspections, airport operations will inspect the construction site once per day to ensure compliance with the CSPP and the SPCD. AVL will have full-time inspectors monitoring activity throughout construction.

Prior to opening any area, phase, or closed runway/taxiway, the AOR will arrange for an inspection by AVL or the AOR. The Contractor shall immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

**B. Final inspections**. A final inspection with the AOR and AVL will take place prior to allowing airport operations to resume in the area.

#### 215. UNDERGROUND UTILITIES

The Contractor must include in the SPCD procedures for locating and protecting existing underground utilities, cables, wires, pipelines, and other underground facilities in excavation areas. This may involve coordinating with public utilities and FAA ATO/Technical Operations. Note that "One Call" services do not include airport airfield utilities and FAA ATO/Technical Operations. A list of Utility Contact information is below:

<u>Utility</u>	<b>Contact</b>
Duke Energy	800-452-2777
PSNC	877-776-2427
Buncombe County Metropolitan Sewerage District	828-525-0061
AT&T	800-288-2020
City of Asheville	828-251-1122

#### 216. PENALTIES

Failure on the part of the contractor to adhere to prescribed requirements may have consequences that jeopardize the health, safety or lives of customers and employees at the airport. The Airport may issue warnings on the first offense based upon the circumstances of the incident. Individuals involved in non-compliance violations may be required to surrender their Airport ID badges and/or be prohibited from working at the airport, pending an investigation of the matter.

Penalties for violations related to airport safety and security procedures will be established and issued by the Airport. Penalties includes monetary penalties of up to \$500 per occurrence or as deemed appropriate by AVL and/or loss of site access to the contractor, subcontractor or specific employees of both for a duration of time determined by AVL.

Note: project shutdown or misdemeanor citations may be issued on a first offense. When construction operations are suspended, activity shall not resume until all deficiencies are rectified.

#### 217. SPECIAL CONDITIONS

During periods of severe weather conditions or other special operational emergencies, the AOR or AVL may direct the Contractor to relinquish areas under construction and to prepare the areas for the severe weather or aircraft operations. During periods of the project when Runway 17-35 is closed, the Contractor shall make the runway available during emergency situation as directed by the AOR and AVL. Other special operational emergencies may include low-visibility operations, aircraft accident, security breach, Vehicle/Pedestrian Deviation and other activities requiring construction suspension/resumption.

In any event, the AOR or AVL will direct the Contractor to evacuate the area. The AOR will specify the limits of the area to be evacuated, the terms of the evacuation, and the conditions governing the restoration work necessary to prepare the area of aircraft operations. The Contractor shall promptly and fully comply with the AORs directive. Should the directive entail extra work under the contract, as determined by the AOR, the Contractor will be reimbursed for such extra work in accordance with the contract documents. Should the directive entail a delay in the completion of the contract or any defined area of the contract, as determined by the AOR, the Contractor may be granted an extension of contract time in accordance with the contract documents.

# 218. RUNWAY AND TAXIWAY VISUAL AIDS:

The Contractor shall ensure that airfield marking, lighting, signs, and visual aids, that aircraft rely on and where aircraft are operating are protected and clearly and visibly separated from construction areas. Throughout the duration of the construction project, the contractor shall inspect and verify that these areas remain clearly marked and visible at all times and that marking, lighting, signs and visual aids remain in place and operational.

**A. General.** Airport markings, lighting, signs, and visual NAVAIDs must be clearly visible to pilots, not misleading, confusing, or deceptive. All must be secured in place to prevent movement by prop wash, jet blast, wing vortices, or other wind currents and constructed of

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materials that would minimize damage to an aircraft in the event of inadvertent contact.

- **B.** Markings. Markings must be in compliance with the Standards of AC 150/5340-1, Standards for Airport Markings. Runways and runway exit taxiways closed to aircraft operations are marked with a yellow X. The preferred visual aid to depict Temporary Runway closure is the lighted X signal placed on or near the runway designation numbers.
  - 1. Temporarily Closed Runways. The Contractor shall use a lighted X (Runway Closure Marker), both at night and during the day, placed at each end of the runway facing the approach and on or near the runway designation numbers. The use of lighted X's is required at all times during this project when Runway 17-35 is closed. The Contractor shall coordinate runway closures with the AOR or AVL.
  - 2. The runway closure markers shall be supplied by AVL, however, the contractor shall take ownership of the runway closure marker at the beginning of the project. The contractor shall store, maintain, place, remove, and operate the runway closure markers throughout the project. The runway closure markers shall be returned to AVL, undamaged, at the end of the project or when runway closures are no longer needed for the project. Any damage to the runway closure markers shall be repaired by the contractor, at no cost to AVL. Any damage to the runway closure markers that is unrepairable shall require the contractor to replace the runway closure markers accordingly at no cost to the airport.
- C. Lighting and visual aids. Runway and taxiway lights shall be impacted by this project.
- **D. Signs.** Airfield signage shall be impacted by this project as indicated on the plan sheets.

# 219. MARKING AND SIGNS FOR ACCESS ROUTES

Location of haul routes on the airport site shall be as specified in the project drawing set and as provided graphically in the attached exhibits, reference Appendix A. It shall be the contractor's responsibility to coordinate off-site haul routes with the appropriate owner who has jurisdiction over the affected route. The haul routes, to the extent possible, shall be marked and signed in accordance with FAA airfield signage requirements, the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications. Signs adjacent to areas used by aircraft must meet the airfield general frangibility requirements as required by the airport and subsequent approval by the Owner. Meeting airfield frangibility requirements may require modification to size and height guidance in the MUTCD.

#### 220. HAZARD MARKING AND LIGHTING:

- **A. Purpose**: Hazard marking and lighting prevents pilots from entering areas closed to aircraft, and prevents construction personnel from entering areas open to aircraft. To that end, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles shall be inStalled and maintained by the contractor for the duration of construction operations.
- **B.** Equipment: Equipment shall be identified in accordance with AC 150/5210-5D "Painting, Marking & Lighting of Vehicles used on Airports".

# 221. PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS

Safety area encroachments, improper ground vehicle operations and unmarked or uncovered holes and trenches in the vicinity of aircraft operation surfaces and construction areas are the three most recurring threats to safety during construction. Protection of runway and taxiway safety areas, object free areas, obstacle free zones, and approach/departure surfaces shall be a Standing requirement for the duration of construction operations. Reference Section 213 Notification of construction activities and Section 218 Runway and Taxiway Visual Aids for Taxiway closure requirements. Reference Section 16 Hazard Marking and Lighting for hazard marking. Reference Section 222 Other Limitations on Construction for height restrictions (as required).

**A. Runway Safety Area (RSA):** A runway safety area is the defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway by aircraft.

Runway	RSA Distance RSA	e fron /	m Centerline (ft) Holdline	RSA Width (ft)	RSA Length from End of Runway (ft)
Temporary Runway 17-35	250	/	272	500	1,000
Permanent Runway 17-35	250	/	272	500	1,000

- 1. No construction may occur within the existing RSA while the runway is open. Any construction between RSA and Holdline must be approved with Airport Operations prior to Starting work.
- 2. The airport operator must coordinate any adjustment of RSA dimensions, to meet the above requirement, with the appropriate FAA Airports Regional or District Office and the local FAA air traffic manager and issue a NOTAM.
- **3.** Open trenches or excavations are not permitted within the RSA while the runway is open. The contractor must backfill trenches before the runway is opened. Coverings are not allowed in runway safety areas.

- **4.** After Runway has been closed, Contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.
- 5. Soil erosion must be controlled to maintain RSA Standards, that is, the RSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and firefighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.
- **B.** Runway Object Free Area (ROFA): Construction, including excavations, may be permitted in the ROFA. However, equipment must be removed from the ROFA when not in use, and material should not be stockpiled in the ROFA if not necessary. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval.

Runway	ROFA Distance from Centerline (ft)	ROFA Width (ft)	ROFA Length from End of Runway (ft)
Temporary Runway 17-35	400	800	1,000
Permanent Runway 17-35	400	800	1,000

**C. Taxiway Safety Area (TSA):** The taxiway safety area is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. No construction may occur within the TSA while the taxiway is open for aircraft operations.

Taxiway	TSA Distance from Centerline (ft)	TSA Width (ft)
A, A1, A2, A3, A4, A5, A6, A7, A8, B, B1, B2, B3, B4, B5, L, N	85.5	171
D1, D2, F, G, K, H	59.0	118

- 1. Open trenches or excavations are not permitted within the TSA while the taxiway is open. The contractor must backfill trenches before the taxiway is opened. Coverings are not allowed in taxiway safety areas.
- 2. After Taxiway has been closed, Contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

- 3. Soil erosion must be controlled to maintain TSA Standards, that is, the TSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and firefighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.
- **D.** Taxiway and Taxilane Object Free Area (TOFA): Unlike the Runway Object Free Area, aircraft wings regularly penetrate the taxiway object free area during normal operations. Thus the restrictions are more stringent. No construction may occur within the TOFA while the taxiway is open for aircraft operations.

Taxiway	TOFA Distance from Centerline (ft)	TOFA Width (ft)
A, A1, A2, A3, A4, A5, A6, A7, A8, B, B1, B2, B3, B4, B5, L, N	129.5	259
D1, D2, F, G, K, H	93	186

Taxilane	TLOFA Distance from Centerline (ft)	TLOFA Width (ft)
N/A	N/A	N/A

- **E. ObStacle Free Zone (OFZ):** Construction personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. The OFZ is a defined Volume of airspace centered about and above the runway centerline.
- **F. Runway approach/departure surfaces:** All personnel, materials, and/or equipment must remain clear of the applicable threshold siting surfaces. Objects that do not penetrate these surfaces may still be obstructions to air navigation and may affect Standard instrument approach procedures. Coordinate with the FAA through the appropriate FAA Airports Regional or District Office.

Construction activity in a runway approach/departure area may result in the need to partially close a runway or displace the existing runway threshold. Partial runway closure, displacement of the runway threshold, as well as closure of the complete runway and other portions of the movement area also require coordination through the airport operator with the appropriate FAA air traffic manager (FSS if non-towered) and ATO/Technical Operations (for affected NAVAIDS) and airport users.

# 222. OTHER LIMITATIONS ON CONSTRUCTION

- **A. Prohibitions:** The following prohibitions are in effect for the duration of this project:
  - 1. No use of tall equipment (cranes, concrete pumps, and so on) unless a 7460-1 determination letter is issued for such equipment or as approved by the AOR.
  - 2. No use of open flame welding or torches unless fire safety precautions are provided and the airport operator has approved their use.
  - 3. Blasting, as needed, may be required for this project. The contractor shall coordinate all blasting operations with AVL and the AOR prior to Starting blasting operations. All blasting should follow, local, State and federal guidelines.
  - **4.** No use of flare pots within the AOA.

# **B.** Restrictions

- 1. Construction suspension required during specific airport operations. (See Section 217)
- 2. Areas that cannot be worked on simultaneously. (See Section 206)
- 3. Day or night construction restrictions. (See Section 206)
- **4.** Seasonal construction restrictions. (See Section 217)

# APPENDIX A - PROJECT SPECIFIC EXHIBITS

# PHASE 4A:

#### SOUTH RUNWAY (STA. 90+25 TO STA. 95+00), TAXIWAY A, TAXIWAY A1, TAXIWAY A2, TAXIWAY B1, TAXIWAY A SHOULDERS, AND BLAST PAD

PHASE 4A SHALL CONSIST OF WORK ON THE SOUTH SIDE OF THE AIRFIELD AND SHALL INCLUDE THE SECTION OF THE PERMANENT RUNWAY (STA 90+25 TO STA 95+00), TAXIWAYS A1, A2, B1, TAXIWAY A SHOULDERS AND THE SOUTHERN BLAST PAD, THE WORK SHALL CONSIST OF PAVEMENT REMOVAL MISCELLANEOUS DEMOLITION, GRADING DRAINAGE BASI PAD. THE WORK SHALL CONSIST OF PAVEMENT REMOVAL INSCELLANEOUS DEMOLITION, GRADING, BRAINAGE, STONE, PAVING, MARKING, LIGHTING, RUNWAY 35 MALSR, SIGNAGE, SEDIMENT AND EROSION CONTROL, SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4A THROUGHOUT THE DURATION OF THE PROJECT. PHASE 4A REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL RUNNAY AND TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. WORK OUTSIDE OF THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4A1. WORK INSIDE THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE A2. WORK WITHIN THE TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4A3. THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4A1 WHILE WORKING IN SUBPHASE 4A2 AND 4A3, CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A, AND TAXIWAY B1 WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING

## PHASE 4B:

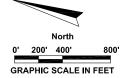
#### **RUNWAY (STA 77+25 TO STA 90+25)**

PHASE 4B SHALL CONSIST OF WORK IN THE MIDFIELD AREA OF THE PROJECT AND SHALL INCLUDE THE SECTION OF THE PERMANENT RUNWAY (STA 77+25 TO STA 90+25). THE WORK SHALL CONSIST OF GRADING, STONE, PAVING, MARKING LIGHTING AND SIGNAGE SEDIMENT AND EROSION CONTROL SEEDING/MULICHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4B THROUGHOUT THE DURATION OF THE PROJECT PHASE 4B REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 SAFETY AREA THE CONTRACTOR SHALL COORDINATE ALL RUNWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES, WORK OUTSIDE OF THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4B1 WORK INSIDE THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4B2. THE CONTRACTOR CAN ALSO WORK IN SURPHASE 4B1 WHILE WORKING IN SURPHASE 4B2 CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN PHASE 4B.

#### PHASE 4C

#### RUNWAY (STA. 42+35 TO STA. 77+25), TAXIWAY A3, A4, B2 (ADDITIVE ALTERNATE BID ITEM), B3 AND TAXIWAY A SHOULDERS

PHASE 4C SHALL CONSIST OF WORK IN THE MIDFIELD AREA OF THE PROJECT AND SHALL INCLUDE THE SECTION OF THE PERMANENT RUNWAY (STA 42+35 TO STA 77+25), TAXIWAYS A3, A4, B2 (ALTERNATE BID ITEM), B3, AND TAXIWAY A SHOULDERS. THE WORK SHALL CONSIST OF GRADING, DRAINAGE, STONE, PAVING, MARKING, LIGHTING AND SIGNAGE, SEDIMENT AND EROSION CONTROL, SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4C THROUGHOUT THE DURATION OF THE PROJECT. PHASE 4C REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY AND TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. WORK OUTSIDE OF THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4C1, WORK INSIDE THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4C2. WORK INSIDE THE TAXIWAY OBJECT FREE AREA SHALL BE SUBPHASE 4C3. THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4C1 WHILE WORKING IN SUBPHASE 4C2 AND 4C3. CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN PHASE 4C.



# **BID ITEM), AND TAXIWAY A SHOULDERS**

PHASE 4D SHALL CONSIST OF WORK IN THE MIDFIELD AREA OF THE PROJECT AND SHALL INCLUDE THE SECTION OF THE PERMANENT RUNWAY (STA 32+25 TO STA 42+35), TAXIWAYS A5, B4 (ALTERNATE BID ITEM) AND TAXIWAY A SHOULDERS. THE WORK SHALL CONSIST OF PAVEMENT REMOVAL, MISCELLANEOUS DEMOLITION, GRADING, DRAINAGE STONE, PAVING, MARKING, LIGHTING AND SIGNAGE, SEDIMENT AND EROSION CONTROL SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4D THROUGHOUT THE DURATION OF THE PROJECT. PHASE 4D REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY AND TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. WORK OUTSIDE OF THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4D1. WORK INSIDE THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4D2. WORK INSIDE THE TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4D3. THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4D1 WHILE WORKING IN SUBPHASE 4D2 AND 4D3. CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN PHASE 4D.

#### RUNWAY (STA. 28+75 TO STA. 32+25), TAXIWAY A6, AND TAXIWAY A SHOULDERS

PHASE 4E SHALL CONSIST OF WORK IN THE MIDFIELD AREA OF THE PROJECT AND SHALL INCLUDE THE SECTION OF THE PERMANENT RUNWAY (STA 28+75 TO STA 32+25), TAXIWAY A6 AND TAXIWAY A SHOULDERS. THE WORK SHALL CONSIST OF PAVEMENT REMOVAL, MISCELLANEOUS DEMOLITION, GRADING, DRAINAGE, STONE, PAVING, MARKING LIGHTING AND SIGNAGE, SEDIMENT AND EROSION CONTROL, SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4E THROUGHOUT THE DURATION OF THE PROJECT. PHASE 4E REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY AND TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES, WORK OUTSIDE OF THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4F1, WORK INSIDE THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4E2. WORK <mark>INS</mark>IDE THE TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 453. THE CONTRACTOR CAN ALSO WORK IN SURPHASE 451 WHILE WORKING IN SURPHASE 452 AND 453. CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAYS A, B5 WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN PHASE 4F

#### PHASE 4F:

#### NORTH RUNWAY (STA 11+00 TO STA 28+75)

PHASE 4F SHALL CONSIST OF WORK ON THE NORTH SIDE OF THE AIRFIELD AND SHALL INCLUDE THE SECTION OF THE PERMANENT RUNWAY (STA 11+00 TO STA 28+75) AND THE NORTHERN BLAST PAD. THE WORK SHALL CONSIST OF GRADING, STONE, PAVING, MARKING, LIGHTING, RUNWAY 17 MALSR, SIGNAGE, SEDIMENT AND EROSION CONTROL, SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4F THROUGHOUT THE DURATION OF THE PROJECT. PHASE 4F REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY AND TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES, WORK OUTSIDE OF THE TEMPORARY RUNWAY 17-35 SAFETY AREA AND TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4F1. WORK INSIDE THE TEMPORARY RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4F2. WORK INSIDE THE TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4F3. THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4F1 WHILE WORKING IN SUBPHASE 4F2 AND 4F3. CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN PHASE 4F.

# TAXIWAY A7, TAXIWAY A8, TAXIWAY A, AND TAXIWAY A SHOULDERS

PHASE 4G SHALL CONSIST OF WORK ON TAXIWAY A7, TAXIWAY A8, TAXIWAY A, AND TAXIWAY A SHOULDERS. THE WORK SHALL CONSIST OF GRADING, DRAINAGE, STONE, PAVING, MARKING, LIGHTING AND SIGNAGE, SEDIMENT AND EROSION CONTROL, SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4G THROUGHOUT THE DURATION OF THE PROJECT, CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN

# FINAL PAVING LIFT FOR THE RUNWAY AND GROOVING

PHASE 4H SHALL CONSIST OF THE PAVING OF THE FINAL LIFT OF ASPHALT ON PERMANENT RUNWAY 17-35 (ONLY IF THE ASPHALT RUNWAY BASE BID IS CHOSEN FOR CONSTRUCTION) COMPLETION OF TDZ AND CENTERLINE LIGHTS. AND MARKING. PHASE 4H WILL BE REMOVED FROM THE PROJECT IF THE CONCRETE RUNWAY ALTERNATIVE IS AWARDED AND ALL WORK ASSOCIATED WITH PHASE 4H WILL BE INCORPORATED INTO EACH INDIVIDUAL PHASE. THE WORK SHALL CONSIST OF PAVING, MARKING, GROOVING, AND LIGHTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4H THROUGHOUT THE DURATION OF THE PROJECT. PHASE 4H REQUIRES WORK WITHIN TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. WORK OUTSIDE OF THE TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4H1. WORK INSIDE THE TAXIWAY OBJECT FREE AREA SHALL BE SUBPHASE 4H2. THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4H1 WHILE WORKING IN SUBPHASE 4H2. CONTRACTOR SHALL REMAIN CLEAR OF TEMPORARY RUNWAY 17-35 AT ALL TIMES AND ALL TAXIWAYS WHILE THEY ARE OPEN AND ACTIVE WHILE WORKING WITHIN PHASE 4H.

PHASE 41 SHALL CONSIST OF THE WORK REQUIRED TO COMPLETE THE MALSR AND LOCALIZER SYSTEMS, INSTALI INFRASTRUCTURE FOR THE GLIDE SLOPE SYSTEMS, INSTALL ALL INFIELD ELECTRICAL NOT SPECIFICALLY TIED TO A PHASE, AND WORK REQUIRED WITHIN THE ELECTRICAL VAULT AND TOWER. THE WORK SHALL CONSIST OF TRENCHING CONDUIT CABLING ELECTRICAL AIRFIELD LIGHTING CONTROL SYSTEM ELECTRICAL VAULT WORK AND INFIEL ELECTRICAL. PHASE 4I REQUIRES WORK WITHIN RUNWAY SAFETY AREAS AND TAXIWAY OBJECT FREE AREAS. ANY WORK FOR PHASE 41 REQUIRING CLOSURE OF THE RUNWAY OR TAXIWAYS SHALL BE COMPLETED WITH TH ASSOCIATED CLOSURES REQUIRED FOR THE OTHER PHASES. THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE THE RUNWAY OR TAXIWAYS SPECIFICALLY FOR THE PURPOSE OF WORK FOR PHASE 4L THE CONTRACTOR SHALL COORDINATE ALL RUNWAY AND TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES.

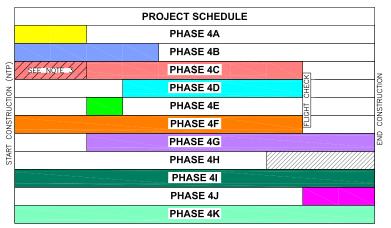
#### PHASE 4J:

#### TAXIWAY H AND EAST SIDE TAXIWAY A SHOULDERS

PHASE 4.I SHALL CONSIST OF WORK ON THE TAXIWAY H AND TAXIWAY A SHOULDERS ALONG THE FASTERN EDGE OF FAXIWAY A. THE WORK SHALL CONSIST OF MILLING, MISCELLANEOUS DEMOLITION, GRADING, STONE, PAVING, CRACK SEALING AND DOUBLE SURFACE TREATMENT, MARKING, LIGHTING AND SIGNAGE, SEDIMENT AND EROSION CONTROL SEEDING/MULCHING/MATTING/SODDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCES THROUGH PHASE 4J THROUGHOUT THE DURATION OF THE PROJECT, PHASE 4J REQUIRES WORK WITHIN TAXIWA OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE AOR AN IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES, WORK ASSOCIATED WITH TAXIWAY H SHALL BE CONSIDERED SUBPHASE 4J1. WORK INSIDE THE TAXIWAY A OBJECT FREE AREAS, WHILE THE TAXIWAY IS CLOSED, SHALL BE SUBPHASE 4.12, THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4.12 WHILE WORKING IN SUBPHASE 4.12.

#### PHASE 4K: BORROW AREA

PHASE 4K SHALL CONSIST OF WORK WITHIN THE BORROW AREA FOR THE PROJECT AS SHOWN ON SP-32. THE WOR SHALL INCLUDE GRADING, EXCAVATION, SEDIMENT AND EROSION CONTROL, SEEDING, AND MULCHING. ALL STOCK PILED MATERIAL SHALL BE UTILIZED TO THE GREATEST EXTENT POSSIBLE PRIOR TO EXCAVATION OF ONSITE MATERIALS. THE AOR SHALL DIRECT THE CONTRACTOR ON THE USE OF SPECIFIC MATERIALS AROUND THE PROJEC SITE INCLUDING THE USE OF BETTER MATERIALS UNDER THE FOOTPRINT OF THE FUTURE RUNWAY.



# (SEE INDIVIDUAL PHASES FOR SPECIFIC SCHEDULE REQUIREMENTS)

## LEGEND:

# ADDITIVE ALTERNATE (S) \\\\\\\\\\\\

- REFERENCE "TAXIWAY NAMING CHART" ON SHEET SP-08 FOR VOLUME 2 & VOLUME 3 PLANNED TAXIWAY RENAMING.
- CONTRACTOR SHALL REFERENCE EROSION AND SEDIMENT CONTROL PLANS FOR VOLUME 2 AND COORDINATE WITH PHASING PLANS, COORDINATION OF PLANS SHALL BE INCIDENTAL TO THE PROJECT. SEE SHEET EC-01 OF VOLUME 2 FOR SPECIFIC EROSION AND SEDIMENT CONTROL REQUIREMENTS AND NOTES FOR EACH PHASE OF WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF ALL EROSION AND SEDIMENT CONTROL REQUIREMENTS FOR EAC
- CONTRACTOR SHALL ENSURE TAXIWAY A/B1 OR A1/B1 BE CLOSED AT THE SAME TIME AS CONNECTOR TAXIWAY P/B2 OR A3
- 4. NIGHT WORK IS EXPECTED AS PART OF THIS PROJECT FOR WORK WITHIN THE RUNWAY SAFETY AREA AND OTHER WORK A REQUIRED TO COMPLETE THE PROJECT ON SCHEDULE. THE CONTRACTOR SHALL SUPPLY THE OWNER A DETAILED WEEKL' SCHEDULE FOR ANTICIPATED NIGHT WORK IN ORDER FOR THE OWNER TO SCHEDULE PERSONNEL, INSPECTION, TESTING AND RUNWAY CLOSURES ACCORDINGLY. THE WEEKLY SCHEDULE MUST PROVIDE ENOUGH DETAIL AND WORK TO WARRAN NIGHT WORK. THE OWNER RESERVES THE RIGHT TO NOT ALLOW NIGHT WORK IF THE CONTRACTOR DOES NOT PROVID ENOUGH JUSTIFICATION FOR THE NIGHT WORK AND ASSOCIATED COSTS AND IMPACT TO THE OWNER. ANY IMPACTS TO THE CONTRACTORS OVERALL SCHEDULE DUE TO THE OWNER RESTRICTING WORK AT NIGHT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT JUSTIFY ADDITIONAL TIME OR MONIES.





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# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE** NORTH CAROLINA



**BID PACKAGE 4 - PAVING** LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL. PHASING AND **SAFETY PLANS** 

VOLUME 2 OVERALL **PHASING PLAN** 

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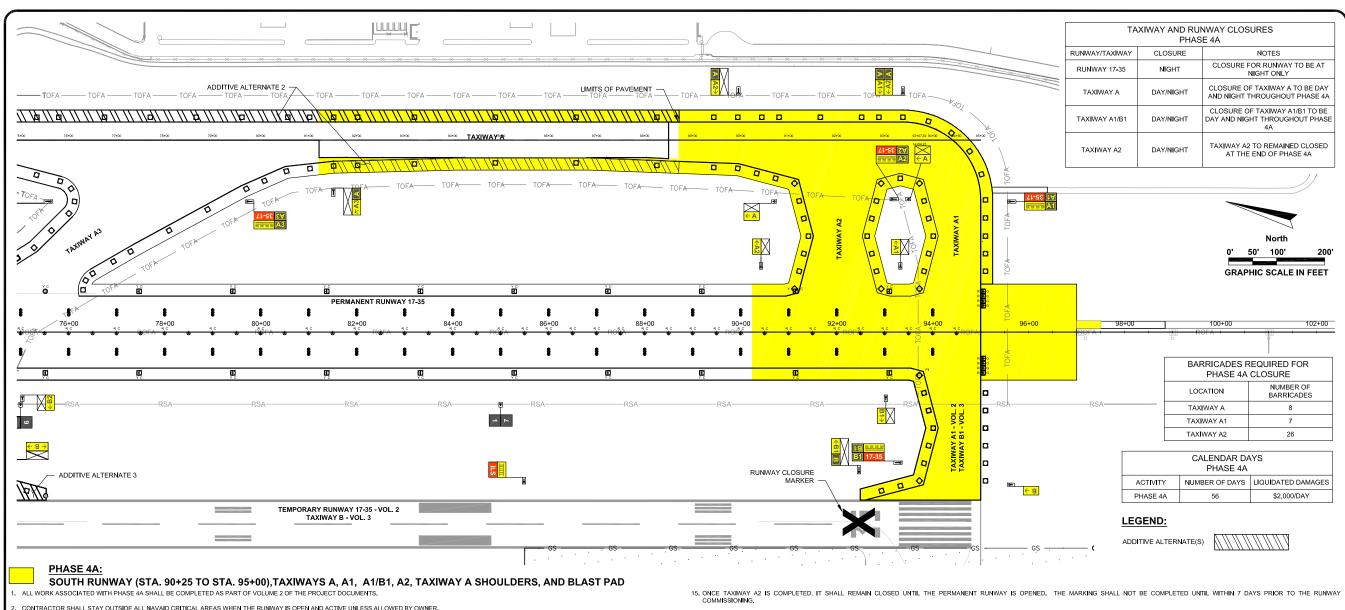
REVISIONS

DESIGNED BY: W.L.J. DRAWN BY: CHECKED BY: J.M.M.

APPROVED BY: J.M.M. DATE:

DECEMBER 2016 STATE LICENSE # N.C. C 2450

PROJECT NO SHEET NUMBER



- CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER.
- CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUIWAY SAFETY AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4A AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUIWAY SAFETY AREA SENERGED AS WORK PROGRESSES. THE STAKING, AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUIWAY SAFETY AREA. IOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO
- TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4A AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIMAY OBJECT FREE AREA AS NEEDED AS WORKE PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY TH TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR, ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- PHASE 4A REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA, NO WORK IS ALLOWED IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY IS PRISE 4A REQUIRES WORN WITHIN THE TEMPORANT ROTIVANT 17-39 CHIMMAY 17-39 CHIMAY 17-39 CHIMMAY 17-39 CHIMAY 17-39 CHIMAY 17-39 CHIMMAY 17-39 CHIMMAY 17-39 CHIMMAY 17-39 CH
- PHASE 4A REQUIRES WORK WITHIN TAXIWAY OBJECT FREE AREA FOR TAXIWAY A, A1 AND B1. NO WORK IS ALLOWED IN THE TAXIWAY OBJECT FREE AREA OF AN OPEN AND ACTIVE TAXIWAY. FOR WORK TO BE COMPLETED WITHIN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY MUST BE CLOSED. THIS CAN BE DONE BY CLOSING THE ASSOCIATED TAXIWAY DURING THE DAY OR NIGHT OR DURING RUNWAY CLOSURES ANSOCIATED WITH WORK WITHIN THE RUNWAY SAFETY AREA. THE CONTROL AND CONTROL AND A C RESERVES THE RIGHT TO CHANGE TAXIWAY CLOSURE DATES AND TIMES AT ANY TIME.
- PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS, AND NOTES.
- ONCE AREAS WITHIN PHASE 4A ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS
- PHASE 4A REQUIRES THE CLOSURE OF TAXIWAY A AND A1 FOR A LONG DURATION. THE CONTRACTOR SHALL NOTIFY THE AIRPORT A MINIMUM OF 14 DAYS PRIOR TO THE ANTICIPATED CLOSURE OF THOSE TAXIWAYS. THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS TO CLOSE THOSE TAXIWAYS. PRIOR TO THE TAXIWAYS BEING REOPENED TO TRAFFIC THEY SHALL BE THOROUGHLY CLEANED OF ANY DEBRIS OR FOD. THE AIRPORT SHALL INSPECT THE TAXIWAYS AND OFFER APPROVAL TO OPEN THE TAXIWAYS PRIOR TO THE REMOVAL OF BARRICADES. ONCE THE TAXIWAYS ARE REOPENED TO TRAFFIC, ALL WORK ON OR IN THE VICINITY OF THE TAXIWAYS OR TAXIWAY OBJECT FREE AREAS SHALL BE COMPLETED AT NIGHT WHEN THE TAXIWAY IS CLOSED.
- 0, PHASE 4A CAN BE COMPLETED CONCURRENTLY WITH PHASE 4C, HOWEVER, AT NO TIME DURING THIS PROJECT WILL CONNECTOR TAXIWAYS A/B1 OR A1/B1 BE CLOSED AT THE SAME TIME AS CONNECTOR TAXIWAYS P/B2 OR A3. THE CONTRACTOR SHALL COORDINATE WORK BETWEEN PHASE 4A AND 4C TO ENSURE INDICATED TAXIWAYS ARE NOT CLOSED AT THE SAME TIME.
- 11. PHASE 4A SHALL BE COMPLETED WITHIN THE ALLOTTED CALENDAR DAYS INCLUDING LIGHTS AND ASSOCIATED MARKING FOR TAXIWAY A1.
- 12. THE FINAL LIFT OF ASPHALT OF PERMANENT RUNWAY 17-35 SHALL BE COMPLETED WITH NO MORE THAN 2 TRANSVERSE COLD JOINTS. THE FINAL LIFT OF ASPHALT FOR PHASE 4A ON THE PERMANENT RUNWAY 17-35 SHALL BE CONSTRUCTED AS PART OF PHASE 4A. CONTRACTOR SHALL COORDINATE WORK FOR PHASE 4A WITH PHASE 4H. THE NORTHERN STATION OF PHASE 4A SHALL BE ONE OF THE TRANSVERSE COLD JOINTS
- 3. ONCE THE FINAL LIFT OF ASPHALT HAS BEEN INSTALLED, THE RUNWAY AND TAXIWAYS SHALL BE MARKED IN ACCORDANCE TO THE PERMANENT RUNWAY AND TAXIWAY MARKING PLANS. GROOVING SHALL BE COMPLETED AS PART OF PHASE 4H.
- 14. BARRICADES FOR TAXIWAY CROSSING CAN BE USED FOR TAXIWAY CLOSURES IN ORDER TO REDUCE MAXIMUM AMOUNT OF BARRICADES REQUIRED FOR PHASE 4A.

- 16. ALL EXISTING TAXIWAY AND RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
- 17. ALL EXISTING TEMPORARY LED TAXIWAY EDGE LIGHTS SHALL BE PRESERVED AND PROTECTED FROM DAMAGE FOR REUSE AS TEMPORARY TAXIWAY EDGE LIGHTS IN THIS PHASE OF CONSTRUCTION.
- 18. PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED ALONG TAXIWAY A, TAXIWAY A1, AND TAXIWAY A2. TH TAXIWAY EDGE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE EXISTING TAXIWAY A SOUTH (TAXIWAY AS) LIGHTING CIRCUIT.
- 19. TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED TO DEFINE THE EDGES OF TAXIWAY AT CROSSING THE PERMANENT RUNWAY 35 THRESHOLD, TAXIWAY EDGE LIGHTS SHALL BE INSTALLED IN A LINE ACROSS THE PROPOSED RUNWAY AT STATION 94-00 (APPROXIMATE) AND ACROSS THE THRESHOLD IN LINE WITH THE PERMANENT TAXIWAY EDGE LIGHTS. THE TEMPORARY LIGHTING ACROSS TAXIWAY AT STATION 94-00 (APPROXIMATE) AND ACROSS TAXIWAY AT STATION 94-00 (APPROXIMATE) AND ACROSS TAXIWAY AT STATION 94-00 (APPROXIMATE) AND ACROSS TAXIWAY AT STATION 95-00 (APPROXIMATE) AND ACROSS TAXIWAY AT A STATION 95-00 (APPROXIMATE) AND A STATION 95-00 (APPROXIMATE) AND A STATION 95-00 (APPROXIMATE)
- 20. THE TAXIWAY EDGE LIGHTING FOR TAXIWAY A2 SHALL BE COVERED TO FULLY OBSCURE THE EDGE LIGHTING FOR THIS TAXIWAY CONNECTOR PRIOR TO THE OPENING OF THE RUNWAY. THE TAXIWAY EDGE
- 21. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED. THE MANDATORY SIGN FOR RUNWAY 17-35 AT TAXIWAY AT SHALL BE ACTIVE AND ILLUMINATED. THE EXISTING RUNWAY EXIT SIGN FROM TEMPORARY RUNWAY 35 SHALL HAVE THE MESSAGE PANEL EXCHANGED TO INDICATE THE TURN ONTO TAXIWAY AT AND SHALL REMAIN ILLUMINATED. THE DIRECTION SIGN FROM TAXIWAY AT OTAXIWAY AT SHALL HAVE THE MESSAGE | A | A1 > ILLUMINATED AND THE MESSAGE < A2 | A | OBSCURED USING A BLANK PANEL UNTIL TAXIWAY A2 BECOMES ACTIVE.
- 22. ALL OTHER TAXIWAY GUIDANCE AND PERMANENT RUNWAY EXIT SIGNAGE SHALL BE TURNED OFF USING THE SIGN ON/OFF SWITCH, COVERED AND OBSCURED UNTIL PERMANENT RUNWAY 17-35 BECOMES ACTIVE.
- 23. THE MALSR THRESHOLD SHALL BE INSTALLED BY THE BP-3 PHASE CONTRACTOR AND THE RUNWAY THRESHOLD LIGHTING SHALL BE INSTALLED BY THE BP-4 PHASE CONTRACTOR. BOTH CONTRACTORS SHALL BE HELD RESPONSIBLE TO COORDINATE THE INSTALLATION OF EACH SYSTEM, THIS SHALL INCLUDE ALL SAW CUTTING ACTIVITIES, EXCAVATION, CONCRETE AND LIGHTING INSTALLATION ACTIVITIES. BOTH CONTRACTORS SHALL COORDINATE AND COMMUNICATE THE CONSTRUCTION PLAN AND ACTIVITIES WITH THE AOR. THE AOR SHALL ACTIVITIES PRIOR TO ANY CONSTRUCTION OF THESE THE ITEMS. THE INTENT IS TO HAVE THESE TWO ITEMS CONSTRUCTED BY EACH CONTRACTOR WITH MINIMAL PAVEMENT DISTURBANCE AND INTERFERENCE BETWEEN THE TWO SYSTEMS. COORDINATION OF THIS WORK SHALL INCIDENTAL TO THE PROJECT.
- 24. ALL RUNWAY EDGE LIGHTING BASE CANS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED CORED AND HAVE THE EDGE LIGHT TOP CAN SECTION INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 25. ALL RUNWAY CENTERLINE AND TDZ LIGHTING BOTTOM BASE CAN SECTIONS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED IN THE RUNWAY BASE MATERIAL PRIOR TO PAVING ACTIVITIES AND FLIGHT CHECK. AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE AND TDZ LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 26. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO OPENING THE PERMANENT RUNWAY.
- HE LIGHTING FOR TAXIWAY A2, INCLUDING CORING, INSTALLING RISERS, AND LIGHTS, CAN BE POSTPONED UNTIL AFTER THE FLIGHT CHECK, HOWEVER, THE LIGHTING MUST BE INSTALLED AND OPERATION.
- 28. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS WITH THE PAVING ACTIVITIES.





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**ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA** 



**BID PACKAGE 4 - PAVING LIGHTING AND NAVAIDS** - VOLUME 1 -**GENERAL, PHASING AND SAFETY PLANS** 

PHASE 4A

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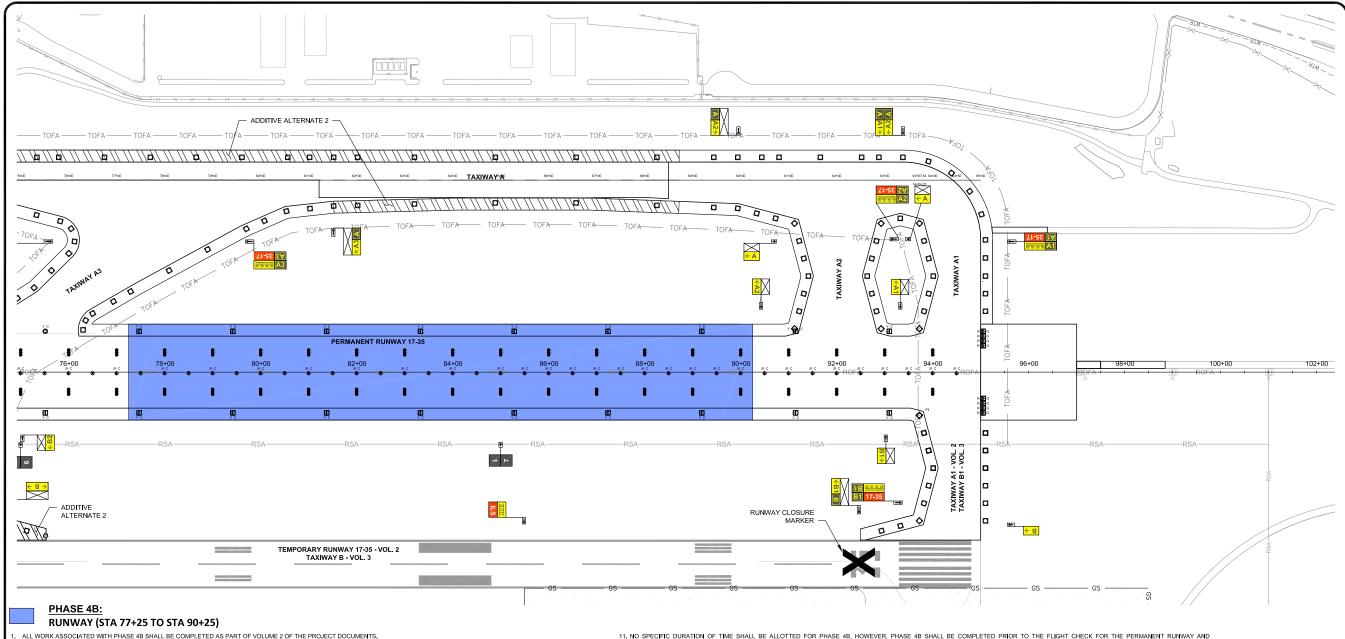
REVISIONS:			
NO.	DATE	BY	DESCRIPTION

**DESIGNED BY:** W.L.J. DRAWN BY: **CHECKED BY:** J.M.M. APPROVED BY: J.M.M.

DECEMBER 2016 DATE:

STATE LICENSE # N.C. C 2450

SHEET NUMBER

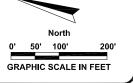


- CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER.
- CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA, THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUMMAY SAFETY AREA TO HE SAFETY AREA. THE STANING SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STANING AND ORANGE MESH SHALL BE RECURELY FASTENED TO THE WOODEN STAKES. THE STANING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4B AND AS DIRECTED BY THE OWNER OR AOR, THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUMWAY SAFETY AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION, THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUNWAY SAFETY AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR, ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH. AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE FEET INGH, AND ORANGE MESH SAFET I MESH TO CLEAR THE INSTITUTE INCOME THE DATAWAY OBJECT FREE AREA. THE DATAWAY OBJECT FREE AREA. STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE PARTICIN OF PHASE 4B AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED IN WRITING TO THE AGR. ANY DEVIATIONS TO THE STAKING ARE AT THE SQUE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- PHASE 4B REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. NO WORK IS ALLOWED IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY IS OPEN AND ACTIVE. NIGHT WORK, WHEN THE RUNWAY IS CLOSED, SHALL BE ALLOWED FOR ANY WORK IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY NIGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE RUNWAY CLOSURE PROCEDURES PRIOR TO STARTING RUNWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE
- PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS, AND NOTES.
- ONCE AREAS WITHIN PHASE 4B ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS.
- THE FINAL LIFT OF ASPHALT OF PERMANENT RUNWAY 17-35 SHALL BE COMPLETED WITH NO MORE THAN TWO TRANSVERSE COLD JOINTS, THE FINAL LIFT OF ASPHALT ON THE PERMANENT RUNWAY 17-35 SHALL NOT BE CONSTRUCTED AS PART OF PHASE 4B. THE FINAL LIFT SHALL BE CONSTRUCTED AS PART OF PHASE 4H, WITH ONE CONTINUOUS PULL. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR COORDINATION OF WORK BETWEEN THE PHASES. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT. THE SOUTHERN STATION OF PHASE 4B SHALL BE ONE OF THE TRANSVERSE COLD JOINTS.
- TO CONTROL DRAINAGE WITHIN PHASE 4B PRIOR TO COMPLETION OF PHASE 4H. THE CONTRACTOR SHALL LEAVE A MINIMUM OF 100 FEET LINPAVED OF THE FINAL ASPHALT LIFT ON THE TO CONTROL DRAINGS WITHIN PRASE 46 PRIOR TO COMPLETION OF PHASE 46, THE CONTRACTOR STALL LEAVE A MINIMOM OF UND FEET ONLY PLOT OF THE FINAL ASPHALT LIFT ON THE SHOULDERS IMMEDIATELY NORTH OF STATION 30-25 ON EACH SIDE OF THE RUNWAY. ADDITIONAL AREAS MAY BE LEFT UNPAYED AS DETERMINED BY THE CONTRACTOR WITH PRIOR APPROVAL FROM THE AOR. THIS AREA SHALL BE PAVED AS PART OF PHASE 4H. THE CONTRACTOR SHALL DIRECT WATER THROUGH THE OPENING IN THE SHOULDER AND CONTROL THE RUNOFF FROM THE PAVEMENT EDGE AND TO THE EXISTING DRAINAGE STRUCTURES. ANY EROSION CAUSED BY THE RUNOFF FROM THE ASPHALT OPENING SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY AND AT NO ADDITIONAL COST TO THE OWNER.
- 0. IT IS THE INTENT FOR PHASE 4B THAT AS MUCH OF THE PERMANENT RUNWAY 35 GLIDE SLOPE BE INSTALLED IN ITS PERMANENT LOCATION. THIS INCLUDES CONDUITS, FOUNDATIONS, GRAVEL PAD, ETC. IN ORDER TO EXPEDITE THE COMPLETION OF THIS WORK FOR VOLUME 3. THE CONTRACTOR SHALL MAKE HIMSELF PROFICIENT THE WORK REQUIRED TO BE COMPLETED IN PHASE 4B IN REGARDS TO THE GLIDE SLOPE AND COMPLETED IN VOLUME 3.

- COORDINATION WITH ONGOING WORK FOR PHASE 4A AND 4C.
- 12. ALL EXISTING RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
- 13. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED. THE RDR SIGN CONCRETE PAD SHALL BE INSTALLED DURING THIS PHASE OF WORK IN PREPARATION FOR A RELOCATED RDR SIGN.
- 14. ALL RUNWAY EDGE LIGHTING BASE CANS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED, CORED AND HAVE THE EDGE LIGHT TOP CAN SECTION INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 15. ALL RUNWAY CENTERLINE AND TDZ LIGHTING BOTTOM BASE CAN SECTIONS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED IN THE RUNWAY BASE MATERIAL PRIOR TO PAVING ACTIVITIES AND FLIGHT CHECK. AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE AND TDZ LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 16. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO OPENING THE PERMANENT RUNWAY
- 17. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS WITH THE PAVING ACTIVITIES.

PHASE 4B			
RUNWAY/TAXIWAY	CLOSURE	NOTES	
RUNWAY 17-35	NIGHT	CLOSURE FOR RUNWAY TO BE AT NIGHT ONLY	
TAXIWAY A	NONE	TAXIWAY A SHALL NOT BE CLOSED AS PART OF PHASE 4B	
TAXIWAY A1/B1	NONE	TAXIWAY A1/B1 SHALL NOT BE CLOSED AS PART OF PHASE 4B	









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**ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA** 



**BID PACKAGE 4 - PAVING LIGHTING AND NAVAIDS** - VOLUME 1 -**GENERAL, PHASING AND SAFETY PLANS** 

PHASE 4B

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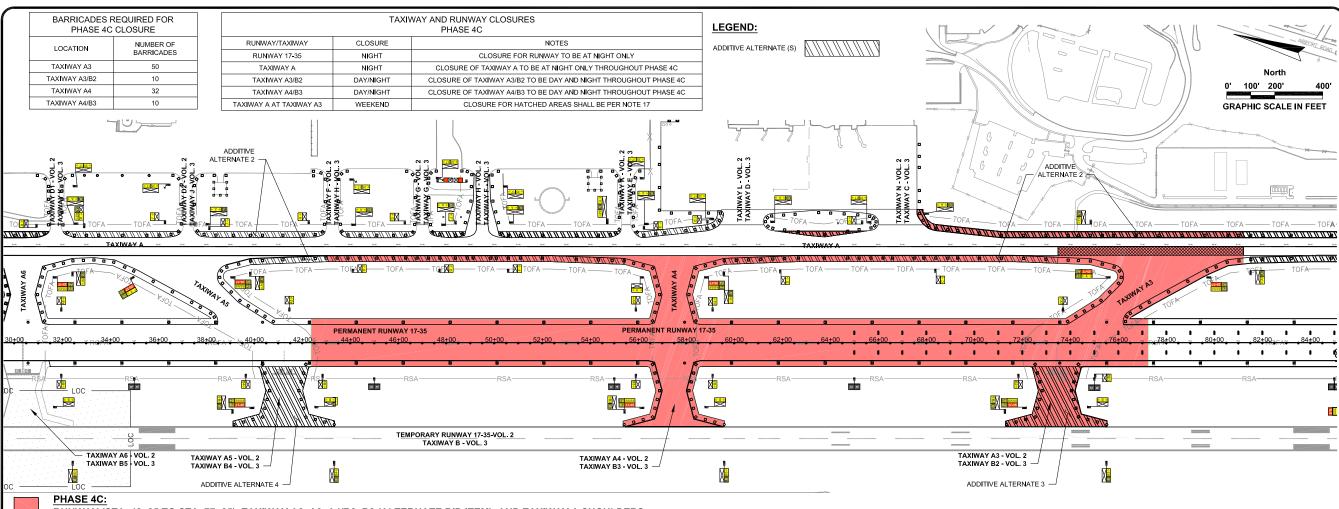
**DESIGNED BY:** DRAWN BY: W.L.J. CHECKED BY: J.M.M.

APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C 2450 PROJECT NO.

SHEET NUMBER



#### RUNWAY (STA. 42+35 TO STA. 77+25), TAXIWAY A2, A3, A4/B3, B2 (ALTERNATE BID ITEM), AND TAXIWAY A SHOULDERS 1. ALL WORK ASSOCIATED WITH PHASE 4C SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS

- 2. CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER
- 3. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUNWAY SAFETY AREA. THE ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4C AND AS DIRECTED BY THE OWNER OR AOR, THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUNWAY SAFETY AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUMWAY SAFETY AREA. HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO
- 4. CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4C AND AS DIRECTED BY THE OWNER OR AOR, THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES, THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION, THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 5 PHASE 4C REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA NO WORK IS ALLOWED IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY IS OPEN AND ACTIVE, NIGHT WORK, WHEN THE RUNWAY IS CLOSED, SHALL BE ALLOWED FOR ANY WORK IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. THE CONTRACTOR SHALL RUNWAY NIGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE RUNWAY CLOSURE PROCEDURES PRIOR TO STARTING RUNWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE RUNWAY CLOSURE DATES AND TIMES AT ANY TIME.
- PHASE 4C REQUIRES WORK WITHIN TAXIWAY OBJECT FREE AREA FOR TAXIWAY A. NO WORK IS ALLOWED IN THE TAXIWAY OBJECT FREE AREA OF AN OPEN AND ACTIVE TAXIWAY. FOR WORK TO BE COMPLETED WITHIN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY ALSO WORK IS ALLOWED IN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY ALSO BE CONFELTED WITHIN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY MUST BE CLOSED. THIS CAN BE DONE BY CLOSING THE ASSOCIATED AXIWAY AT NIGHT OR DURING RUWAY A CLOSURES ASSOCIATED WITH WORK WITHIN THE RUWAY SAFETY AREA. THE CONTRACTOR SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE OWNER AND AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE TAXIWAY CLOSURE PROCEDURES PRIOR TO STARTING TAXIWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE TAXIWAY CLOSURE DATES AND TIMES AT ANY TIME.
- 7. PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS, AND NOTES.
- 8. ONCE AREAS WITHIN PHASE 4C ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS.
- 9. THE FINAL LIFT OF ASPHALT ON THE PERMANENT RUNWAY 17-35 SHALL NOT BE CONSTRUCTED AS PART OF PHASE 4C. THE FINAL LIFT SHALL BE CONSTRUCTED AS PART OF PHASE 4H, WITH ONE CONTINUOUS PULL. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR COORDINATION OF WORK BETWEEN THE PHASES. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT.
- 10. PHASE 4C CAN BE COMPLETED CONCURRENTLY WITH PHASE 4A, HOWEVER, AT NO TIME DURING THIS PROJECT WILL CONNECTOR TAXIWAYS A/B1 OR A1/B1 BE CLOSED AT THE SAME TIME AS CONNECTOR TAXIWAYS P/B2 OR A3. THE CONTRACTOR SHALL COORDINATE WORK BETWEEN PHASE 4A AND 4C TO ENSURE INDICATED TAXIWAYS ARE NOT CLOSED AT THE SAME TIME.
- 11. TO CONTROL DRAINAGE WITHIN PHASE 4C PRIOR TO COMPLETION OF PHASE 4H. THE CONTRACTOR SHALL LEAVE A MINIMUM OF 100 FEET UNPAVED OF THE FINAL ASPHALT LIFT ON THE SHOULDERS IMMEDIATELY NORTH OF STATION 46-00, 51-00, 56-00, 60-00, 60-00, 60-00, 62-00, 72-00, AND 75-50 ON EACH SIDE OF THE RUNWAY. ADDITIONAL AREAS MAY BE LEFT UNPAVED AS DETERMINED BY THE CONTRACTOR WITH PRIOR APPROXISE FROM THE AOR. THESE AREA SHALL BE PAVED AS PART OF PHASE 4H. THE CONTRACTOR SHALL DIRECT WATER THROUGH THE OPENING IN THE SHOULDER AND CONTROL THE RUNOFF FROM THE PAVEMENT EDGE AND TO THE EXISTING DRAINAGE STRUCTURES. ANY EROSION CAUSED BY THE RUNOFF FROM THE ASPHALT OPENING SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY AND AT NO ADDITIONAL
- 12. IF TAXIWAY B2 IS NOT CONSTRUCTED AS PART OF VOLUME 2, TAXIWAY A3 SHALL REMAIN CLOSED FOR THE DURATION OF THE PROJECT. A TAXIWAY CROSSING WILL NOT BE REQUIRED IF B2 IS NOT AWARDED. THE MARKING FOR TAXIWAY A3 SHALL NOT BE COMPLETED UNTIL WITHIN 7 DAYS PRIOR TO THE RUNWAY COMMISSIONING. THE LIGHTING FOR TAXIWAY A3, INCLUDING CORING, INSTALLING RISERS, AND LIGHTS, CAN BE POSTPONED UNTIL AFTER THE FLIGHT CHECK, HOWEVER, THE LIGHTING MUST BE INSTALLED AND OPERATIONAL PRIOR TO COMMISSIONING.
- 13. IF TAXIWAY B2 IS CONSTRUCTED AS PART OF VOLUME 2, TAXIWAY A3 AND B2 SHALL BE MARKED, LIGHTED AND SIGNED PER THE PLANS AND OPENED TO TRAFFIC UPON COMPLETION AND THE TAXIWAY CROSSING
- 14. CONTRACTOR SHALL BE REQUIRED TO INSTALL A WEDGE OF ASPHALT AT THE TWO INCH LIFT WITHIN EACH TAXIWAY THAT THE LOCATION THE FINAL LIFT HAS NOT BEEN INSTALLED ON THE RUNWAY TO ALLOW TAXING OF AIRCRAFT. THE WEDGE SHALL BE PLACED WITHIN THE TAXIWAY FOOTPRINT AND SHALL BE TIED IN PRIOR TO THE EDGE OF THE RUNWAY. THIS WEDGE OF ASPHALT SHALL BE REMOVED PRIOR TO INSTALLING THE FINAL LIFT AND SHALL BE INCIDENTAL TO THE PROJECT. TAXIWAY A4/B3 SHALL HAVE ASPHALT WEDGE INSTALLED. TAXIWAYS A3/B2 SHALL HAVE ASPHALT WEDGES INSTALLED ONLY IF

- 15. NO SPECIFIC DURATION OF TIME SHALL BE ALLOTTED FOR PHASE 4C, HOWEVER, PHASE 4C SHALL BE COMPLETED PRIOR TO THE FLIGHT CHECK FOR THE PERMANENT RUNWAY AND COORDINATED WITH ONGOING WORK FOR PHASE 4B AND 4D.
- 16. ALL EXISTING TAXIWAY AND RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE.
- 17. ALL EXISTING TEMPORARY LED TAXIWAY EDGE LIGHTS SHALL BE PRESERVED AND PROTECTED FROM DAMAGE FOR REUSE AS TEMPORARY TAXIWAY EDGE LIGHTS IN THIS PHASE OF CONSTRUCTION.
- 18, PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED ALONG TAXIWAY A, TAXIWAY A3, AND TAXIWAY A4. THE TAXIWAY EDGE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE EXISTING TAXIWAY A SOUTH (TWAS) OR TAXIWAY A NORTH (TWAN) LIGHTING CIRCUIT.
- 19. PHASE 4C REQUIRES WORK WITHIN TAXIWAY A FROM CENTERLINE TO THE EDGE OF PAVEMENT AND SHOULDER WORK ALONG TAXIWAY A. ANY WORK WITHIN THE ACTUAL PAVEMENT AREA OF TAXIWAY A AND THE TAXIMAY SHOULDER AS INDICATED BY THE CROSS HATCH, INCLUDING TIE IN TO PROPOSED WORK, SHALL BE COMPLETED DURING 1 WEEKEND OF WORK BETWEEN THE HOURS OF 11 PM FRIDAY AND 5:30 AT MONDAY. THE LONG WEEKEND SHALL BE SCHEDULED WITH THE AIRPORT A MINIMUM OF 21 DAYS PRIOR TO ANTICIPATED START OF WORK. THE OWNER RESERVES THE RIGHT TO APPROVE, REJECT, OR ALTEI THE PROPOSED DATES AND TIMES.
- 20, TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED ON TAXIWAY A ACROSS TAXIWAY A3 TO DEFINE THE EDGE OF TAXIWAY A, DURING CONSTRUCTION OF TAXIWAY A3 ADDITIONAL TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED TO DEFINE THE EDGES OF TAXIWAY AS CROSSING THE PERMANENT RUNWAY 17-35 ONLY IF TAXIWAY BZ IS CONSTRUCTED. TEMPORARY TAXIWAY EDGE LIGHTS SHALL BE EDGE LIGHTING SHALLE BY OUR THE THE DESCRIPTION THE PERMANENT ROUND THE PERMANENT ROUND THE TOWN TO SOLD THE TOWN TO THE TEMPORARY LIGHTING ACROSS TAXIMAY AS UNCERTAINT ON THE PERMANENT ROUNDE GUIDANCE ACROSS THE PERMANENT ROUNDAY PAYEMENT. THE TEMPORARY LIGHTING ACROSS TAXIMAY AS SHALL BE CONNECTED TO THE TWAS CIRCUIT. THE TEMPORARY LIGHTING ACROSS THE PERMANENT ROUNDAY 17-35 SHALL BE CIRCUITED TO THE TAXIMAY B LIGHTING ON TAXIMAY A ACROSS TAXIMAY AS SHALL REMAIN IN PLACE UNTIL THE COMMISSIONING OF PERMANENT ROUNDAY 17-35. THE TAXIMAY BE LIGHTING ON TAXIMAY A ACROSS TAXIMAY AS SHALL REMAIN IN PLACE UNTIL THE COMMISSIONING OF PERMANENT ROUNDAY 17-35. THE TAXIMAY BE LIGHTING ON TAXIMAY A ACROSS TAXIMAY AS SHALL REMAIN IN PLACE UNTIL THE COMMISSIONING OF PERMANENT ROUNDAY 17-35. THE TAXIMAY BE LIGHTING ON TAXIMAY A ACROSS TAXIMAY AS SHALL REMAIN IN PLACE UNTIL THE COMMISSIONING OF PERMANENT ROUNDAY 17-35. THE TAXIMAY BE LIGHTING FOR TAXIWAY AS SHALL BE COVERED TO FULLY OBSCURE THE EDGE LIGHTING FOR THIS TAXIWAY CONNECTOR PRIOR TO THE OPENING OF THE RUNWAY. IF TAXIWAY B2 IS CONSTRUCTION, THE TEMPORARY EDG LIGHTING ON TAXIWAY A ACROSS TAXIWAY A3 SHALL BE REMOVED IN ORDER TO OPEN TAXIWAY A3 TO TRAFFIC.
- 21. TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED ON TAXIWAY A ACROSS TAXIWAY A4 TO DEFINE THE EDGE OF TAXIWAY A DURING CONSTRUCTION OF TAXIWAY A4. ADDITIONAL TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED TO DEFINE THE EDGES OF TAXIWAY A4 CROSSING THE PERMANENT RUNWAY 17-35. TEMPORARY TAXIWAY EDGE LIGHTS SHALL BE INSTALLED IN A LINE ACROSS THE PROPOSED RUNWAY AT STATION 56+00 AND 58+50 (APPROXIMATE) TO PROVIDE GUIDANCE ACROSS THE PERMANENT RUNWAY PAVEMENT. THE TEMPORARY LIGHTING ACROSS TAXIWAY A3 SHALL BE CONNECTED TO THE TWAS CIRCUIT. THE TEMPORARY LIGHTING ACROSS THE PERMANENT RUNWAY 17-35 SHALL BE CIRCUITED TO THE TAXIWAY B LIGHTING CIRCUIT. THE TAXIWAY EDGE LIGHTS FOR TAXIWAY AND TAXIWAY A4 SHALL BE ACTIVE AND LIGHTED THROUGHOUT CONSTRUCTION WHILE TAXIWAY A4 CONNECTOR IS ACTIVE
- 22. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED. THE MANDATORY SIGN FOR RUNWAY 17-35 AT TAXIWAY A3 (ONLY IF TAXIWAY B2 IS CONSTRUCTED) AND A4 SHALL BE ACTIVE AND ILLUMINATED. WITH THE EXCEPTION OF THE RUNWAY EXIT SIGNS FOR PERMANENT RUNWAY 17-35. ALL SIGNS ASSOCIATED WITH TAXIWAY A3 (ONLY IF TAXIWAY B2 IS CONSTRUCTED) AND A4 AND THE RAMP CONNECTORS SHALL BE
- 23. THE RDR SIGN CONCRETE PADS (3) SHALL BE INSTALLED DURING THIS PHASE OF WORK IN PREPARATION FOR A RELOCATED RDR SIGNS. THE RDR SIGNS SHALL BE RELOCATED IN PHASE 4L AND CIRCUITED TO
- 24. ALL OTHER TAXIWAY GUIDANCE AND PERMANENT RUNWAY EXIT SIGNAGE SHALL BE TURNED OFF USING THE SIGN ON/OFF SWITCH, COVERED AND OBSCURED UNTIL PERMANENT RUNWAY 17-35 BECOMES ACTIVI
- 25. ALL RUNWAY EDGE LIGHTING BASE CANS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED
- 26. ALL RUNWAY CENTERLINE AND TDZ LIGHTING BOTTOM BASE CAN SECTIONS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED IN THE RUNWAY BASE MATERIAL PRIOR TO PAVING ACTIVITIES AND FLIGH CHECK. AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE AND TDZ LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTION: SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 27. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO OPENING THE PERMANENT RUNWAY.
- 28. THE PAVEMENT SENSOR FOR THE PAVEMENT SENSING SYSTEM SHALL BE INSTALLED WITHIN THIS PHASE OF CONSTRUCTION AT STATIONS 50+00 AND 77+50. THE CONDUIT FOR THE SENSOR SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES AND THE LOCATION OF THE CONDUIT END SHALL BE RECORDED. THE PAVEMENT SENSOR SHALL BE INSTALLED ONLY AFTER ALL PAVING AND GROOVING ACTIVITIES ARI COMPLETED AND PRIOR TO THE RUNWAY OPENING
- 29. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS AND THE PAVEMENT SENSOR COMPONENTS WITH THE





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**BID PACKAGE 4 - PAVING** LIGHTING AND NAVAIDS - VOLUME 1 -**GENERAL. PHASING AND** SAFETY PLANS

PHASE 4C

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DESIGNED BY: DRAWN BY: CHECKED BY:

APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # PROJECT NO.

SHEET NUMBER

J.M.M.

W.L.J.

J.M.M.

N.C. C 2450

WILL BE REQUIRED.

1. ALL WORK ASSOCIATED WITH PHASE 4D SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS

OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.

2. CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER

3. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUIWAY SAFETY AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES, THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURRATION OF PHASE 4D AND AS DIRECTED BY THE OWNER OF A ROT. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUINAWY SAFETY AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUINWAY SAFETY AREA.

HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO

- 4. CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS, THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4D AND AS DIRECTED BY THE OWNER OR AGN. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIMAY OBJECT FREE AREA AS NEEDED AS WORLD PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THIS TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR, ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE
- ISE 4D REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. NO WORK IS ALLOWED IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY IS OPEN AND ACTIVE, NIGHT WORK, WHEN THE RUNWAY IS CLOSED, SHALL BE ALLOWED FOR ANY WORK IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY NIGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE RUNWAY CLOSURE PROCEDURES PRIOR TO STARTING RUNWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE RUNWAY CLOSURE DATES AND TIMES AT ANY TIME
- 6. PHASE 4D REQUIRES WORK WITHIN TAXIWAY OBJECT FREE AREA FOR TAXIWAY E AND B4. NO WORK IS ALLOWED IN THE TAXIWAY OBJECT FREE AREA OF AN OPEN AND ACTIVE TAXIWAY. FOR WORK TO BE COMPLETED WITHIN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY MUST BE CLOSED, THIS CAN BE DONE BY CLOSING THE ASSOCIATED TAXIWAY DURING AT NIGHT OR DURING RUNWAY CLOSURES ASSOCIATED WITH WORK WITHIN THE RUNWAY SAFETY AREA, THE CONTRACTOR SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE OWNER AND AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE TAXIWAY CLOSURE PROCEDURES PRIOR TO STARTING TAXIWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE TAXIWAY CLOSURE DATES AND TIMES AT ANY TIME.
- 7. PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS.
- 8. ONCE AREAS WITHIN PHASE 4D ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS,
- 9. PHASE 4D REQUIRES THE CLOSURE OF TAXIWAY E/A5 AND A5/84 FOR A LONG DURATION. THE CONTRACTOR SHALL NOTIFY THE AIRPORT A MINIMUM OF 14 DAYS PRIOR TO THE ANTICIPATED CLOSURE OF THOSE TAXIMAYS, THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS TO CLOSE THOSE TAXIMAYS, PRIOR TO THE TAXIMAYS BEING REOPENED TO TRAFFIC, THEY SHALL BE THOROUGHLY CLEANAGED OF ANY DEBTOR OF FOR. THE TAXIMAYS BEING REOPENED TO TRAFFIC, THEY SHALL BE THOROUGHLY CLEANAGED OF ANY DEBTOR OF THE TAXIMAYS PRIOR TO THE TAXIMAYS ARE REOPENED TO TRAFFIC, THEY SHALL BE THOROUGHLY CLEANAGED OF ANY DEBTOR OF THE TAXIMAYS ARE REOPENED TO TRAFFIC, THEY SHALL BE THOROUGHLY CLEANAGED OF ANY DEBTOR OF THE TAXIMAYS PRIOR TO THE TEXTOR OF THE TAXIMAYS ARE REOPENED TO TRAFFIC, ALL WORK ON OR IN THE VICINITY OF THE TAXIWAYS OR TAXIWAY OBJECT FREE AREAS SHALL FOLLOW THE SAME REQUIREMENTS PER NOTE 4 AND 6.
- 10. PHASE 4D CANNOT BE COMPLETED CONCURRENTLY WITH PHASE 4E. AT NO TIME DURING THIS PROJECT WILL CONNECTOR TAXIWAYS E/B4 OR A5/B4 BE CLOSED AT THE SAME TIME AS CONNECTOR TAXIWAYS C/B5 OR A6/B5. PHASE 4D SHALL NOT BE STARTED UNTIL PHASE 4E IS COMPLETED.
- 11. THE FINAL LIFT OF ASPHALT OF PERMANENT RUNWAY 17-35 SHALL BE COMPLETED WITH NO MORE THAN 2 TRANSVERSE COLD JOINTS. THE FINAL LIFT OF ASPHALT ON THE PERMANENT RUNWAY 17-35 SHALL NOT DE CONSTRUCTED AS PART OF PHASE 4D. THE FINAL LIFT SHALL BE CONSTRUCTED AS PART OF PHASE 4H, WITH ONE CONTINUOUS PULL. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR COORDINATION OF WORK BETWEEN THE PHASES. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT. CONTRACTOR SHALL BE REQUIRED TO INSTALL A WEDGE OF ASPHALT AT THE 2 INCH LIFT ON THE TAXIMAYS AT THE LOCATIONS THE FINAL LIFT HAS NOT BEEN INSTALLED ON THE RUNWAY TO ALLOW TAXING OF AIRCRAFT. THIS WEDGE OF ASPHALT SHALL BE REMOVED PRIOR TO INSTALLING THE FINAL LIFT AND SHALL BE INCIDENTAL TO THE PROJECT. THE NORTHERN STATION OF PHASE 4D SHALL BE ONE OF THE TRANSVERSE COLD JOINTS.
- 12. TO CONTROL DRAINAGE WITHIN PHASE 4D PRIOR TO COMPLETION OF PHASE 4H, THE CONTRACTOR SHALL LEAVE A MINIMUM OF 100 FEET UNPAVED OF THE FINAL ASPHALT LIFT ON THE SHOULDERS IMMEDIATELY NORTH OF STATION 34+00 AND 38+00 ON EACH SIDE OF THE RUNWAY. ADDITIONAL AREAS MAY BE LEFT UNPAVED AS DETERMINED BY THE CONTRACTOR WITH PRIOR APPROVAL FROM THE AOR. THIS AREA SHALL BE PAVED AS PART OF PHASE 4H. THE CONTRACTOR SHALL DIRECT WATER THROUGH THE OPENING IN THE SHOULDER AND CONTROL THE RUNOFF FROM THE PAVEMENT EDGE AND TO THE EXISTING DRAINAGE STRUCTURES. ANY EROSION CAUSED BY THE RUNOFF FROM THE ASPHALT OPENING SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY AND AT NO ADDITIONAL COST TO THE OWNER.

- 14. IF TAXIWAY B4 IS NOT CONSTRUCTED AS PART OF VOLUME 2. TAXIWAY A5 SHALL REMAIN CLOSED FOR THE DURATION OF THE PROJECT. A TAXIWAY CROSSING IS NOT REQUIRED IF TAXIWAY B4 IS NO CONSTRUCTED. THE MARKING SHALL NOT BE COMPLETED UNTIL WITHIN 7 DAYS PRIOR TO THE RUNWAY COMMISSIONING. THE LIGHTING FOR TAXIWAY A5, INCLUDING CORING, INSTALLING RISERS, AND LIGHTS CAN BE POSTPONED UNTIL AFTER THE FLIGHT CHECK, HOWEVER, THE LIGHTING MUST BE INSTALLED AND OPERATIONAL PRIOR TO COMMISSIONING 15. IF TAXIWAY B4 IS CONSTRUCTED AS PART OF VOLUME 2. TAXIWAY A3 AND B4 SHALL BE MARKED, LIGHTED AND SIGNED PER THE PLANS AND OPENED TO TRAFFIC UPON COMPLETION AND THE TAXIWAY CROSSING
- 16. CONTRACTOR SHALL BE REQUIRED TO INSTALL A WEDGE OF ASPHALT AT THE TWO INCH LIFT WITHIN EACH TAXIWAY THAT THE LOCATION THE FINAL LIFT HAS NOT BEEN INSTALLED ON THE RUNWAY TO ALLOW TAXING OF AIRCRAFT. THE WEDGE SHALL BE PLACED WITHIN THE TAXIWAY FOOTPRINT AND SHALL BE TIED IN PRIOR TO THE EDGE OF THE RUNWAY. THIS WEDGE OF ASPHALT SHALL BE REMOVED PRIOR TO INSTALLING THE FINAL LIFT AND SHALL BE INCIDENTAL TO THE PROJECT. TAXIWAYS A5/84 SHALL HAVE ASPHALT WEDGES INSTALLED ONLY IF ASSOCIATED ADDITIVE ALTERNATES ARE AWARDED.
- 17. NO SPECIFIC DURATION OF TIME SHALL BE ALLOTTED FOR PHASE 4D, HOWEVER, PHASE 4D SHALL BE COMPLETED PRIOR TO THE FLIGHT CHECK FOR THE PERMANENT RUNWAY AND COORDINATED WITH ONGOIN WORK FOR PHASE 4C AND 4E.
- 18. ALL EXISTING TAXIWAY AND RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE
- 19. ALL EXISTING TEMPORARY LED TAXIWAY EDGE LIGHTS SHALL BE PRESERVED AND PROTECTED FROM DAMAGE FOR REUSE AS TEMPORARY TAXIWAY EDGE LIGHTS IN THIS PHASE OF CONSTRUCTION.
- 20. PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED ALONG TAXIWAY A, AND TAXIWAY A5. THE TAXIWAY EDGI
- . TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED ON TAXIWAY A ACROSS TAXIWAY AS TO DEFINE THE EDGE OF TAXIWAY A. DURING CONSTRUCTION OF TAXIWAY AS ADDITIONAL TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED TO DEFINE THE EDGES OF TAXIWAY AS CROSSING THE PERMANENT RUNWAY 17-35 ONLY IF TAXIWAY BY IS CONSTRUCTED. TEMPORARY TAXIWAY EDGE LIGHTS SHALL BE INSTALLED IN A LINE ACROSS THE PROPOSED RUNWAY AS INDICATED ON THE PLANS TO PROVIDE GUIDANCE ACROSS THE PERMANENT RUNWAY PAVEMENT. THE TEMPORARY LIGHTING ACROSS TAXIWAY AS SHALL BE CONNECTED TO THE TAXIWAY A SOLITH (TWAS) CIRCUIT. THE TEMPORARY LIGHTING ACROSS THE PERMANENT RUNWAY 17-35 SHALL BE CIRCUITED TO THE TAXIWAY B LIGHTING CIRCUIT. IF TAXIWAY B IS NOT CONSTRUCTED, THE TEMPORARY EDGE LIGHTING ON TAXIWAY A ACROSS TAXIWAY AS ASHALL REMAIN IN PLACE UNTIL THE COMMISSIONING OF PERMANENT RUNWAY 17-35, THE TAXIWAY BOOK LIGHTING FOR TAXIWAY AS SHALL BE COVERED TO FULLY OBSCURE THE EDGE LIGHTING FOR THIS TAXIWAY CONNECTOR PRIOR TO THE OPENING OF THE RUNWAY. IF TAXIWAY B4 IS CONSTRUCTION, THE TEMPORARY EDGE LIGHTING ON TAXIWAY A ACROSS TAXIWAY AS SHALL BE REMOVED IN ORDER TO OPEN TAXIWAY AS TO TRAFFIC.
- 22. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED. THE MANDATORY SIGN FOR RUNWAY 17-35 AT TAXIWAY A5 SHALL BE TURNED OFF, COVERED AND OBSCURED. ALL TAXIWAY GUIDANCE SIGNAGI ASSOCIATED WITH TWAS AND THE PERMANENT RUNWAY 17-35 EXIT SIGNS SHALL BE TURNED OFF USING THE SIGN ON/OFF SWITCH, COVERED AND OBSCURED UNTIL PERMANENT RUNWAY 17-35 EXIT SIGNS SHALL BE TURNED OFF USING THE SIGN ON/OFF SWITCH.
- 23. THE RDR SIGN CONCRETE PAD SHALL BE INSTALLED DURING THIS PHASE OF WORK IN PREPARATION FOR A RELOCATED RDR SIGN. THE RDR SIGN SHALL BE RELOCATED IN PHASE 4L AND CIRCUITED TO THI
- 24. ALL RUNWAY EDGE LIGHTING BASE CANS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED CORED AND HAVE THE EDGE LIGHT TOP CAN SECTION INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 25. ALL RUNWAY CENTERLINE LIGHTING BOTTOM BASE CAN SECTIONS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED IN THE RUNWAY BASE MATERIAL PRIOR TO PAVING ACTIVITIES AND FLIGHT CHECK. AFTER PAYING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING
- 26. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT
- 27. THE PAVEMENT SENSOR FOR THE PAVEMENT SENSING SYSTEM SHALL BE INSTALLED WITHIN THIS PHASE OF CONSTRUCTION AT STATION 33+50. THE CONDUIT FOR THE SENSOR SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES AND THE LOCATION OF THE CONDUIT END SHALL BE RECORDED. THE PAVEMENT SENSOR SHALL BE INSTALLED ONLY AFTER ALL PAVING AND GROOVING ACTIVITIES ARE COMPLETED AND PRIOR TO THE RUNWAY OPENING.
- 28. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS AND PAVEMENT SENSOR COMPONENTS WITH THE





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**ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA** 



**BID PACKAGE 4 - PAVING** LIGHTING AND NAVAIDS - VOLUME 1 -**GENERAL. PHASING AND** SAFETY PLANS

PHASE 4D

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NO.	DATE	BY	DESCRIPTION

DESIGNED BY: DRAWN BY: W.L.J. CHECKED BY: J.M.M.

APPROVED BY: J.M.M. DATE: DECEMBER 2016

PROJECT NO.

N.C. C 2450

SHEET NUMBER

- . ALL WORK ASSOCIATED WITH PHASE 4E SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS.
- 2. CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER.
- 3. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUNWAY SAFETY AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODED STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUNWAY SAFETY AREA AS NEEDED DA WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUNWAY SAFETY AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 4. CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS, THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4E AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR, ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 5. PHASE 4E REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. NO WORK IS ALLOWED IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY IS OPEN AND ACTIVE. NIGHT WORK, WHEN THE RUNWAY IS CLOSED, SHALL BE ALLOWED FOR ANY WORK IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY NIGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLICITED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE RUNWAY CLOSURE PROCEDURES PRIOR TO STARTING RUNWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE RUNWAY CLOSURE DATES AND TIMES AT ANY TIME.
- 6. PHASE 4E REQUIRES WORK WITHIN TAXIWAY OBJECT FREE AREA FOR TAXIWAY C AND 85. NO WORK IS ALLOWED IN THE TAXIWAY OBJECT FREE AREA OF AN OPEN AND ACTIVE TAXIWAY. FOR WORK TO BE COMPLETED WITHIN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY MUST BE CLOSED, THIS CAN BE DONE BY CLOSING THE ASSOCIATED TAXIWAY DURING THE DAY OR NIGHT OR DURING RUNNAY CLOSURES ASSOCIATED WITH WORK WITHIN THE RUNWAY SAFETY AREA, THE CONTRACTOR SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE OWNER AND AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE TAXIWAY CLOSURE PROCEDURES PRIOR TO STARTING TAXIWAY CLOSURES. THE OWNER AND SAFETY AREA, THE OWNER RESERVES THE RIGHT TO CHANGE TAXIWAY CLOSURE DATES AND TIMES AT ANY TIME.
- 7. PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS, AND NOTES.
- 8. ONCE AREAS WITHIN PHASE 4E ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS.
- 9. PHASE 4E REQUIRES THE CLOSURE OF TAXIWAY C AND B5 FOR A LONG DURATION. THE CONTRACTOR SHALL NOTIFY THE AIRPORT A MINIMUM OF 14 DAYS PRIOR TO THE ANTICIPATED CLOSURE OF THOSE TAXIWAYS. THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS TO CLOSE THOSE TAXIWAYS. PRIOR TO THE TAXIWAYS BEING REOPENED TO TRAFFIC, THEY SHALL BE THOROUGHLY CLEANED OF ANY DEBRIS OF TO. THE AIRPORT SHALL INSPECT THE TAXIWAYS AND OFFER APPROVAL TO OPEN THE TAXIWAYS PRIOR TO THE REMOVAL OF BARRICADES. ONCE THE TAXIWAYS ARE REOPENED TO TRAFFIC, ALL WORK ON OR IN THE VICINITY OF THE TAXIWAYS OR TAXIWAY OBJECT FREE AREAS SHALL BE COMPLETED AT NIGHT WHEN THE TAXIWAY IS CLOSED.
- 10. PHASE 4E CANNOT BE COMPLETED CONCURRENTLY WITH PHASE 4D. AT NO TIME DURING THIS PROJECT WILL CONNECTOR TAXIWAYS E/B4 OR A5/B4 BE CLOSED AT THE SAME TIME AS CONNECTOR TAXIWAYS C/B5 OR A6/B5. PHASE 4E SHALL BE COMPLETED PRIOR TO STARTING WORK IN PHASE 4D.
- 11. THE FINAL LIFT OF ASPHALT OF PERMANENT RUNWAY 17-35 SHALL BE COMPLETED WITH NO MORE THAN TWO TRANSVERSE COLD JOINTS. THE FINAL LIFT OF ASPHALT ON THE PERMANENT RUNWAY 17-35 SHALL NOT BE CONSTRUCTED AS PART OF PHASE 4E. THE FINAL LIFT SHALL BE CONSTRUCTED AS PART OF PHASE 4H, WITH ONE CONTINUOUS PULL. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR COORDINATION OF WORK BETWEEN THE PHASES. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT. CONTRACTOR SHALL BE REQUIRED TO INSTALL A WEDGE OF ASPHALT AT THE 2 INCH LIFT ON THE TAXIMAYS AT THE LOCATIONS THE FINAL LIFT HAS NOT BEEN INSTALLED ON THE RUNWAY TO ALLOW TAXING OF AIRCRAFT. THIS WEDGE OF ASPHALT SHALL BE REMOVED PRIOR TO INSTALLING THE FINAL LIFT AND SHALL BE INCIDENTAL TO THE PROJECT. THE SOUTHERN STATION OF PHASE 4E SHALL BE ONE OF THE TRANSVERSE COLD JOINTS.

- 12. CONTRACTOR SHALL BE REQUIRED TO INSTALL A WEDGE OF ASPHALT AT THE TWO INCH LIFT WITHIN EACH TAXIMAY THAT THE LOCATION THE FINAL LIFT HAS NOT BEEN INSTALLED ON THE RUNWAY TO ALLOW TAXING OF AIRCRAFT. THE WEDGE SHALL BE PLACED WITHIN THE TAXIMAY FOOTPRINT AND SHALL BE TIED IN PRIOR TO THE EDGE OF THE RUNWAY. THIS WEDGE OF ASPHALT SHALL BE REMOVED PRIOR TO INSTALLING THE FINAL LIFT AND SHALL BE INCIDENTAL TO THE PROJECT. TAXIMAYS AS SHALL HAVE ASPHALT WEDGE INSTALLED.
- 13. PHASE 4E SHALL BE COMPLETED WITHIN THE ALLOTTED CALENDAR DAYS.
- 14. TO CONTROL DRAINAGE WITHIN PHASE 4E PRIOR TO COMPLETION OF PHASE 4H, THE CONTRACTOR SHALL LEAVE A MINIMUM OF 100 FEET UNPAVED OF THE FINAL ASPHALT LIFT ON THE SHOULDERS IMMEDIATELY NORTH OF STATION 29-400 ON EACH SIDE OF THE RUNNWAY. ADDITIONAL AREAS MAY BE LEFT UNPAVED AS DETERMINED BY THE CONTRACTOR WITH PRIOR APPROVAL FROM THE AOR. THIS AREA SHALL BE PAVED AS PART OF PHASE 4H. THE CONTRACTOR SHALL DIRECT WATER THROUGH THE OPENING IN THE SHOULDER AND CONTROL THE RUNOFF FROM THE PAVEMENT EDGE AND TO THE EXISTING DRAINAGE STRUCTURES. ANY EROSION CAUSED BY THE RUNOFF FROM THE ASPHALT OPENING SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY AND AT NO ADDITIONAL COST TO THE OWNER.
- 15. BARRICADES FOR TAXIWAY CROSSING CAN BE USED FOR TAXIWAY CLOSURES IN ORDER TO REDUCE MAXIMUM AMOUNT OF BARRICADES REQUIRED FOR PHASE 4E.
- 16. ALL EXISTING TAXIWAY AND RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
- 17. ALL EXISTING TEMPORARY LED TAXIWAY EDGE LIGHTS SHALL BE PRESERVED AND PROTECTED FROM DAMAGE FOR REUSE AS TEMPORARY TAXIWAY EDGE LIGHTS IN THIS PHASE OF CONSTRUCTION.
- 18. PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED ALONG TAXIWAY A, AND TAXIWAY A6. THE TAXIWAY EDGE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE EXISTING TAXIWAY A NORTH (TWAN) LIGHTING CIRCUIT.
- 19. TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED ACROSS TAXIWAY A TO DEFINE THE TRANSITION FROM TAXIWAY A TO TAXIWAY A6. ADDITIONAL TEMPORARY TAXIWAY EDGE LIGHTING SHALL BE INSTALLED TO DEFINE THE EDGES OF TAXIWAY A6 CROSSING THE PROPOSED RUNWAY 17-35 PAVEMENT AT STATIONS 29+50 AND 31+25 (APPROXIMATE). THE TEMPORARY LIGHTING ACROSS TAXIWAY A SHALL BE CONNECTED TO THE TAXIWAY N CIRCUIT. THE TEMPORARY LIGHTING ACROSS THE PROPOSED RUNWAY 17-35 SHALL BE CIRCUITED TO THE TAXIWAY B LIGHTING CIRCUIT.
- 20. THE TAXIWAY EDGE LIGHTING FOR TAXIWAY A NORTH OF TAXIWAY A6 SHALL BE COVERED TO FULLY OBSCURE THE EDGE LIGHTING FOR THIS TAXIWAY SECTION PRIOR TO THE OPENING OF THE RUNWAY. THE TAXIWAY EDGE LIGHTS FOR TWA6 AND TAXIWAY A, SOUTH OF TAXIWAY A6, SHALL BE ACTIVE AND LIGHTED THROUGHOUT CONSTRUCTION WHILE TWA6 CONNECTOR IS ACTIVE.
- 21. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED. THE MANDATORY SIGN FOR RUNWAY 17-35 AT TAXIWAY A6 SHALL BE ACTIVE AND ILLUMINATED. THE EXISTING RUNWAY EXIT SIGN FROM TEMPORARY RUNWAY 17-35 SHALL HAVE THE MESSAGE PANEL EXCHANGED TO INDICATE THE TURN ONTO TAXIWAY A6 AND SHALL REMAIN ILLUMINATED. ALL TAXIWAY GUIDANCE SIGNS INSTALLED IN THIS PHASE SHALL BE OPERATIONAL AND ILLUMINATED WITH THE FOLLOWING EXCEPTIONS: [] A | A6 > ], AND THE PERMANENT RUNWAY 17-35 EXIT SIGNS. THESE SIGNS SHALL BE TURNED OFF USING THE SIGN ON/OFF SWITCH COVERED AND OBSCURED UNTIL PERMANENT RUNWAY 17-35 BECOMES ACTIVE.
- 22. ALL RUNWAY EDGE LIGHTING BASE CANS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED, CORED AND HAVE THE EDGE LIGHT TOP CAN SECTION INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 23. ALL RUNIWAY CENTERLINE LIGHTING BOTTOM BASE CAN SECTIONS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED IN THE RUNIWAY BASE MATERIAL PRIOR TO PAVING ACTIVITIES AND FLIGHT CHECK. AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 24. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO OPENING THE PERMANENT RUNWAY.
- 25. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS WITH THE PAVING ACTIVITIES.





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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4E

ATTENTION

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REVISIONS:			
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	NO.	NO. DATE	

DESIGNED BY:
DRAWN BY:

CHECKED BY: J.M.M.
APPROVED BY: J.M.M.

W.L.J.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450

JECT NO. 2014.

SHEET NUMBER

# NORTH RUNWAY (STA 11+00 TO STA 28+75)

2 CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER

1. ALL WORK ASSOCIATED WITH PHASE 4F SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS.

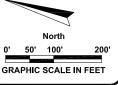
- 3. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUNWAY SAFETY AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR CLEARLY INDICATE IN PROVIDED IN CONTROLLED SECURITY FASTELLED IN THE WOODER STARTS. THE STAKING AND ORNING MEST STAKE AS NEEDED AS DIRECTED BY THE OWNER OR AGN. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUNWAY SAFETY AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUNWAY SAFETY AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AGN. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 4. CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES, THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4F AND AS DIRECTED BY THE OWNER OR AGR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE TAXIMAY SAFETY AREA AND TAXIMAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 5. PHASE 4F REQUIRES WORK WITHIN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA. NO WORK IS ALLOWED IN THE TEMPORARY RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY FINISE AF REQUIRES WORK WITHIN THE TEMPORARY NOTWARD ASSETT AREA AND WORK AS ALLOWED FOR A ALLOWED FOR A ALLOWED FOR A ALLOWED FOR A ROY WORK IN THE TEMPORARY RUMWAY 17-39 NOTWARD AFETY AREA THE CONTRACTOR SHALL CORDINATE ALL RUNWAY INGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL CORDINATE ALL RUNWAY INGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL CORDINATE ALL RUNWAY CLOSURE PROCEDURES PRIOR TO STARTING RUNWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE RUNWAY CLOSURE DATES AND TIMES AT ANY TIME.
- 6. PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS,
- 7. ONCE AREAS WITHIN PHASE 4F ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND COMPLETION OF THE RUNWAY 17 MALSR WITH THE ELECTRICAL CONTRACTOR FROM BP-3. THE COORDINATION OF THIS WORK IS INCIDENTAL TO
- 9. IT IS THE INTENT FOR PHASE 4F THAT AS MUCH OF THE PERMANENT RUNWAY 17 CLIDE SLOPE BE INSTALLED IN ITS PERMANENT LOCATION. THIS INCLUDES CONDUITS FOLINDATIONS GRAVEL PAID FTC. IN ORDER TO EXPEDITE THE COMPLETION OF THIS WORK FOR VOLUME 3. THE CONTRACTOR SHALL MAKE HIMSELF PROFICIENT THE WORK REQUIRED TO BE COMPLETED IN PHASE 4F IN REGARDS TO THE GLIDE SLOPE AND COMPLETED IN VOLUME 3.
- 10. THE FINAL LIFT OF ASPHALT ON THE PERMANENT RUNWAY 17-35 SHALL NOT BE CONSTRUCTED AS PART OF PHASE 4F. THE FINAL LIFT SHALL BE CONSTRUCTED AS PART OF PHASE 4H. WITH ONE CONTINUOUS PULL. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR COORDINATION OF WORK BETWEEN THE PHASES. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT
- 11. TO CONTROL DRAINAGE WITHIN PHASE 4F PRIOR TO COMPLETION OF PHASE 4H, THE CONTRACTOR SHALL LEAVE A MINIMUM OF 100 FEET UNPAVED OF THE FINAL ASPHALT LIFT ON THE SHOULDERS IMMEDIATELY NORTH OF STATION 20-00 AND 25-00 ON EACH SIDE OF THE RUNWAY. ADDITIONAL AREAS MAY BE LEFT UNPAVED AS DETERMINED BY THE CONTRACTOR WITH PRIOR APPROVAL FROM THE AOR. THIS AREA SHALL BE PAVED AS PART OF PHASE 4H. THE CONTRACTOR SHALL DIRECT WATER THROUGH THE OPENING IN THE SHOULDER AND CONTROL THE RUNOFF FROM THE PAVEMENT EDGE AND TO THE EXISTING DRAINAGE STRUCTURES. ANY EROSION CAUSED BY THE RUNOFF FROM THE ASPHALT OPENING SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY AND AT NO ADDITIONAL COST TO THE
- 12. ONCE THE FINAL LIFT OF ASPHALT HAS BEEN INSTALLED. THE RUNWAY AND TAXIWAYS SHALL BE MARKED IN ACCORDANCE TO THE PERMANENT RUNWAY AND TAXIWAY MARKING PLANS.
- 13. NO SPECIFIC DURATION OF TIME SHALL BE ALLOTTED FOR PHASE 4F; HOWEVER, PHASE 4F SHALL BE COMPLETED PRIOR TO THE FLIGHT CHECK FOR THE PERMANENT RUNWAY AND COORDINATED WITH

- 14. ALL EXISTING TAXIWAY AND RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
- 15. PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED AT THE FILLETS OF TAXIWAY A7 AND TAXIWAY A8. THE TAXIWAY EDGE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE TAXIWAY A NORTH (TWAN) LIGHTING CIRCUIT.
- 16. THE TAXIWAY EDGE LIGHTING FOR TAXIWAY A7 AND TAXIWAY A8 SHALL BE COVERED TO FULLY OBSCURE THE EDGE LIGHTING FOR THIS TAXIWAY CONNECTOR PRIOR TO THE OPENING OF THE RUNWAY.
- 17. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED. THE RDR SIGN CONCRETE PAD SHALL BE INSTALLED DURING THIS PHASE OF WORK IN PREPARATION FOR A RELOCATED RDR SIGN. THE RDR SIGN SHALL BE RELOCATED IN PHASE 4L AND CIRCUITED TO THE RUNWAY.
- 18. THE MALSR THRESHOLD SHALL BE INSTALLED BY THE BP-3 PHASE CONTRACTOR AND THE RUNWAY THRESHOLD LIGHTING SHALL BE INSTALLED BY THE BP-4 PHASE CONTRACTOR. BOTH CONTRACTORS SHALL THE MALOS FIRESPONSIBLE TO COORDINATE THE INSTALLATION OF EACH SYSTEM. THIS SHALL INCLUDE ALL SAV CUTTING ACTIVITIES, EXCAVATION, CONCRETE AND LIGHTING INSTALLATION ACTIVITIES. BOTH CONTRACTORS SHALL COORDINATE AND COMMUNICATE THE CONSTRUCTION PLAN AND ACTIVITIES WITH THE AOR. THE AOR SHALL APPROVE ALL ACTIVITIES PRIOR TO ANY CONSTRUCTION OF THESE TWO ITEMS. THE INTENT IS TO HAVE THESE TWO ITEMS CONSTRUCTED BY EACH CONTRACTOR WITH MINIMAL PAVEMENT DISTURBANCE AND INTERFERENCE BETWEEN THE TWO SYSTEMS.
- 19. ALL RUNWAY EDGE LIGHTING BASE CANS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED PRIOR TO PAVING ACTIVITIES. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED, CORED AND HAVE THE EDGE LIGHT TOP CAN SECTION INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 20. ALL RUNWAY CENTERLINE LIGHTING BOTTOM BASE CAN SECTIONS, CONDUIT AND COUNTERPOISE SHALL BE INSTALLED IN THE RUNWAY BASE MATERIAL PRIOR TO PAVING ACTIVITIES AND FLIGHT CHECK.
  AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 21. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO OPENING THE PERMANENT RUNWAY.
- 22, IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS WITH THE PAVING ACTIVITIES.

RUNWAY/TAXIWAY	UNWAY/TAXIWAY CLOSURE NOTES			
RUNWAY 17-35 NIGHT		CLOSURE FOR RUNWAY TO BE AT NIGHT ONLY	LEGEND:	
BARRICADES			ADDITIVE ALTERNATE (S	
REQUIRED FOR PHASE 4F CLOSURES				
LOCATION		NUMBER OF BARRICADES		

TAXIWAY AND RUNWAY CLOSURES

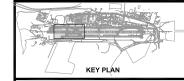
TAXIWAY A





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**ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA** 



**BID PACKAGE 4 - PAVING LIGHTING AND NAVAIDS** - VOLUME 1 -**GENERAL, PHASING AND SAFETY PLANS** 

PHASE 4F

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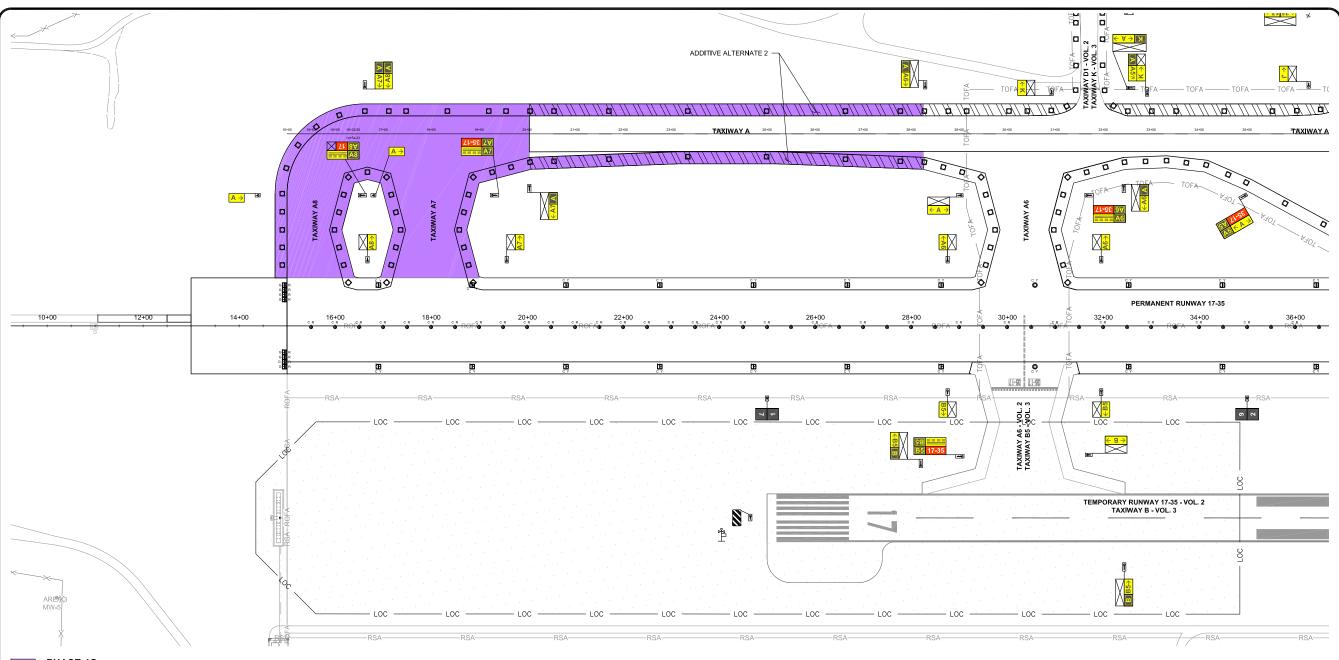
REVISIONS:			
NO.	DATE	BY	DESCRIPTION

DESIGNED BY: DRAWN BY: W.L.J. CHECKED BY: J.M.M.

APPROVED BY: J.M.M. DATE: DECEMBER 2016

STATE LICENSE # N.C. C 2450

SHEET NUMBER



# PHASE 4G:

#### TAXIWAY A7, TAXIWAY A8, TAXIWAY A, AND TAXIWAY SHOULDERS

- 1. ALL WORK ASSOCIATED WITH PHASE 4G SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS.
- 2. CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER
- 3. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUNWAY SAFETY AREA. THE OTANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4G AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUNWAY SAFETY AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUNWAY SAFETY AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER.
- 4. CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4G AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE TAXIWAY SAEA AND AXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 6. PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS, AND NOTES.
- 7. ONCE AREAS WITHIN PHASE 4G ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS.
- 8. NO SPECIFIC DURATION OF TIME SHALL BE ALLOTTED FOR PHASE 4G, HOWEVER, PHASE 4G SHALL BE COMPLETED PRIOR TO THE COMMISSIONING DATE OF THE PERMANENT RUNWAY.
- . ALL EXISTING TAXIWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
- 10. PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED ALONG TAXIWAY A, TAXIWAY A7, AND TAXIWAY A8. THE TAXIWAY EDGE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE EXISTING TAXIWAY A NORTH (TWAN) LIGHTING CIRCUIT.
- 11. TEMPORARY TAXIWAY EDGE LIGHTING SHALL NOT BE REQUIRED IN THIS PHASE OF CONSTRUCTION.
- 12. THE PERMANENT LIGHTING SHALL BE JUMPERED OUT OF SERVICE UNTIL THE OPENING OF PERMANENT RUNWAY 17-35. THE JUMPER SHALL BE INSTALLED WITHIN THE LIMITS OF PHASE 4E.

- 13. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED, CIRCUITED AND SWITCHED OFF USING THE SIGN ON/OFF SWITCH. ALL SIGNAGE SHALL BE COVERED AND OBSCURED UNTIL PERMANENT RUNWAY 17-35 BECOMES ACTIVE.
- 14. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS WITH THE PAVING ACTIVITIES.

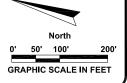
TAXIWAY AND RUNWAY CLOSURES PHASE 4G			
RUNWAY / TAXIWAY CLOSURE NOTES			
RUNWAY 17-35 NIGHT CLOSURE FOR RUNWAY TO BE AT NIGHT ONLY		CLOSURE FOR RUNWAY TO BE AT NIGHT ONLY	
TAXIWAY A7	DAY/NIGHT	TAXIWAY A7 TO REMAINED CLOSED AT THE END OF PHASE 4G	
TAXIWAY A8	DAY/NIGHT	TAXIWAY AS TO REMAINED CLOSED AT THE END OF PHASE 4G	

BARRICADES REQUIRED FOR PHASE 4G CLOSURES

LOCATION NUMBER OF BARRICADES

TAXIWAY A 9

LEGEND:
ADDITIVE ALTERNATE (S)







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ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4G

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SCALE:

	REVISIONS:				
NO.	DATE	BY	DESCRIPTION		
_					

DESIGNED BY: J.M.M.
DRAWN BY: W.L.J.
CHECKED BY: J.M.M.
APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450 PROJECT NO. 2014.157.01

**SHEET NUMBER** 

# FINAL PAVING LIFT FOR THE RUNWAY

- 1. ALL WORK ASSOCIATED WITH PHASE 4H SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS.
- 2. THE INTERT FOR PHASE 4H IS THAT THE PAYING AND MARKING ARE TO BE COMPLETED PRIOR TO THE FLIGHT CHECKS FOR THE PERMANENT RUNIWAY, SEPTEMBER 5, 2017 WITH GROOVING AND TOZ AND CENTERLINE LIGHTS COMPLETED PRIOR TO THE COMMISSIONING OF THE PERMANENT RUNIWAY. IF CONCRETE RUNIWAY IS CHOSEN, WORK ASSOCIATED WITH PHASE 4H SHALL BE ADDED TO THE OTHER PHASES, HOWEVER, THE GROOVING AND TOZ AND CENTERLINE LIGHTS SHALL BE COMPLETED PRIOR TO THE COMMISSIONING OF THE PERMANENT RUNIWAY.
- 3. CONTRACTOR SHALL STAY OUTSIDE ALL NAVAID CRITICAL AREAS WHEN THE RUNWAY IS OPEN AND ACTIVE UNLESS ALLOWED BY OWNER.
- 4. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUNWAY SAFETY AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4H AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUNWAY SAFETY AREA AS NEEDED AS WORK PROGRESSES, THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION, THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUNWAY SAFETY AREA, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 4. CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY IS OPEN AND ACTIVE, THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE AREAS. THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA. THE ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE SECURELY FASTENED TO THE WOODEN STAKES. THE STAKING AND ORANGE MESH SHALL BE MICHOEVED AS THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4H AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES, THE STAKING, RESTAKING AND MAINTENNANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE TAXIWAY SAFETY AREA AND TAXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 5. THE FINAL LIFT OF ASPHALT OF PERMANENT RUNWAY 17-35 SHALL BE COMPLETED WITH NO MORE THAN TWO TRANSVERSE COLD JOINTS. THE FINAL LIFT OF ASPHALT ON THE PERMANENT RUNWAY 17-35 SHALL BE CONSTRUCTED AS PART OF PHASE 4H. EXCEPT FOR THE FINAL LIFT BEING INSTALLED AS PART OF PHASE 4A. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR COORDINATION OF WORK BETWEEN THE PHASES. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT. THE LOCATION OF THE TRANSVERSE COLD JOINTS SHALL BE AS FOLLOWS:
  - A. STATION 90+25, BETWEEN PHASE 4A AND 4B
  - B. STATION 23+25, BETWEEN PHASE 4D AND 4E
- THE FINAL LIFT OF ASPHALT SHALL ALSO BE PER PHASES:
- A. PHASE 4A B. PHASE 4B, 4C, 4D
- C. PHASE 4E, 4F
- 6. FINAL LIFT OF ASPHALT BETWEEN THE STATIONS SHALL BE COMPLETED IN ONE PULL. IN AREAS WHERE THE FINAL LIFT PASSES AT CONNECTOR TAXIWAYS, THOSE CONNECTOR TAXIWAYS MUST BE CLOSED. THE CONTRACTOR SHALL COORDINATE CLOSURE OF THOSE TAXIWAYS WITH THE AIRPORT PRIOR TO STARTING THE FINAL LIFT OF ASPHALT. THE CONTRACTOR SHALL SUBMIT A PLAN FOR PLACEMENT OF THE FINAL LIFT AND CLOSURE OF EACH TAXIWAY. THE PLAN SHALL BE SUBMITTED A MINIMUM OF ONE MONTH PRIOR TO STARTING WORK ASSOCIATED WITH PHASE 4H.
- 7. CONTRACTOR SHALL BE REQUIRED TO INSTALL A WEDGE OF ASPHALT AT THE TWO INCH LIFT WITHIN EACH TAXIMAY THAT THE LOCATION THE FINAL LIFT HAS NOT BEEN INSTALLED ON THE RUNWAY TO ALLOW TAXIMO OF AIRCRAFT. THE WEDGE SHALL BE PLACED WITHIN THE TAXIMAY FOOTPRINT AND SHALL BE TIED IN PRIOR TO THE EDGE OF THE RUNWAY. THIS WEDGE OF ASPHALT SHALL BE REMOVED PRIOR TO INSTALLING THE FINAL LIFT AND SHALL BE INCIDENTAL TO THE PROJECT.
- 8. ONCE THE FINAL LIFT HAS BEEN INSTALLED, THE RUNWAY SHALL BE MARKED IN ACCORDANCE TO THE PERMANENT RUNWAY AND TAXIWAY MARKING PLANS. THIS WORK SHALL BE COMPLETED PRIOR TO THE FLIGHT CHECK DATES.
- 10. RUNWAY SHOULDER CUT OUTS NOT PAVED AS PART OF THE INDIVIDUAL PHASES SHALL ALSO BE PAVED DURING PHASE 4H, DURING THE COMPLETION OF THE FINAL ASPHALT LIFT.

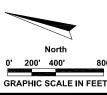
9. AFTER THE FLIGHT CHECK, THE RUNWAY SHALL BE GROOVED IN ACCORDANCE TO THE P-621 SPECIFICATION. THE TDZ AND CENTERLINE LIGHTS SHALL ALSO BE INSTALLED.

- 11. CONTRACTOR SHALL REMOVE TAXIWAY CROSSINGS AS REQUIRED TO COMPLETED PHASE 4H. EACH CROSSING WILL NEED TO BE REINSTALLED ONCE THE PAVING HAS BEEN COMPLETED. THE CONTRACTOR SHALL ALSO RELOCATE TAXIWAY CROSSING AS REQUIRED TO COMPLETE THE RUNWAY MARKING AND GROOVING
- 12. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF TDZ AND CENTERLINE LIGHTS WITH INSTALLATION OF FINAL ASPHALT LIFT.
- 13. AFTER PAVING ACTIVITIES ARE COMPLETED THE EDGE LIGHTING SHALL BE LOCATED, CORED AND HAVE THE EDGE LIGHT TOP CAN SECTION INSTALLED AND/OR ADJUSTED TO GRADE PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 14. AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE CENTERLINE LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 15. AFTER PAVING AND FLIGHT CHECK IS COMPLETED THE RUNWAY TDZ LIGHTING BOTTOM CAN SECTIONS SHALL BE LOCATED AND CORED IN PLACE. APPROPRIATELY SIZED TOP CAN SECTIONS SHALL BE PROCURED AND INSTALLED PRIOR TO FIXTURE INSTALLATION AND CIRCUITING.
- 16. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO OPENING THE PERMANENT RUNWAY.
- 17. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS WITH THE PAVING ACTIVITIES.

	TAXIWAY AND RUNWAY CLOSURES PHASE 4H		
RUNWAY/TAXIWAY	RUNWAY/TAXIWAY CLOSURE NOTES		
RUNWAY 17-35	NIGHT	CLOSURE FOR RUNWAY TO BE AT NIGHT ONLY	
TAXIWAY A3/B2	DAY/NIGHT	TAXIWAY A3/B2 TO REMAINED CLOSED AT THE END OF PHASE 4H	
TAXIWAY A4/B3	DAY/NIGHT	TAXIWAY A4/B3 TO REMAINED CLOSED AT THE END OF PHASE 4H	
TAXIWAY A5/B4	DAY/NIGHT	TAXIWAY A5/B4 TO REMAINED CLOSED AT THE END OF PHASE 4H	

BARRICADES REQUIRED FOR PHASE 4H CLOSURES		
LOCATION	NUMBER OF BARRICADES	
TAXIWAY A3/B2	15	
TAXIWAY A4/B3	60	
TAXIWAY A5/B4	65	









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ASHEVILLE
REGIONAL AIRPORT
ASHEVILLE
NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4H

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NO.	DATE	BY	DESCRIPTION

DESIGNED BY: J.M.M.
DRAWN BY: W.L.J.
CHECKED BY: J.M.M.
APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450

SHEET NUMBER

## NAVAIDS, INFIELD ELECTRICAL CABLING, ELECTRICAL VAULT AND TOWER WORK

#### PRECISION APPROACH PATH INDICATOR (PAPI)

- 1. INSTALL FAA PROVIDED 4 BOX PAPI SYSTEM FOR RUNWAY 17 AND RUNWAY 35 PER THE CONTRACT DOCUMENTS. THE PAPI SYSTEMS SHALL BE INSTALLED IN THEIR PERMANENT LOCATION TO COORDINATE WITH THE GLIDE SLOPE FACILITY THAT SHALL BE INSTALLED UNDER VOLUME 3 WORK. TEMPORARY POWER SHALL BE ESTABLISHED FOR THE PAPI SYSTEMS AND COMMUNICATIONS FROM THE ATCT TO EACH PAPI SHALL BE ESTABLISHED. CONTROL OF THE PAPI'S SHALL BE FROM THE FAA ATCT.
- 2. THE PAPI SYSTEMS SHALL BE INSTALLED WITH THE POWER AND COMMUNICATIONS RACK WITHIN THE RSA OF THE TEMPORARY RUNWAY 17-35.
- 3. THE PAPI UNITS SHALL BE PROVIDED BY THE FAA. THE UNITS FOR RUNWAY 17 SHALL BE REFURBISHED BY THE CONTRACTOR PRIOR TO INSTALLATION. THE PAPI UNITS FOR RUNWAY 35 SHALL BE NEW UNITS SUPPLIED BY THE FAA.
- 4. BOTH RUNWAY PAPI UNITS SHALL BE FULLY FUNCTIONAL, OPERATING AND FLIGHT CHECKED PRIOR TO THE OPENING OF PERMANENT RUNWAY 17-35.

#### GLIDESLOPE FACILITIE

1. THE CONTRACTOR SHALL INSTALL THE FOUNDATIONS AND INFRASTRUCTURE FOR EACH OF THE GLIDES SLOPE FACILITIES, RUNWAY 17 AND RUNWAY 35, TO ACCEPT THE FACILITY SHELTER, ANTENNA, RVR, POWER DISTRIBUTION RACK AND PRIMARY POWER PAD MOUNTED TRANSFORMER DURING VOLUME 3 CONSTRUCTION. NO PORTION OF THESE INSTALLATIONS SHALL BE MORE THAN 3" ABOVE GRADE.

# AIRFIELD LIGHTING VAULT WORK

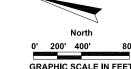
- 1. THE CONTRACTOR SHALL INSTALL NEW L-829 CONSTANT CURRENT REGULATORS (CCR) TO REPLACE THE EXISTING L-828 CCR'S. IN ADDITION TO THE CCR INSTALLATION A NEW COMMUNICATIONS NETWORK SHALL BE INSTALLED TO CONTROL AND MONITOR EACH REGULATOR USING A NEW L-890 AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM. THE CONTRACTOR SHALL REMOVE THE EXISTING L-828 CCR'S AND EXISTING CCR CONTROL UNIT FROM THE VAULT. THE CONTRACTOR SHALL PROVIDE NEW CIRCUIT BREAKERS AND CONDUCTORS TO POWER EACH NEW REGULATOR.
- 2. THE CONTRACTOR SHALL INSTALL A NEW L-890 ALCMS SYSTEM IN THE VAULT FOR USE BY THE ASHEVILLE AIRPORT AIRFIELD ELECTRICAL STAFF TO CONTROL AND MAINTAIN THE AIRFIELD LIGHTING. THE SYSTEM SHALL BE INTERFACED WITH THE NEW L-829 CCR'S AND THE MAIN ALCMS LOCATED IN THE ATCT BUILDING.
- 3. THE CONTRACTOR SHALL PROVIDE A REMOTE MAINTENANCE CENTER SYSTEM FOR THE AIRFIELD ELECTRICIANS TO CONTROL THE ALCMS FROM THE FIELD.
- 4. THE CONTRACTOR SHALL HAVE AN ARC FLASH STUDY CONDUCTED ON THE VAULT AND NEW EQUIPMENT AND PROVIDE ARC FLASH LABELS INDICATING THE HAZARD CATEGORY AND PERSONAL PROTECTION EQUIPMENT (PPE) REQUIREMENTS.

AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS) ATCT

- 1. A NEW L-890 ATCT ALCMS COMPUTER SYSTEM SHALL BE INSTALLED WITHIN THE ASHEVILLE AIRPORT IT ROOM AND HAVE THE ALCMS TOUCH SCREEN INSTALLED IN THE ATCT OPERATOR CONSOLE. THE TWO UNITS SHALL BE CONNECTED VIA A DEDICATED FIBER LINK FROM THE CONTROL CAB TOUCHSCREEN TO THE IT ROOM COMPUTER SYSTEM.
- 2. A CONTROL SYSTEM SHALL BE INSTALLED TO OPERATE THE BEACON LOCATED ON TOP OF THE ATCT AND THE CENTER FIELD WIND CONE WHICH IS CONTROLLED FROM THE BASEMENT OF THE ATCT.
- 3. THE ATCT ALCMS SYSTEM SHALL BE CONNECTED VIA A DEDICATED SINGLE MODE FIBER LINK TO THE ALCMS SYSTEM IN THE AIRFIELD LIGHTING VAULT. A NEW SINGLE MODE FIBER CONNECTION SHALL BE ESTABLISHED FROM THE ATCT TO THE VAULT.
- $4. \quad \text{THE CONTRACTOR SHALL PROVIDE TRAINING FOR FAA STAFF AND AIRPORT STAFF ON THE NEW ALCMS UNITS. } \\$
- 5. THE CONTROL AND MONITORING SYSTEM SHALL BE ACCEPTED AS BEING FULLY FUNCTIONAL AND OPERATING WITH TRAINED FAA ATCT AND ASHEVILLE AIRPORT STAFF PRIOR TO THE OPENING OF THE PERMANENT RUNWAY 17-35.

LEGEND:

ADDITIVE ALTERNATE (S)







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ASHEVILLE
REGIONAL AIRPORT
ASHEVILLE
NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4

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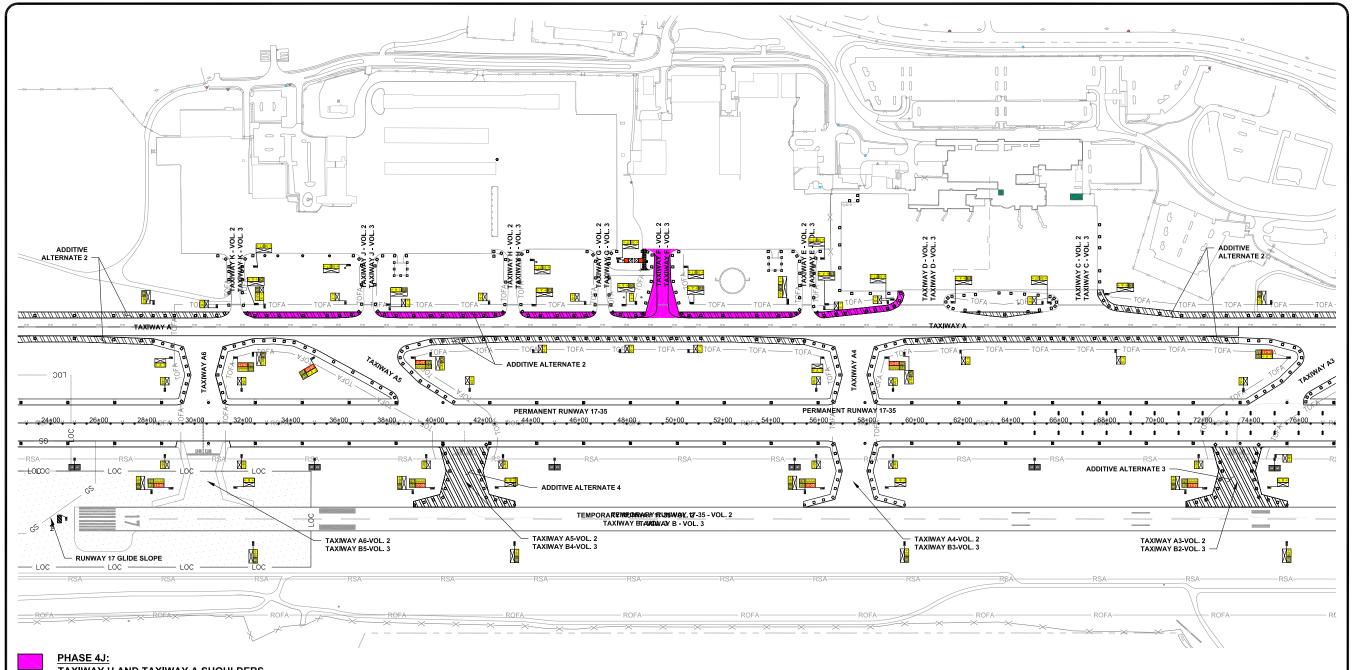
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PROJECT NO. 2014.157.01

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# TAXIWAY H AND TAXIWAY A SHOULDERS

- 1. ALL WORK ASSOCIATED WITH PHASE 4J SHALL BE COMPLETED AS PART OF VOLUME 2 OF THE PROJECT DOCUMENTS.
- CONTRACTOR SHALL STAY OUTSIDE THE TAXIWAY OBJECT FREE AREA AT ALL TIMES WHILE THE TAXIWAY A IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE TAXIWAY OBJECT FREE AREA OF SHOULD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE TAXIWAY OBJECT FREE AREA, THE STAKING SHOR SHALL BE MAINTAINED BY THE CONTRACTOR THRE DURATION OF PHASE 4J AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE TAXIWAY OBJECT FREE AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, RESTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE TAXIWAY OBJECT FREE AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DOME AT NO ADDITIONAL COST TO THE OWNER.
- 3. PHASE 4J REQUIRES WORK WITHIN TAXIWAY OBJECT FREE AREA FOR TAXIWAY A. NO WORK IS ALLOWED IN THE TAXIWAY OBJECT FREE AREA OF AN OPEN AND ACTIVE TAXIWAY. FOR WORK TO BE COMPLETED WITHIN THE TAXIWAY OBJECT FREE AREA, THE AFFECTED TAXIWAY MUST BE CLOSED. THIS CAN BE DONE BY CLOSING THE ASSOCIATED TAXIWAY DURING THE DAY OR NIGHT OR DURING RUNWAY CLOSURES ASSOCIATED WITH WORK WITHIN THE RUNWAY SAFETY AREA. THE CONTRACT SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE OWNER AND AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE TAXIWAY CLOSURE PROCEDURES PRIOR TO STARTING TAXIWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE TAXIWAY CLOSURE AND TIMES AT ANY TIME.
- 4. CONTRACTOR SHALL INSTALL THE TEMPORARY ACCESS ROUTE FOR AIRPORT VEHICLES AS THE FIRST ORDER OF WORK FOR PHASE 4J. THE REMOVAL OF THE TEMPORARY ACCESS ROUTE SHALL BE THE LAST ORDER OF WORK FOR PHASE 4J.
- 5. PHASING AND CONSTRUCTION OF INTERNAL AND EXTERIOR EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COMPLETED PER THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS, AND NOTES.
- . ALL WORK ASSOCIATED WITH PHASE 4J SHALL BE COMPLETED WITHIN 28 CALENDAR DAYS FROM THE INITIAL START DATE OF PHASE 4J, THIS WORK SHALL BE CONSIDERED COMPLETE ONCE ALL PAVING AND LIGHTING IS COMPLETED AND ALL AREAS ARE SEEDED/MULCHEDMATTED. THE INTENT OF THIS REQUIREMENT IS SUCH THAT THE ASSOCIATED WORK SHALL BE COMPLETED AS SOON AS POSSIBLE TO MINIMIZE THE AMOUNT OF TIME AREAS WITHIN THE PROJECT LIMITS ARE DISTURBED.
- 7. ONCE AREAS WITHIN PHASE 4J ARE COMPLETE AND BROUGHT TO FINAL GRADE, THEY SHALL BE IMMEDIATELY SEEDED, MULCHED, AND/OR MATTED PER THE PLANS AND SPECIFICATIONS.
- 3. ALL EXISTING TAXIWAY AND RUNWAY FIXTURES, SIGNS, CABLE, TRANSFORMERS, CONDUIT, COUNTERPOISE AND MANHOLES SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
- 9. PERMANENT TAXIWAY LIGHTING BASE CANS, CONDUIT, COUNTERPOISE, L-824 CABLE, L-830 TRANSFORMERS AND APPURTENANCES SHALL BE INSTALLED ALONG TAXIWAY A, AND TAXIWAY H. THE TAXIWAY EDGE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE EXISTING TAXIWAY A SOUTH (TWAS) OR TAXIWAY A NORTH (TWAN) LIGHTING CIRCUIT PER THE CIRCUITING PLANS.
- 10. ALL SIGNAGE WITHIN THIS PHASE SHALL BE INSTALLED, CIRCUITED AND ILLUMINATED.
- 11. ALL AIRFIELD LIGHTING CIRCUITING, LIGHT FIXTURE INSTALLATION (INCLUDING FIXTURE IDENTIFICATION MARKERS) AND SIGNAGE SHALL BE INSTALLED, CIRCUITED, ENERGIZED AND INSPECTED FOR ALIGNMENT AND OPERATION PRIOR TO PROJECT CLOSE OUT.

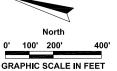
- 12. THE PAVEMENT SENSOR FOR THE PAVEMENT SENSING SYSTEM REMOTE PROCESSING UNIT SHALL BE INSTALLED WITHIN THIS PHASE OF CONSTRUCTION. THE UNIT SHALL BE LOCATED IN THE EXISTING POSITION SOUTH OF TAXIWAY K AND EAST OF TAXIWAY A.
- 13. IT SHALL BE THE SOLE RESPONSIBILITY OF THE PAVING AND ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF THE LIGHTING COMPONENTS AND PAVEMENT SENSOR COMPONENTS WITH THE PAVING ACTIVITIES,

CALENDAR DAYS PHASE 4E			
ACTIVITY	NUMBER OF NIGHT CLOSURES	LIQUIDATED DAMAGES	
PHASE 4J	28	\$2,000/DAY	

TAXIWAY AND RUNWAY CLOSURES PHASE 4J		
RUNWAY 17-35	NONE	
TAXIWAY A	NIGHT	
TAX <b>I</b> WAY H	DAY/NIGHT	

BARRICADES REQUIRED FOR PHASE 4J CLOSURES		
LOCATION	NUMBER OF BARRICADES	
TAXIWAY H	34	

LEGEND:
ADDITIVE ALTERNATE (S)



Asheville REGIONAL AIRPORT



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ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4J

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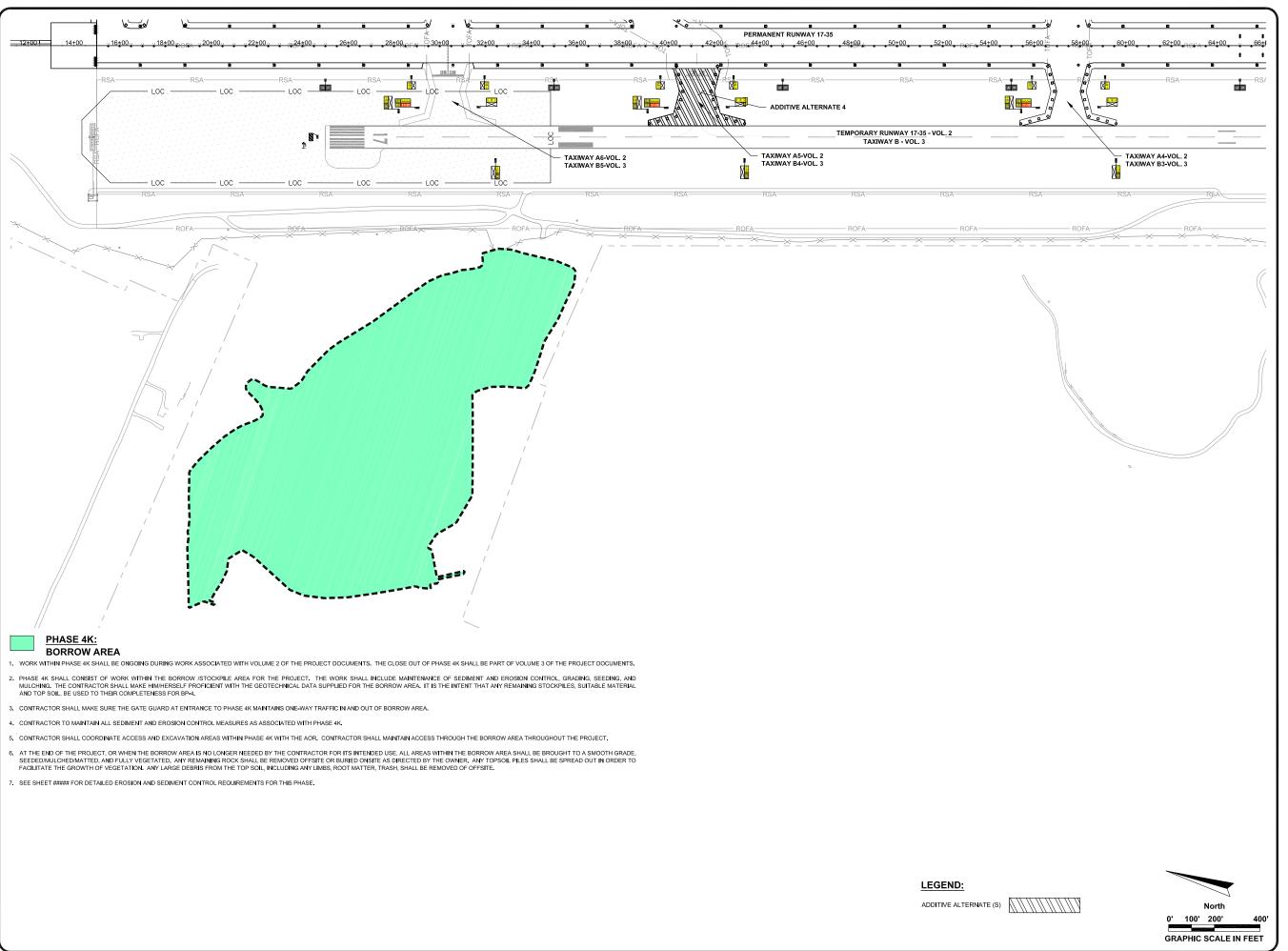
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PROJECT NO. 2014.157.01

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**SHEET NUMBER** 

N.C. C-2450







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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4K

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**SHEET NUMBER** 

**ELECTRICAL WORK ALONG TAXIWAY CONNECTORS AND GA RAMP** 

TAXIWAY OBJECT FREE AREA WHILE TAXIWAY IS OPEN.

PHASE 4N SHALL CONSIST OF WORK IN ALONG TAXIWAY E, G, H, J, AND K, AND THE GENERAL AVIATION RAMP. THE WORK SHALL CONSIST OF REMOVAL AND INSTALLATION OF NEW AIRFIELD LIGHTING ALONG THE TAXIWAYS AND RAMP. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4N THROUGHOUT

THE DURATION OF THE PROJECT. PHASE 4N REQUIRES WORK WITHIN THE TAXIWAY OBJECT FREE AREAS. THE CONTRACTOR SHALL COORDINATE ALL TAXIWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL

REQUIRED CLOSURE PROCEDURES. WORK OUTSIDE OF THE TAXIWAY OBJECT FREE AREAS SHALL BE SUBPHASE 4N1 AND WORK INSIDE THE TAXIWAY OBJECT FREE AREAS, WHILE THE TAXIWAY IS CLOSED, SHALL BE SUBPHASE

4N2. THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4N1 WHILE WORKING IN SUBPHASE 4N2. CONTRACTOR SHALL REMAIN CLEAR OF PERMANENT RUNWAY 17-35 AT ALL TIMES AND TAXIWAY A. WORK CANNOT OCCUR IN THE

## PHASE 4L:

PHASE 4M:

#### TAXIWAY B CONVERSION

PHASE 4L SHALL CONSIST OF ALL WORK ASSOCIATED WITH THE CONVERSION OF THE TEMPORARY RUNWAY 17-35 TO TAXIWAY B. THE WORK SHALL INCLUDE REMOVAL OF HIRL AND INSTALLATION OF MITL, SIGNAGE INSTALLATION AND REMOVAL, MISCELLANEOUS ELECTRICAL AND ELECTRICAL REMOVAL, MISCENING REMOVAL AND MARKING OF TAXIWAY, AND SEAL COAT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS THROUGH PHASE 4L THROUGH THE DURATION OF THE PROJECT. PHASE 4L REQUIRES WORK WITHIN THE PERMANENT RUNWAY 17-35 SAFETY AREA. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY CLOSURES AND TIMES WITH THE AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. WORK OUTSIDE OF THE PERMANENT RUNWAY 17-35 SAFETY SHALL BE SUBPHASE 4L1 AND WORK INSIDE THE PERMANENT RUNWAY 17-35 SAFETY AREA SHALL BE SUBPHASE 4L2. THER CONTRACTOR CAN ALSO WORK IN SUBPHASE 4LY THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4LY THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4LY THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4LY SUBPHASE 4LY THE CONTRACTOR CAN ALSO WORK IN SUBPHASE 4LY SUBPHASE 4LY CONTRACTOR CAN ALSO WORK IN SUBPHASE 4LY SUBPHASE 4LY CONTRACTOR SHALL REMAIN CLEAR OF PERMANENT RUNWAY 17-35 AT ALL TIMES WHILE IT IS OPEN AND ACTIVE WHILE WORKING WITHIN

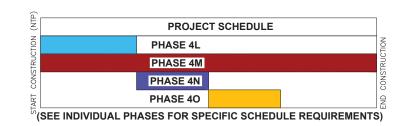
# PHASE 40:

PHASE 4N:

# GLIDE SLOPE AND NAVAIDS GRADING, DRAINAGE, AND DETENTION FOR CLOSE OUT

PHASE 4M SHALL CONSIST OF THE REMAINING WORK REQUIRED TO COMPLETE THE PERMANENT RUNWAY 17 AND 35 GLIDE SLOPES, INCLUDING RELOCATION AND INSTALLATION OF SHELTERS, INSTALLATION OF RUNWAY 17 GLIDE SLOPE, FLIGHT CHECKS AND COMMISSIONING, AND MINOR GRADING. THE INFRASTRUCTURE FOR THE PERMANENT RUNWAY 17 AND 35 GLIDE SLOPES SHALL BE INSTALLED AS PART OF VOLUME 2. THE CONTRACTOR SHALL COMPLETE THE INSTALLATION OF THE PERMANENT RUNWAY 17-35 GLIDE SLOPES PER THE CONTRACT COMPLETION OF RUNWAY 17 GLIDE SLOPE SHALL BE PHASE 4M1, RELOCATION AND COMPLETION OF RUNWAY 35 GLIDE SLOPE SHALL BE PHASE 4M2. UNLESS OTHERWISE DIRECTED BY THE OWNER, THE RUNWAY 17 GLIDE SLOPE SHALL BE COMPLETED AND COMMISSIONED PRIOR TO THE RELOCATION OF THE RUNWAY 35 GLIDE SLOPE. IF THE OWNER REQUIRES THE RELOCATION AND COMMISSIONING OF THE RUNWAY 35 GLIDE SLOPE PRIOR TO THE INSTALLATION OF THE RUNWAY 35 GLIDE SLOPE. IF THE OWNER REQUIRES THE RELOCATION AND COMMISSIONING OF THE RUNWAY 35 GLIDE SLOPE PRIOR TO THE INSTALLATION OF THE RUNWAY 17 GLIDE SLOPE, THE CHANGE

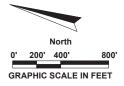
PHASE 40 SHALL CONSIST OF ALL REMAINING SITE WORK TO CLOSE OUT THE PROJECT AND THE AIRFIELD REDEVELOPMENT PROGRAM. THE WORK SHALL CONSIST OF REMOVAL OF SEDIMENT AND EROSION CONTROL MEASURES, GRADING, DRAINAGE, REMOVE AND INSTALLATION OF FENCE, COMPLETION OF DETENTION STRUCTURES, AND SEEDING AND MULCHING. THE CONTRACTOR SHALL REMAIN CLEAR OF ALL ACTIVE AIRFIELD PAVEMENTS AND SAFETY AREAS WHILE WORKING IN PHASE 40. WORK IN PHASE 40 SHALL NOT BEGIN UNTIL WRITTEN AUTHORIZATION HAS BEFOR GIVEN BY THE OWNER OR AOR



#### NOTES:

1. REFERENCE "TAXIWAY NAMING CHART" ON SHEET SP-08 FOR VOLUME 2 & VOLUME 3 PLANNED TAXIWAY RENAMING

- 2. CONTRACTOR SHALL REFERENCE EROSION AND SEDIMENT CONTROL PLANS FOR VOLUME 3 AND COORDINATE WITH PHASING PLANS. COORDINATION OF PLANS SHALL BE INCIDENTAL TO THE PROJECT. SEE SHEET EC-01 OF VOLUME 3 FOR SPECIFIC EROSION AND SEDIMENT CONTROL REQUIREMENTS AND NOTES FOR EACH PHASE OF WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF ALL EROSION AND SEDIMENT CONTROL REQUIREMENTS FOR EACH PHASES AND THE ENTIRE PROJECT.
- 3. NIGHT WORK IS EXPECTED AS PART OF THIS PROJECT FOR WORK WITHIN THE RUNWAY SAFETY AREA AND OTHER WORK AS REQUIRED TO COMPLETE THE PROJECT ON SCHEDULE. THE CONTRACTOR SHALL SUPPLY THE OWNER A DETAILED WEEKLY SCHEDULE FOR ANTICIPATED NIGHT WORK IN ORDER FOR THE OWNER TO SCHEDULE PERSONNEL, INSPECTION, TESTING, AND RUNWAY CLOSURES ACCORDINGLY. THE WEEKLY SCHEDULE MUST PROVIDE ENOUGH DETAIL AND WORK TO WARRANT NIGHT WORK. THE OWNER RESERVES THE RIGHT TO NOT ALLOW NIGHT WORK THE THE CONTRACTOR DOES NOT PROVIDE ENOUGH JUSTIFICATION FOR THE NIGHT WORK AND ASSOCIATED COSTS AND IMPACT TO THE OWNER. ANY IMPACTS TO THE CONTRACTOR OVERALL SCHEDULE DUE TO THE OWNER RESTRICTING WORK AT NIGHT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT JUSTIFY ADDITIONAL TIME OR MONIES.







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ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

VOLUME 3 OVERALL PHASING PLAN

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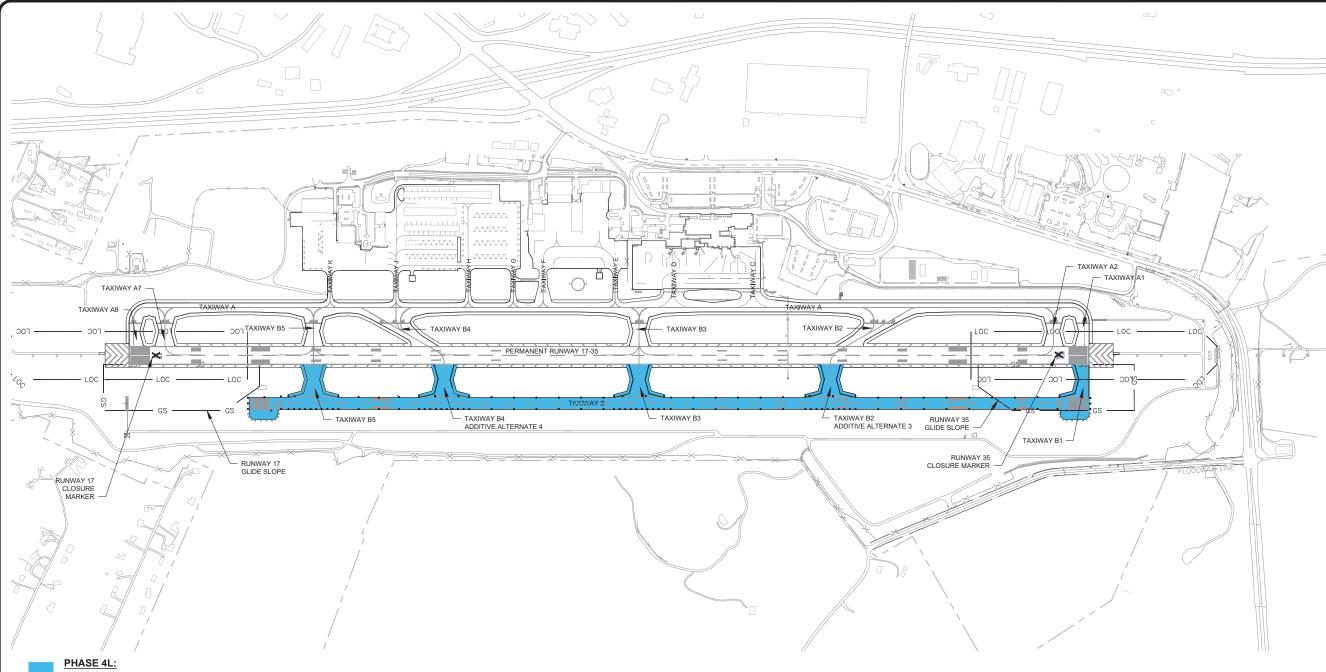
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#### TAXIWAY B CONVERSION

- 1. ALL WORK ASSOCIATED WITH PHASE 4L SHALL BE COMPLETED AS PART OF VOLUME 3 OF THE PROJECT DOCUMENTS.
- 2. TEMPORARY RUNWAY 17-35, TAXIWAY B, B1, B2, B3, B4, AND B5 SHALL REMAIN CLOSED THROUGHOUT THE DURATION OF PHASE 4L. TAXIWAY B, B1, B2, B3, B4, AND B5 SHALL ONLY BE OPENED ONCE ALL WORK HAS BEEN COMPLETED AND APPROVED BY THE AIRPORT.
- 3. CONTRACTOR SHALL STAY OUTSIDE THE RUNWAY 17-35 RUNWAY SAFETY AREA AT ALL TIMES WHILE THE RUNWAY IS OPEN AND ACTIVE. THE CONTRACTOR SHALL STAKE OUT THE LIMITS OF THE RUNWAY SAFETY AREA TO ENSURE PERSONNEL AND EQUIPMENT STAY CLEAR OF THE SAFETY AREA THE STAKING SHALL BE WOOD STAKES, A MINIMUM OF THREE FEET HIGH, AND USE AN ORANGE SAFETY MESH TO CLEARLY INDICATE THE RUNWAY SAFETY AREA. THE STAKING AND ORANGE MESH SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF PHASE 4L AND AS DIRECTED BY THE OWNER OR AOR. THE CONTRACTOR SHALL REMOVE AND RESTAKE THE RUNWAY SAFETY AREA AS NEEDED AS WORK PROGRESSES. THE STAKING, ROSTAKING AND MAINTENANCE OF SUCH WORK SHALL BE INCIDENTAL TO THE P-102 SPECIFICATION. THE CONTRACTOR MAY REQUEST TO USE OTHER MEANS TO IDENTIFY THE RUNWAY SAFETY AREA, HOWEVER, ANY DEVIATIONS MUST BE SUBMITTED, IN WRITING, TO THE AOR. ANY DEVIATIONS TO THE STAKING ARE AT THE SOLE DISCRETION OF THE OWNER AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- 4. PHASE 4L REQUIRES WORK WITHIN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA. NO WORK IS ALLOWED IN THE PERMANENT RUNWAY 17-35 RUNWAY 17-35 RUNWAY SAFETY AREA AT ANY TIME WHILE THE RUNWAY IS OPEN AND ACTIVE. NIGHT WORK, WHEN THE RUNWAY IS CLOSED, SHALL BE ALLOWED FOR ANY WORK IN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA. THE CONTRACTOR SHALL COORDINATE ALL RUNWAY NIGHT CLOSURES AND TIMES WITH THE OWNER OR AOR AND IMPLEMENT ALL REQUIRED CLOSURE PROCEDURES. THE CONTRACTOR SHALL MAKE ITSELF KNOWLEDGEABLE AND PROFICIENT WITH THE RUNWAY CLOSURE PROCEDURES PRIOR TO STARTING RUNWAY CLOSURES. THE OWNER RESERVES THE RIGHT TO CHANGE RUNWAY CLOSURE DATES. AND TIMES AT ANY TIME.
- 5. CONTRACTOR SHALL PLACE THE AIRPORTS RUNWAY CLOSURE LIGHTED X'S AT EACH END OF TEMPORARY RUNWAY 17-35 FOR A MINIMUM OF TWO WEEKS AFTER THE COMMISSIONING OF THE PERMANENT RUNWAY. THE CONTRACTOR SHALL PLACE THE AIRPORTS VIRYL CLOSURE MARKERS AT EQUAL INTERVALS ON THE TEMPORARY RUNWAY 17-35. THE VINYL CLOSURE MARKERS SHALL REMAIN IN PLACE UNTIL THE OPENING OF TAXIWAY B UNLESS OTHERWISE DIRECTED BY THE AIRPORT. THE RUNWAY CLOSURE LIGHTED X'S SHALL ONLY BE OPERATED DURING FROM DAWN TILL DUSK.
- 6. ONCE THE PERMANENT RUNWAY HAS BEEN COMMISSIONED, THE CONTRACTOR WILL IMMEDIATELY START REMOVING THE RUNWAY MARKINGS ASSOCIATED WITH PHASE 4L. THE CONTRACTOR SHALL SUBMIT A REMOVAL SCHEDULE TO THE OWNER PRIOR TO STARTING THE WORK, HOWEVER, ALL THE MARKING REMOVAL ASSOCIATED WITH PHASE 4L SHALL BE COMPLETED WITHIN FIVE DAYS OF THE PERMANENT RUNWAY COMMISSIONING.
- ONCE ALL THE MARKING HAS BEEN REMOVED, THE TEMPORARY RUNWAY/TAXIWAY B AND TAXIWAY B5 SHALL BE SEAL COATED PER THE P-608 SPECIFICATION

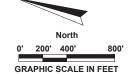
- 8. ONCE THE SEAL COAT HAS CURED, TAXIWAY B AND CONNECTOR TAXIWAYS SHALL BE MARKED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS
- 9. CONTRACTOR SHALL REMOVE ALL HIRL'S AND INSTALL MITL'S PER THE CONTRACT DOCUMENTS

TAXIWAY AND RUNWAY CLOSURES PHASE 4L		
нт		
SED		
3		

BARRICADES PHASE 4L		
LOCATION	NUMBER OF BARRICADES	
TAXIWAY B1	10	
TAXIWAY B2	10	
TAXIWAY B3	10	
TAXIWAY B4	10	
TAXIWAY B5	10	
MAX NEEDED	50	

CALENDAR DAYS PHASE 4L			
ACTIVITY	NUMBER OF DAYS	NUMBER OF RUNWAY NIGHT CLOSURES	LIQUIDATED DAMAGES
PHASE 4L 60		10	\$2,000/DAY

 RUNWAY CLOSURES ASSOCIATED WITH WORK IN PHASE 4L IS RESTRICTED TO THE NUMBER OF NIGHT ALLOWED ABOVE. ANY ADDITIONAL RUNWAY CLOSURES REQUIRED FOR THIS WORK, NOT SPECIFICALLY ALLOWED BY THE OWNER OR TIED TO OTHER PHASED WORK CLOSURE, SHALL BE SUBJECT TO LIQUIDATED DAMAGES.







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ENGINEERS & PLANNERS
MALLARD CREEK III, SUITE 152
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BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4L

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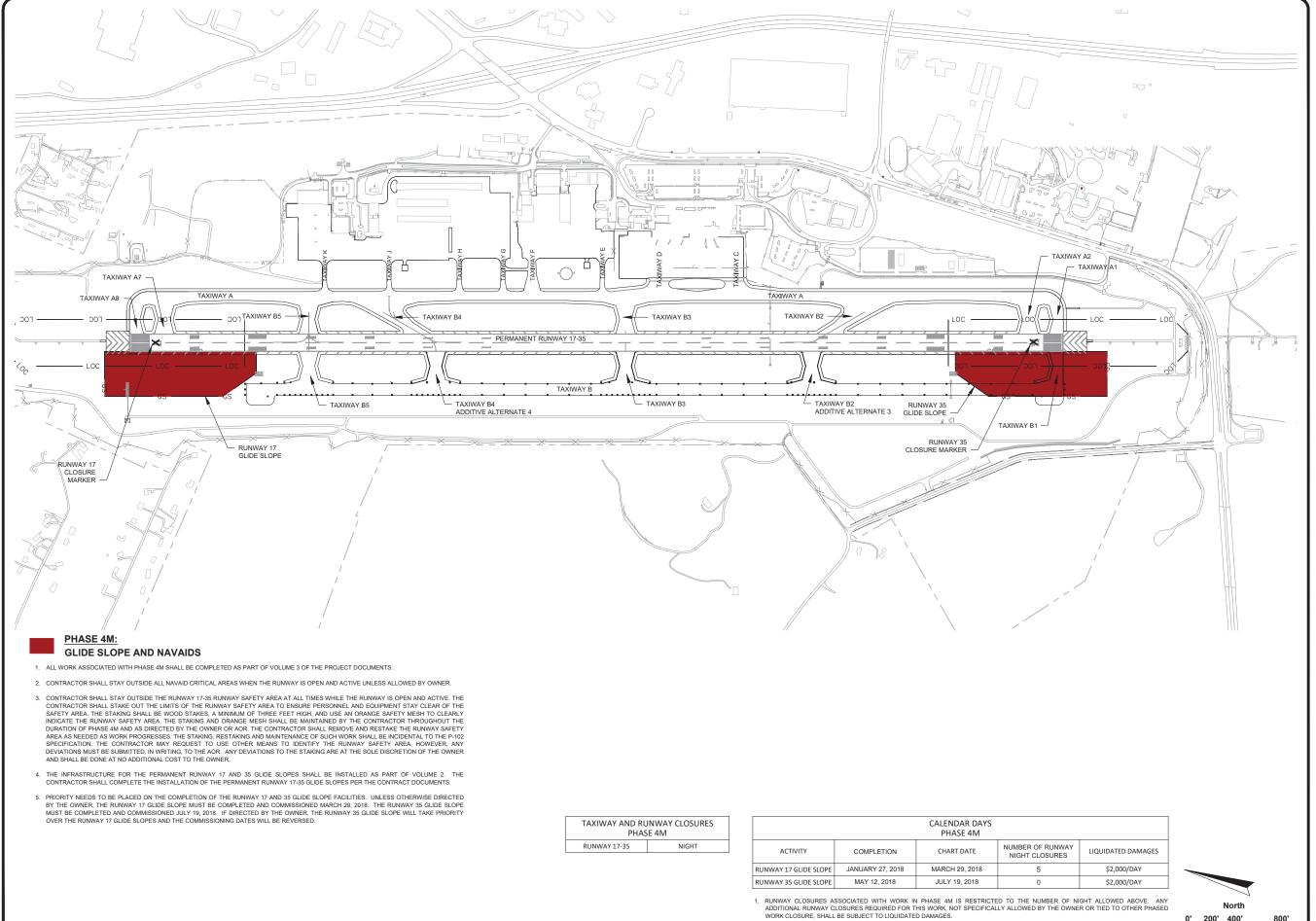
DESIGNED BY: J.M.M.
DRAWN BY: W.L.J.
CHECKED BY: J.M.M.

APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450 PROJECT NO. 2014.157.01

**SHEET NUMBER** 







ENGINEERS & PLANNERS
MALLARD CREEK III, SUITE 152
CLIFF CAMERON DRIVE CHARLOTTE N.C
OFFICE: (704) 954-9008

ISSUED FOR BID NOT RELEASED FOR CONSTRUCTION

ASHEVILLE
REGIONAL AIRPORT
ASHEVILLE
NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4M

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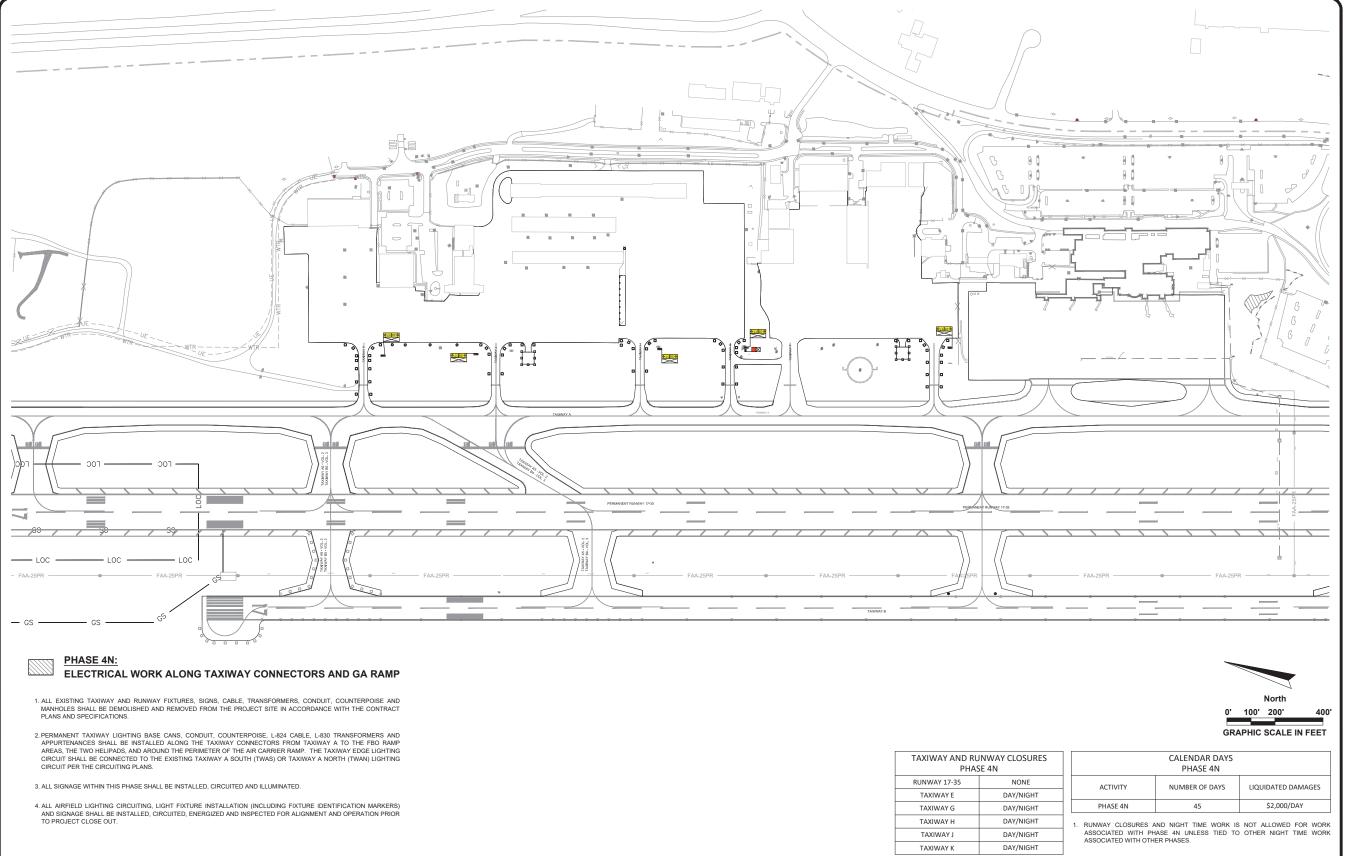
APPROVED BY: J.M.M.
DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450

PROJECT NO. 2014.157.01

GRAPHIC SCALE IN FEET

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AVCON, INC.
ENGINEERS & PLANNERS
MALLARD CREEK III, SUITE 152
CLIFF CAMERON DRIVE #CHARLOTTE N.C. 283
OFFICE: (704) 954-9008

ISSUED FOR BID NOT RELEASED FOR CONSTRUCTION

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 4N

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DATE: DECEMBER 2016

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**SHEET NUMBER** 

- 4.IT IS THE INTENT OF PHASE 40 THAT THE WORK ASSOCIATED WITH THE BORROW AREA AND SEEDING AND MULCHING WILL BE ONGOING THROUGH VOLUME 2 AND 3. WORK ASSOCIATED WITH CLOSURE AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES WILL STAT ONCE APPROVAL IS GIVEN BY NCDEQ, WHICH IS EXPECTED TO BE SPRING 2018. THE CLOSURES ARE DEPENDENT ON THE CONTRACTOR ABILITY TO ADEQUATELY AND EXPEDITIOUSLY VEGETATE THE PROJECT SITE.
- 5. ALL SEDIMENT BASINS SHALL EITHER BE REMOVED, GRADED OUT FOR POSITIVE DRAINAGE, FILLED IN, OR TURNED INTO DETENTION BASINS. CONTRACTOR TO FOLLOW REQUIREMENTS FOR EACH BASIN AS REQUIRED BY THE GRADING AND DRAINAGE PLANS. NO WORK CAN TAKE PLACE, OTHER THAM MAINTENANCE OF THE SEDIMENT BASINS, UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE OWNER AND NOCEQ.
- 6. THE BORROW AREA MUST BE CLEANED UP, GRADED TO A SMOOTH GRADE, AND VEGETATED AT THE END OF THE PROJECT. THE CONTRACTOR SHALL MAKE PROVISIONS TO COMPLETE THIS WORK IN A TIMELY MANNER AND SEED AND MULCH ACCORDINGLY. THE BORROW AREA WILL NOT BE ACCEPTED BY THE OWNER UNTIL THE SITE HAS BEEN COMPLETELY VEGETATED. ONCE VEGETATION HAS BEEN ESTABLISHED, THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AS DIRECTED BY NODE.
- 7. AS PART OF PHASE 40, ALL EROSION AND SEDIMENT CONTROL MEASURES INSTALLED FOR BID PACKAGE 4 AND THE AIRPIELD REDEVELOPMENT PROGRAM SHALL BE REMOVED, UNLESS OTHERWISE DIRECTED. THIS INCLUDES BUT IS NOT LIMITED TO, SLIT FENCE, SLOPE DRAINS, INLET AND OUTLET PROTECTIONS, CHECK DAMS, AND DIVERSION DITCHES. RIP RAP OUTLET PROTECTIONS TO REMAIN AT THE END OF THE PROJECT SHALL BE REFRESHED WITH STONE AND RESHAPPD AS NEEDED.





ENGINEERS & PLANNERS

MALLARD CREEK III, SUITE 152

CLIFF CAMERON DRIVE CHARLOTTE N.C

OFFICE: (704) 954-9008

www.avconinc.com

ISSUED FOR BID NOT RELEASED FOR CONSTRUCTION

ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 1 -GENERAL, PHASING AND SAFETY PLANS

PHASE 40

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APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE #
PROJECT NO.

**SHEET NUMBER** 

N.C. C-2450

2014.157.01



**RS&H** 

# ADDENDUM NO. 1 TO PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR

# PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 – PAVING, LIGHTING, AND NAVAIDS

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE, NORTH CAROLINA

TO: ALL PROSPECTIVE BIDDERS

DATE: DECEMBER 12, 2016

This Addendum No. 1 forms a part of the Contract Documents and modifies the original Issued for Bid contract documents, plan drawings and specifications dated December 2016 as noted and included herein. <u>Bidder must acknowledge receipt of this ADDENDUM in the space provided on the Bid Form.</u> Failure to do so may subject the Bidder to disgualification.

# **GENERAL**

- 1. The location for the Pre-Bid Conference has been changed to the Asheville Regional Airport Department of Public Safety building. See attached for a parking diagram and location map. The time and date for the Pre-Bid Conference remains **Thursday**, **December 15**, **2016** at **10:30 AM Eastern Standard time**.
- 2. The deadline for bids remains Friday, January 27, 2017 at 2:00 PM Eastern Standard Time.
- 3. Deadline for questions and answers remains Friday, January 20, 2017, at 5:00 PM Eastern Standard Time.

# MODIFICATIONS TO CONTRACT PLANS AND SPECIFICATIONS

# **SPECIFICATIONS**

- 1. Add attached Specification P-102 Safety and Security.
- 2. **Specification L-108** Pay Item L-108-4 has been added as follows:

Item L-108-4 Ground Dissipation Plate - .25"x24"x24" with Pinkered Edge, including 8' Length of

-- per Each (EA)

1/0 AWG Guard Wire

Specification L-108 is not reissued with Addendum No. 1.

3. Specification L-109 – Pay Items L-109-3 and L-109-4 have been deleted as follows:

Item L-109-3 250 kW / 312.5 kVA, 480 Volt, 3 Phase, 12w 60Hz
Packaged Engine Generator Set per Specification
L-109S-26 32 13

--- Lump Sum

Item L-109-4 400 Amp, 480 Volt, Three Phase, Four Pole, 100% Rated Automatic Transfer Switch per Specification L-109S-26 23 00

--- Lump Sum

Specification L-109 is not reissued with Addendum No. 1.

4. **Specification L-125** – Pay Items L-125-56 and L-125-57 have been added as follows:

Item L-125-56 L-867B, 1/2" Galvanized Steel Blank Cover (NE)

1/2" Galvanized Steel Blank Cover mounted on an existing L-867B deep light base utilizing existing spacer ring(s) (w/concrete ring) and all incidentals and secured with stainless steel bolts.

Item L-125-57 L-868, 3/4" Galvanized Steel Blank Cover (NE)
3/4" Galvanized Steel Blank Cover mounted on an existing L-868B deep light base utilizing existing spacer ring(s) (w/concrete ring) and all incidentals and secured with stainless steel bolts.

-- per Each (EA)

Specification L-125 is not reissued with Addendum No. 1.

# **PLANS**

- 1. Cross sections are at a 50:10 scale. Scale to be revised as part of the released for construction documents.
- Plan Sheet E-601 Revise note callout on sign #S09 from "Note 8" to "Note 7".

3.

- Plan Sheet E-602B Revise note callout on sign #S06 from "Note 8" to "Note 7".
- 5. Plan Sheet E-806A Revise the "Sheet Note" at top right of drawing "ADDITIVE ALTERNATE 4" to "ADDITIVE ALTERNATE 3".
- 6. Plan Sheet N-603 Revise note 4 sheet reference from "SHEET X" to "SHEET N-604".

# ANSWERS TO WRITTEN INQUIRIES RECEIVED

1. Question One: Will there need to be coordination with the NCDOT for work with in the right of way.

ANSWER: Yes, there will need to be coordination with NCDOT for any work within the right of way.

2. Question Two: On page P-69 – line items L-108-1 and L-108 are not expanded out and the top line of the description cannot be read.

ANSWER: Item L-108-1 reads "1/C L-824-TYPE C UNSHEILDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT." Item L-108 is re-numbered to Item L-108-4, and reads, "GROUND DISSIPATION PLATE - .25"X24"X24" WITH PINKERED EDGE, INCLUDING 8' LENGTH OF 1/0 AWG GUARD WIRE."

A revised bid proposal form as well as an electronic copy of the bid quantities in .XLS format will be released via Addendum No. 2.

**END OF ADDENDUM NO. 1** 

# Asheville Regional Airport Pre-Bid Meeting Location & Parking



# **ITEM P-102**

# **SAFETY AND SECURITY**

# **PART I - GENERAL**

**102-1.1 DESCRIPTION.** The provisions of this safety and security plan and associated procedures are applicable within the boundaries of the **Asheville Regional Airport**. A complete understanding of all procedures and requirements contained herein is required to ensure safety during construction. The Airport has completed a Construction Safety and Phasing Plan (CSPP), which is appended at end of this project manual. It is required that the contractor comply with this CSPP at all times during the project. The contractor shall be required to submit for approval a Safety Plan Compliance Document (SPCD) which details how the contractor will comply with the CSPP. This safety plan is a part of this Contract and deviations from the requirements established herein will be sufficient cause for Contract termination.

Required reference material associated with this safety plan includes:

FAA AC 150/5200-18C, Airport Safety Self-Inspection

FAA AC 150/5210-5D, Painting, Marking and Lighting of Vehicles Used on an Airport

FAA AC 150/5370-2F, Operational Safety on Airports During Construction

Copies of these documents are included in the specifications. FAA Advisory Circulars may also be found at the below web link: http://www.faa.gov/airports/resources/advisory\_circulars/

# **PART 2 - CONTRACTOR SAFETY AND SECURITY OFFICER**

**102-2.1 CONTRACTOR SAFETY AND SECURITY OFFICER (CSSO)**. The Contractor shall appoint its on-site Construction Superintendent or other qualified individual(s) as its duly authorized representative to serve as Contractor Safety and Security Officer (CSSO) for the duration of the Contract. The CSSO shall thoroughly understand the safety and security requirements of the Contract, the necessity for them and shall have sufficient authority to implement its provisions without significant deviation. The Contractor shall notify the Engineer in writing of the name of the individual(s) selected for the assignment.

The CSSO shall represent the Contractor on safety and security requirements compliance. The CSSO shall be especially knowledgeable regarding the requirements of FAA AC's 150/5200-18, Airport Self Inspection Guide and 150/5370-2F Operational Safety on Airports During Construction, latest edition.

- **102-2.2 RESPONSIBILITIES OF THE CONTRACTOR SAFETY AND SECURITY OFFICER**. Prior to the desired date for commencement of any work on the project, the CSSO shall accomplish the following:
  - **a.** Develop and submit in writing a detailed work sequence schedule with dates and times specified for all milestone events. This sequence schedule shall conform, as a minimum, to the events specified in Section 3.1, Construction Sequence, and shall be subject to the approval of the Engineer. To assure adequate time for coordination, this document shall be submitted at least one week prior to the date of the Preconstruction Conference.
  - b. Develop and submit in writing a detailed outline of the procedures to be followed to maintain safety and security of both Contractor operations and the integrity of airport landside and airside operations during the prosecution of contract work. This plan shall detail, in addition, the procedures to be followed in the event of an accident or fire involving Contractor personnel and the Contractor's efforts to maintain fire protection and security. These procedures shall be subject to the approval of the Engineer and reflect any change as may be deemed necessary.

- c. Conduct at least one meeting of all Contractor supervisory personnel prior to the start of contract work. The purpose of this meeting is to review the approved Work sequence schedule and safety and security procedures. Attendance at this meeting by the CSSO, all Contractor supervisory personnel and the Engineer is mandatory. This meeting shall also be open to other employees of the Contractor and others as the Engineer may deem appropriate. Minutes of this meeting shall be taken by the CSSO, copies provided to each supervisor and kept on file in the Contractor's construction office for periodic review and updating.
- d. Develop a safety and security orientation program and provide a briefing for all employees of the Contractor and subcontractors that will be used on the project. A similar briefing will be given to new employees prior to their use on contract work. In addition, the CSSO shall be responsible for briefing, from time to time, all Contractor personnel on any changes to safety and security measures deemed necessary.
- e. SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) to the airport operator describing how the contractor's SPCD will comply with the requirements of the CSPP and supplying any details that could not be determined before contract award. The SPCD must include a certification statement by the contractor that indicates it understands the operational safety requirements of the CSPP and it asserts it will not deviate from the approved CSPP and SPCD unless written approval is granted by the airport operator. Any construction practice proposed by the contractor that does not conform to the CSPP and SPCD may impact the airport's operational safety and will require a revision to the CSPP and SPCD and re-coordination with the airport operator and the FAA in advance.
  - a. THE SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) should include a general statement by the construction contractor that he/she has read and will abide by the CSPP. In addition, the SPCD must include all supplemental information that could not be included in the CSPP prior to the contract award. The contractor statement should include the name of the contractor, the title of the project CSPP, the approval date of the CSPP, and a reference to any supplemental information (that is, "I, Name of Contractor, have read the Title of Project CSPP, approved on Date, and will abide by it as written and with the following additions as noted:"). The supplemental information in the SPCD should be written to match the format of the CSPP indicating each subject by corresponding CSPP subject number and title. If no supplemental information is necessary for any specific subject, the statement, "No supplemental information," should be written after the corresponding subject title. The SPCD should not duplicate information in the CSPP:
    - i. **COORDINATION.** Discuss details of proposed safety meetings with the airport operator and with contractor employees and subcontractors.
    - ii. **PHASING.** Discuss proposed construction schedule elements, including:
      - 1. Duration of each phase.
      - 2. Daily start and finish of construction, including "night only" construction.
      - 3. Duration of construction activities during:
      - a. Normal runway operations.
      - b. Partially closed (displace threshold) runway operations.
      - 4. Modified runway "Aircraft Reference Code" usage.

- iii. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY. These areas and operations should be identified in the CSPP and should not require an entry in the SPCD.
- iv. PROTECTION OF NAVAIDS. Discuss specific methods proposed to protect operating NAVAIDs.
- v. **CONTRACTOR ACCESS.** Provide the following:
  - 1. Details on how the contractor will maintain the integrity of the airport security fence (gate guards, daily log of construction personnel, and other).
  - 2. Listing of individuals requiring driver training (for certificated airports and as requested).
  - 3. Radio communications.
  - Types of radios and backup capabilities.
  - 5. Who will be monitoring radios.
  - Whom to contact if Airport Operations cannot reach the contractor's designated person by radio.
  - 7. Details on how the contractor will escort material delivery vehicles.
- vi. WILDLIFE MANAGEMENT. Discuss the following:
  - 1. Methods and procedures to prevent wildlife attraction.
  - 2. Wildlife reporting procedures.
- vii. **FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT.** Discuss equipment and methods for control of FOD, including construction debris and dust.
- viii. **HAZARDOUS MATERIAL (HAZMAT) MANAGEMENT.** Discuss equipment and methods for responding to hazardous spills.
- ix. **NOTIFICATION OF CONSTRUCTION ACTIVITIES.** Provide the following:
  - 1. Contractor points of contact.
  - 2. Contractor emergency contact.
  - 3. Listing of tall or other requested equipment proposed for use on the airport and the timeframe for submitting 7460-1 forms not previously submitted by the airport operator.
  - 4. Batch plant details, including 7460-1 submittal.
- x. **INSPECTION REQUIREMENTS.** Discuss daily (or more frequent) inspections and special inspection procedures.
- xi. **UNDERGROUND UTILITIES.** Discuss proposed methods of identifying and protecting underground utilities.
- xii. **PENALTIES.** Penalties should be identified in the CSPP and should not require an entry in the SPCD.
- xiii. **SPECIAL CONDITIONS.** Discuss proposed actions for each special condition identified in the CSPP.

- xiv. **RUNWAY AND TAXIWAY VISUAL AIDS.** Including marking, lighting, signs, and visual NAVAIDs. Discuss proposed visual aids including the following:
  - 1. Equipment and methods for covering signage and airfield lights.
  - 2. Equipment and methods for temporary closure markings (paint, fabric, other).
  - 3. Types of temporary Visual Guidance Slope Indicators (VGSI).
- xv. **MARKING AND SIGNS FOR ACCESS ROUTES.** Discuss proposed methods of demarcating access routes for vehicle drivers.
- xvi. **HAZARD MARKING AND LIGHTING.** Discuss proposed equipment and methods for identifying excavation areas.
- xvii. **PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS.** including object free areas, obstacle free zones, and approach/departure surfaces. Discuss proposed methods of identifying, demarcating, and protecting airport surfaces including:
  - 1. Equipment and methods for maintaining Taxiway Safety Area standards.
  - 2. Equipment and methods for separation of construction operations from aircraft operations, including details of barricades.
- xviii. **OTHER LIMITATIONS ON CONSTRUCTION** should be identified in the CSPP and should not require an entry in the SPCD.
- b. **HAVE AVAILABLE AT ALL TIMES COPIES** of the CSPP and SPCD for reference by the airport operator and its representatives, and by subcontractors and contractor employees.
- c. **ENSURE THAT CONSTRUCTION PERSONNEL** are familiar with safety procedures and regulations on the airport. Provide a point of contact who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport. Contractor shall provide 24-hour coverage.
- d. **IDENTIFY IN THE SPCD THE CONTRACTOR'S ON-SITE EMPLOYEES** responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site whenever active construction is taking place.
- e. **CONDUCT INSPECTIONS** sufficiently frequently to ensure construction personnel comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.
- f. **RESTRICT MOVEMENT OF CONSTRUCTION VEHICLES AND PERSONNEL** to permitted construction areas by flagging, barricading, erecting temporary fencing, or providing escorts, as appropriate and as specified in the CSPP and SPCD.
- g. **ENSURE THAT NO CONTRACTOR EMPLOYEES,** employees of subcontractors or suppliers, or other persons enter any part of the air operations area (AOA) from the construction site unless authorized.
- h. The Contractor shall submit and receive approval of SPCD prior to issuance of Notice to Proceed.

#### **PART 3 - CONSTRUCTION SEQUENCING**

**102-3.1 CONSTRUCTION SEQUENCE.** The Contractor, utilizing the information shown on the plans, shall prepare a construction schedule and submit to the Engineer at least one week prior to the preconstruction conference.

**102-3.2 CLOSING RUNWAYS AND/OR TAXIWAYS/TAXILANES.** The Contractor shall acquaint his supervisors and employees with the sequence of construction and its relationship to airport activity and aircraft operations that are inherent to this airport. No runway, taxiway, apron or airport roadway shall be closed without the written approval of the Owner, to enable necessary NOTAMS and/or advisories to airport fixed based operators (FBOs), tenants and users.

The Contractor shall contact the Engineer a minimum of ten (10) days prior to any requested closing.

Any construction activity within 250 feet of the centerline of an active runway (runway safety area) or within 129.5 feet of the centerline of an active taxiway or apron (taxilane object free area) requires the closure of the affected area. These safety areas are shown on the phasing plan.

The Engineer will arrange for an inspection prior to return to service of any facility, that has been closed for work, on or adjacent thereto, or that has been used for a crossing point or haul route by the Contractor.

#### **PART 4 - MARKING AND LIGHTING**

**102-4.1** Proper marking and lighting of areas on the airfield associated with the construction shall be the responsibility of the Contractor and shall be described by the SPCD. This will include properly marking and lighting closed runways, taxiways, taxilanes, and aprons, the limits of construction, material storage areas, equipment storage areas, haul routes, parking areas and other areas defined as required for the Contractor's exclusive use. The Contractor shall erect and maintain around the perimeter of these areas suitable marking and warning devices visible for day and night use. Temporary barricades, flagging, and flashing warning lights shall be required at critical access points. The type and location of marking and warning devices will be approved by the Engineer.

Special emphasis shall be given to open trenches, excavations, heavy equipment marshalling areas, and stockpiled material located in the airport operations area, which shall be predominantly marked by the Contractor with flags and lighted by approved light units during hours of restricted visibility and darkness. All marking shall be in accordance with FAA Advisory Circular (AC) 150/5340-1J or latest edition.

#### **PART 5 - TRAFFIC CONTROL**

**102-5.1 VEHICLE IDENTIFICATION**. The Contractor shall establish and maintain a list of Contractor and subcontractor vehicles authorized to operate on the site. Contractor employee vehicles shall be restricted to the Contractor's staging area and are not allowed in the Airport Operations Area (AOA) at any time. To be authorized to operate on the airport, each Contractor or subcontractor's vehicle shall:

- **a.** be marked/flagged for high daytime visibility and lighted for nighttime operations. Vehicles that are not marked and/or lighted shall be escorted by a vehicle appropriately marked and/or lighted. Vehicles requiring escort shall be identified on the list.
- **b.** be identified with the name and/or logo of the Contractor and be of sufficient size to be identified at a distance. Vehicles needing intermittent identification could be marked with tape or with commercially available magnetically attached markers. Vehicles that are not appropriately identified shall be escorted by a vehicle that conforms to this requirement. Vehicles requiring escort shall be identified on the list.

- **c.** be operated in a manner that does not compromise the safety of either landside or airside airport operations. If, in the opinion of the Engineer, any vehicle is operated in a manner not fully consistent with this requirement, the Engineer has the right to restrict operation of the vehicle or prohibit its use on the airport.
- 102-5.2 ACCESS TO THE SITE OF CONSTRUCTION. The Contractor's access to the site shall be as shown on the Contract Layout Plan. No other access points shall be allowed unless approved by the Engineer. All Contractor traffic authorized to enter the site shall be experienced in the route or guided by Contractor personnel. The Contractor shall be responsible for traffic control to and from the various construction areas on the site, and for the operation and security of the access gate to the site. A Contractor's flagman or traffic control person shall monitor and coordinate all Contractor traffic at the access gate with Airport Security. The Contractor shall not permit any unauthorized construction personnel or traffic on the site. Access gates to the site shall be locked and secured at all times when not attended by the Contractor. If the Contractor chooses to leave any access gate open, it shall be attended by Contractor personnel who are familiar with the requirements of the Airport Security Program. The Contractor is responsible for the immediate cleanup of any debris deposited along the access route as a result of his construction traffic. Directional signing from the access gate along the delivery route to the storage area, plant site or work site shall be as directed by the Engineer. In addition, the following requirements are applicable:
  - a. All Contractor traffic authorized to travel on the airport shall have been briefed as part of the Contractor's construction safety and security orientation program, be thoroughly familiar with the access procedures and route for travel or be escorted by personnel authorized by the Contractor Safety and Security Officer (CSSO).
  - **b.** The Contractor shall install work site identification signs at the authorized access point(s). If, in the opinion of the Engineer, directional signs are needed for clarity, they shall be installed along the route authorized for access to each construction site.
  - **c.** Under no circumstance will Contractor personnel be permitted to drive their individually owned vehicles to any construction site on the airport. All vehicles must be parked in the area designated for employee parking and out of secured airport property.
  - **d.** In addition to the inspection and cleanup required at the end of each shift, the Contractor is responsible for the immediate cleanup of any debris generated along the construction site access route(s) as a result of construction related traffic or operations whether or not created by Contractor personnel.
- **102-5.3 MATERIAL SUPPLIERS.** All material suppliers, subcontractors and visitors to the work site are obligated to follow the same safety and security operating procedures as the Contractor. All material suppliers shall make their deliveries using the same access points and routes as the Contractor and shall be advised of the appropriate delivery procedures at the time the materials order is placed. The Contractor shall not use the Airport address for any delivery but shall use the street address appropriate to the location of the entrance of the work site. If it is not practical to conform to the vehicle identification requirements of Section 102-5.1 and the safety and security operations program requirements of Section 102-2.2, the Contractor shall be prepared to escort all suppliers, subcontractors and visitors while they are on the airport.
- **102-5.4 PERSONNEL IDENTIFICATION.** All employees, agents, vendors, invitees, etc. of the Contractor or subcontractors requiring access to the construction site shall, conform to the Security Program.

#### **PART 6 - GENERAL SAFETY REQUIREMENTS**

**102-6.1** All Contractor vehicles that are authorized to operate on the airport outside of the designated construction area limits or haul routes as defined herein shall display in full view above the vehicle a flashing amber (yellow) dome-type light or a three-foot by three-foot, or larger, orange and white checkerboard flag, each checkerboard color being one-foot square. Vehicles must be under control of a Contractor mobile (two-way) radio operator (flagmen) monitoring the Airport frequency. Vehicle operators must be vigilant for conflict with any aircraft and give way to any operating aircraft.

All Contractor vehicles that are required to operate outside of the construction area limits as defined herein and cross active runways, taxiways, aprons, or runway approach clear zones shall do so under the direct control of a flagman who is monitoring the Airport frequency. Flagmen and two-way radios shall be furnished by the Contractor. Flagmen shall be instructed in the use of two-way radios prior to use. All aircraft traffic on runways, taxiways and aprons shall have priority over Contractor's traffic.

Construction vehicles not in use for extended periods during the work day, or during nights and weekends (nonwork periods) shall be parked away from active runways, taxiways, and aprons in designated vehicle marshalling areas.

**102-6.2** In order to protect all aircraft traffic, aviation related businesses, terminal apron areas, etc. from potential damage caused by foreign object debris (FOD) generated by construction activities, the Contractor shall provide a vacuum truck as required at the startup of construction to daily vacuum all pavements affected by construction. The vacuum truck shall remain on-site for the duration of the project and shall be available at the discretion of the Owner to vacuum pavement areas adjacent to the construction areas to ensure no FOD is present on pavements within 500 feet of any construction area. Protecting the aircraft, airport tenants, users, public, etc. against FOD is a critical safety issue therefore the cost of the vacuum truck will be included in the cost established for this specification item.

#### **PART 7 - CONSTRUCTION CONTROL**

**102-7.1** A primary and alternate responsible Contractor's representative shall be designated by the Contractor. The Contractor's representatives shall be available locally on a 24-hour basis. Names of the primary and alternate, including phone number, shall be made available to the Engineer by the Contractor. The Contractor shall insure that the names and phone numbers are kept current and made available to the Engineer.

#### **PART 8 - CONSTRUCTION TECHNIQUES**

**102-8.1** Construction shall be planned and conducted throughout this project in such a manner as to allow the maintenance of completely safe airport operations. Every effort shall be made to reduce the impact of construction activity on overall airport operations. To this end the Contractor's activities shall be conducted in such a manner so as to preclude, except where absolutely required, open excavations, trenches, ditches and above ground obstacles such as booms on cranes or obstacle markers such as wooden saw horses. The primary responsibility for assuring that the safest possible construction techniques are followed rests with the Contractor Safety and Security Officer (CSSO).

#### **PART 9 - METHOD OF MEASUREMENT**

- **102-9.1** The item of Safety and Security shall be measured as a lump sum item when required and furnished for the life of the Contract.
- **102-9.2** For the item of barricade, the method of measurement will be made per each barricade supplied by the contractor. Any costs associated with placement and moving of barricades shall be incidental to 102-9.1.

- **102-9.3** For the item of maintain existing barricade, the method of measurement will be made per each existing barricade supplied by the owner. Any costs associated with placement and moving of barricades shall be incidental to 102-9.1.
- **102-9.4** The item of Taxiway Crossings shall be measured as a lump sum item for each taxiway crossing shown on the plans. Reorientation of the taxiway crossing between the temporary and permanent situations does not constitute multiple taxiway crossings. The lump sum item shall include the crossing guards, stop sign, and maintenance of barricades, cleaning of taxiway crossing, and multiple installations and removals as required to complete the contract documents.

#### **PART 10 - BASIS OF PAYMENT**

- **102-10.1** Payment shall be made for airport safety and security measures for personnel or materials related to this specification item and incidentally required to satisfy the specified objective(s) under Item P-102 Safety and Security. This compensation shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.
- **102-10.2** Payment for the barricades will be made per each new barricade supplied by the contractor for the barricade and maintenance of each barricade throughout the project. Any costs associated with placement and moving of barricades shall be incidental to 102-9.1.
- **102-10.3** Payment for maintaining existing barricades will be made per each existing barricade supplied by the owner for the barricade and maintenance of each barricade throughout the project. Any costs associated with placement and moving of barricades shall be incidental to 102-9.1.
- **102-10.4** Payment for the Taxiway Crossings shall be for personnel and materials related to each taxiway crossing, including crossing guards, broom tractors, and vacuum truck. The cost of multiple installations and removals, as required by the plans, shall be included in the lump sum cost.

#### PARTIAL PAYMENTS.

Partial payments will be made in accordance with the following:

PERCENTAGE OF ORIGINAL CONTRACT EARNED	ALLOWABLE PERCENT OF THE LUMP SUM PRICE FOR THE ITEM
25	25
50	50
75	75
100 (or Contract Completion)	100

This compensation shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

## Payment shall be made under:

Item P-102-1	Safety and Security	- per lump sum (LS)
Item P-102-2	Maintain Existing Barricade	- per lump sum (LS)
Item P-102-3	Barricade	- per lump sum (LS)
Item P-102-4	Taxiway Crossing 1	- per lump sum (LS)
Item P-102-5	Taxiway Crossing 2	- per lump sum (LS)
Item P-102-6	Taxiway Crossing 3	- per lump sum (LS)
Item P-102-7	Taxiway Crossing 4	- per lump sum (LS)

### **TESTING REQUIREMENTS**

None.

**END OF ITEM P-102** 

### ADDENDUM NO. 2 TO PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR

## PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 – PAVING, LIGHTING, AND NAVAIDS

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE, NORTH CAROLINA

TO: ALL PROSPECTIVE BIDDERS

DATE: JANUARY 6, 2017

This Addendum No. 2 forms a part of the Contract Documents and modifies the original Issued for Bid contract documents, plan drawings and specifications dated December 2016 as noted and included herein. <u>Bidder must acknowledge receipt of this ADDENDUM in the space provided on the Bid Form.</u> Failure to do so may subject the Bidder to disqualification.

### **GENERAL**

- 1. The deadline for bids remains Friday, January 27, 2017 at 2:00 PM Eastern Standard Time.
- 2. A pre-bid meeting was held on Thursday, December 15, 2016 at 10:30 AM at the Asheville Regional Airport. A summary of the meeting and copy of the sign-in sheet is included with this Addendum No. 2. Meeting minutes are incorporated as part of this Addendum and Contract Documents.
- 3. Deadline for questions and answers remains Friday, January 20, 2017, via email to eric.rysdon@rsandh.com and nick.loder@rsandh.com.
- 4. Bidders are reminded that all bid forms (Proposal Form 1 through 15) shall be complete in order for a bid to be considered responsive. <u>Specifically, it is emphasized that Proposal Form 12 Subcontractor List shall be fully completed, including all DBE and non-DBE subcontractors to be used during construction.</u>

#### MODIFICATIONS TO CONTRACT PLANS AND SPECIFICATIONS

#### **SPECIFCATIONS**

1. Addendum No. 2 modifies bid items and quantities. Remove Proposal Form 3: Bid Form, Page P-4 through P-76 and replace with the Enclosed Proposal Form 3: Bid Form, Page P-4 through P-76.

#### **PLANS**

- 1. Remove the note of EC-06 under the perimeter road "Approximate location of existing gravel or paved access road. (Limits not shown)". The access road is shown.
- 2. Revise "See Note 2" of EC-20 in the lower right hand corner of the sheet to be "See Note 3".
- Revise "See Note 2" in the lower left hand corner of the sheet to be "See Note 3".
- 4. G-02, G-03, G-04, and G-05 shall be revised per the latest proposal. These sheets are not to be resubmitted as part of Addendum 2, however, they will be finalized with final bid quantities as part of the released for construction documents.
- 5. Revise Note 3 of SP-21 to read as follows: "Contractor shall ensure Taxiway A/B1 or A1/B1 not be closed at the same time as connector Taxiway P/B2 or A3."
- 6. Replace EC-47 with the EC-47 of Addendum 2.
- 7. Replace EC-24 with the EC-24 of Addendum 2.
- 8. Replace EC-26 with the EC-26 of Addendum 2.
- 9. Replace EC-42 with the EC-42 of Addendum 2.
- 10. Replace EC-43 with the EC-43 of Addendum 2.
- 11. Replace EC-44 with the EC-44 of Addendum 2.
- 12. Replace EC-56 with the EC-56 of Addendum 2.
- 13. Replace EC-59 with the EC-59 of Addendum 2.
- 14. Replace EC-305 with the EC-305 of Addendum 2.

#### ANSWERS TO WRITTEN INQUIRIES RECEIVED

1. How will the bids be reviewed and awarded?

ANSWER: Bids will be reviewed and awarded based on the FAA General Provisions in the Project Specifications to the lowest responsive and responsible bidder.

See enclosed for outline of how the life cycle cost analysis (LCCA) methodology.

2. Who will verify when HydraCM or approved equal will be used and how will it be paid for?

ANSWER: HydraCM or approved equal is a seed/mulch mix that is typically used to stabilize steep slopes. Its properties are such that NCDEQ will approve an area as stabilized that HydraCM or approved equal has been applied as long as it has been appropriately applied per the requirements of the manufacturer. For BP-4, if the Contractor has not adequately stabilized areas around the site required to be stabilized in order to close out specific sediment and erosion control measures needed to be closed out for the commissioning of the runway, HyrdaCM will be required for use in order to obtain the stabilization. Cost of HydraCM is incidental to the cost of seeding and mulching and no additional payment will be issued to the contractor for its use. Use the HydraCM does not alleviate the contractor from meeting all permanent vegetation requirements.

3. What are the limits of the grouting for the grouted rip rap?

ANSWER: The grouting of the rip rap shall include all rip rap within the area indicated on the plans, from the existing outfalls to the downstream flared end section. The grout shall also extend up the slope, south and east of the rip rap, a minimum of 3' above the rip rap and around each flared end section a minimum of 1'.

4. What is the dilution rate for the P-608 Asphalt Surface Treatment?

ANSWER: The dilution rate for the P-608 Asphalt Surface Treatment shall be 1:1.

5. What are the limits of the slope and ditch repairs to take place on the airfield and when should this work take place?

ANSWER: The ditch along the western edge of the temporary runway safety area from the localizer shelter all the way south to the retaining wall shall be repaired accordingly to the plans and specifications. The slope repair shall include the slope along the northern and western slope adjacent to the localizer shelter. The final limits of the work shall be as directed by the Airport and AOR. This work shall be completed as part of the first order of work, Phase 1 of the Erosion and Sediment Control plans. The intent is this work is completed such that any areas disturbed can be easily vegetated prior to summer.

6. Can the cost and need of the taxiway crossing be clarified?

ANSWER: The project includes four taxiway crossing/closure areas and are numbered accordingly. All four existing crossings will be established and used until construction requires their removal. For the base bid work, only taxiway crossing/closure locations one and four will be utilized. If one or both add alternate(s) for the connector Taxiways B2 and B4 are awarded, then the appropriate proposed taxiway crossing will need to be established for use by the contractor. The proposal forms have been revised by this Addendum to include the taxiway crossings as needed for each bid award.

7. The existing area that was graded for the permanent runway has 4" of topsoil on it. How do we get paid to remove that? Are the contours shown as existing on the plans represent the 4" topsoil that was re-spread? We need to know in order to calculate the embankment. Thank you

ANSWER: Existing grades shown on the plans are "as-design" grades per previous projects. Existing ground elevations are presumed to include topsoil. Topsoil shall be paid for per T-905 Topsoiling specification.

8. Will additional rip rap be required at the bottom of the spill way for Sediment Basin D?

ANSWER: Rip rap shall be placed at the end of the concrete spill way of the basin once converted to a detention basin. Rip Rap shall be Class I, the width of the spillway, a minimum of 10' from fence.

9. How often is a revised schedule required to be submitted by the contractor?

ANSWER: A revised schedule shall be submitted to the Owner and AOR monthly. The contractor shall also submit a revised schedule at any point during construction that the schedule changes significantly enough to impact proposed work and scheduling with the Owner and AOR.

10. In item P-304 Cement Treated Base Course, could you clarify Note 1 under the table labeled Aggregate Gradation for CTB Material? It states that the "maximum nominal size of aggregate is 1 inch". The typical definition of "nominal maximum size" is the first screen in which some material may be retained. Does the note in P-304 mean that the CTB material must be 100% passing the 1" screen, or does it mean that some material may be retained on the 1"?

ANSWER: The nominal maximum size is the designated or theoretical maximum size that may vary from the actual. The nominal maximum size should be such that it passes the 1" screen.

11. In Section P-609 Bituminous Surface Treatments, the three aggregate types that are specified are a #6, #7, and #8 stone. These are not commonly made aggregate products in the state of North Carolina. Would you consider changing the gradation requirements to more commonly produced products such as #57, #67, and #78m which are readily available in the Asheville market? These are the same products that NCDOT uses for surface treatment applications.

**ANSWER: Yes** 

12. What is the width of the shoremax or approved equal?

ANSWER: Shoremax shall be a minimum of 3X Pipe Diameter or 15' wide. The location and width shall be determined in the field by Engineer.

13. What is the width of the shoremax or approved equal?

ANSWER: Shoremax shall be a minimum of 3X Pipe Diameter or 15' wide. The location and width shall be determined in the field by Engineer.

**END OF ADDENDUM NO. 2** 

#### **PRE-BID MEETING NOTES**



Date: December 15, 2016

Project: Permanent Runway 17-35 Construction

Bid Package 4 - Paving, Lighting, and NAVAIDs

Meeting Place: AVL Department of Public Safety

Participants: See attached sign-in sheet

#### The following is a summary of this meeting:

#### 1. Introduction

- a. Michael Reisman (GARAA) opened with an introduction of the Airport and personnel.
- b. Eric Rysdon (RS&H) provided an overview of the work scope of Bid Package 4.
  - Project scope includes paving, drainage, pavement marking, grooving, airfield electrical, lighting, signage, and NAVAIDs installation for Permanent Runway 17-35 and associated connector taxiways.
  - ii. NAVAIDs installation includes two instrument landing system (ILS) glide slope facilities and installation of two precision approach path indicator (PAPI) systems.

### 2. Project Description & Scope of Work

- a. Earthwork 134,400 CY
- b. Drainage 2.700 LF of Pipe. 26 Structures
- c. Pavement Removal 67,100 SY
- d. Pavement
  - i. Asphalt (Runway and Taxiways)
    - 1. P-209 75,800 CY
    - 2. P-403 64,200 Tons
    - 3. P-401 65,000 Tons
  - ii. Concrete (Runway Base Bid Option)
    - 1. P-304 137,000 SY
    - 2. P-501 133,000 SY
- e. Grooving 122,700 SY
- f. Pavement Marking 370,000 SF
- g. Erosion & Sediment Control
- h. Airfield lights 750
- i. Airfield signs 92 new and relocated
- j. NAVAIDs Installation New Runway 17 GS and relocate Runway 35 GS
- k. Division of Work by Volumes 1, 2, and 3
  - i. Volume 1: Overall project requirements, including safety, phasing, security, etc.
  - ii. Volume 2: All work focused on commissioning of Runway 17-35.
  - iii. Volume 3: NAVAIDs, grading, erosion control, and drainage work to occur after Runway 17-35 commissioning.



#### 3. Bid Alternates

- a. Contractors shall submit the following Base Bid & Alternative Bids
  - i. One or both Volume 2 Base Bids may be submitted:
    - 1. Volume 2 Base Bid Asphalt Runway w/ Quarts HIRL's
    - 2. Volume 2 Base Bid Concrete Runway w/ Quarts HIRL's
- b. Volume 3 Base Bid Taxiway B Conversion and NAVAIDS
- c. Additive/Deduct Alternative 1 LED HIRL's
- d. Additive Alternative 2 Taxiway A Shoulders
- e. Additive Alternative 3 Taxiway B2
- f. Additive Alternative 4 Taxiway B4

#### 4. Bid Award

- a. Low Bid is within GARAA budget
- b. If both concrete and asphalt low bids are within the GARAA budget, then Life Cycle Cost Analysis shall be used to determine bid award for asphalt vs. concrete Volume 2 base bid.

#### 5. Work Being Performed by Others

a. Correction: Bid Package 3 contractor (Precision Approach) will be on site during Bid Package 4 to complete remaining NAVAIDs work on the Runway 17 and 35 medium intensity approach lighting system with runway alignment indicator lights (MALSR).

#### 6. Project Phasing & Schedule

- a. 470 Calendar Days to Complete
  - i. 276 Calendar Days to Complete Volume 2 Work (Permanent Runway 17-35 construction). Includes item tied to FAA Flight Check schedule:
    - 1. Critical Milestone for flight check: September 1, 2017
    - 2. Critical Milestone for runway opening: December 7, 2017
  - ii. 194 Calendar Days to Complete Volume 3 Work (Taxiway B Conversion and NAVAIDS installation). Includes items tied to FAA Flight Check schedule:
    - 1. Critical Milestone for Runway 17 Glide Slope: December 15, 2017
    - 2. Critical Milestone for Runway 35 Glide Slope: April 12. 2018
- b. Anticipated construction notice-to-proceed (NTP): March 6, 2017
- c. Phasing Plan Overview
  - Contractor will be able to work in multiple phases at same time, provided certain connector taxiways are kept in service at all times. Taxiways A/B1 and P/B2 cannot be closed simultaneously. Taxiways C/B5 and E/B4 cannot be closed simultaneously.
- d. Night Work
  - i. Work within the runway safety area will be accomplished between the hours of 12:15 AM and 5:30 AM while the runway is closed.
  - ii. Haul Routes
  - iii. Work within the taxiway object free area will be accomplished while the associated taxiway is closed or during a nighttime runway closure.
  - iv. Haul Route 2 May be used at night while the runway is closed or with prior approval from the airport during daytime hours weather permitting.
- e. Liquidated Damages
  - i. Project Completion: \$2,000 per calendar day
  - ii. Project Phases: \$2,000 per calendar day
  - iii. Night Closures: \$1,000 per 30 minute increment (or portion thereof)
  - iv. Notice of Violation: \$2,000 per day site is under NOV by NCDEQ
  - v. Critical Milestones: \$2,000 per day, as detailed in the general provisions Section 80.



#### 7. Staging, Access & Parking

- a. Four staging areas
  - i. Overview of existing trailer locations and preferred location of batch plant
- b. Four access points
  - i. Borrow pit is outside of the airport security fence. Gate guard is required on this access point at all times when open.

#### 8. Contractor Quality Control (QC) Testing

- a. The contractor is responsible for QC testing to ensure the work meets the project requirements prior to quality assurance (QA) testing. The Owner/Construction Manager will be responsible for QA testing.
- b. Owner/Construction Manager will be using S&ME for QA testing.

#### 9. Airport Safety & Security

- a. Badging Requirements
  - i. There is a badging requirement for this project. Key personnel (superintendents, supervisors, and contractor crossing guards) will be required to obtain and maintain airport-issued badges. Contractor will be responsible for issuing contractor-issued identification badges to ALL other Contractor personnel on the site, (including all subcontractor personnel). The contractor-issued badge design shall be reviewed and approved by the Airport. A list of individuals allowed on the project site shall be maintained and updates provided to the airport weekly.
  - ii. Airport badging involves training and a computer-based test. A ten-year background check will be performed on each badge applicant. Cost for each airport badge: \$70
- b. Contractor Taxiway Crossing Guards
  - Contractor crossing guards shall be provided by the Contractor at all construction/taxiway crossings denoted in the plans. These personnel are responsible for the control of vehicle and equipment movement across active taxiways. Crossing guards shall meet the requirements specified in the Special Conditions of Volume 1 – Contract and Bid Documents.
    - 1. Crossing guards will be screened and trained by the Airport. Training includes radio communications with air traffic control, situational awareness, separation of vehicles and aircraft, and foreign object debris (FOD) control.
  - ii. Crossing guards not performing adequately in training or duties may be terminated by Airport at any time.
- c. Runway Safety Areas, Taxiway Object Free Area, and NAVAIDs Critical Areas
  - i. FAA Advisory Circular AC/150-5370-2 (latest version) Operational Safety on Airports During Construction provides guidelines regarding operational safety on airports during construction. This document is incorporated as part of the construction contract, and requires review by the Contractor. There is a contractorrequired document within this advisory circular.
  - ii. Work may be performed within the runway safety area (RSA) at night only, while the runway is closed. Work within the taxiway object free area (TOFA) shall occur at night only while the runway is closed, or during a taxiway closure. Contractor shall coordinate all night work with Airport Operations to ensure Airport staff has personnel available. See contract plan requirements for more information.
  - iii. A visual barrier shall be placed to mark the edge of the runway safety area, taxiway object free area, and NAVAID critical areas. Any employees who enter the runway safety area, taxiway object free area, or NAVAID critical areas without authorization are subject to fines and/or dismissal from the project. The visual barrier shall be maintained at all times (7 days per week, 24 hours per day).



#### 10. Bid Date/Opening

- a. Bids are Due **January 27**, **2017** @ **2:00 PM local time** in sealed envelopes at the GARAA Board Room in the terminal building. See Instructions to Bidders (Volume 1 of the Specifications) for more information. Bids will be publicly read at this time.
- b. Contract award will be made within 90 calendar days of bid opening, however it is expected to award prior to the 90 calendar days, in early March.

#### 11. Questions During Bid

- a. All questions and inquiries should be directed to the Program Manager, Eric Rysdon, RS&H, eric.rysdon@rsandh.com and Nick Loder, RS&H, nick.loder@rsandh.com.
- b. All questions must be submitted in writing / email.
- c. Last day for questions is Friday, January 20, 2017 at 5:00 PM EST.

#### 12. Addendums

- a. Bidders must acknowledge receipt of all addendums on the bid form
- b. Addendums will be distributed to all those on the plan holders list and will be posted on the Airport's website: http://flyavl.com/pages/about-the-airport/doing-business-with-avl.php

#### 13. <u>Bid Submittal Requirements</u>

- a. Completed Proposal Forms 1-15, ALL FORMS MUST BE COMPLETED.
  - i. Ensure the subcontractor forms are fully completed, with each intended subcontractor clearly stated.
- b. Unit prices and totals entered for ALL bid items
- c. **Total bid amount shall include taxes.** Provide the sum of taxes that is included in the total bid schedule amount in the space marked "Sum of Taxes Included in Bid Schedule" on the bid form.

#### 14. Bond Requirements

- a. Bid Bond bid bond or certified check totaling 5% of contract amount
- b. Performance Bond 100% of the total contract amount
- c. Payment Bond 100% of the total contract amount

#### 15. Insurance Requirements

- a. Contractor is required to provide insurance of the types and limits as specified in the Contract Documents Special Conditions Section 2.
- b. Include Airport (GARAA), Program Manager (RS&H), and Engineer (AVCON, Inc.) as additional insured

#### 16. Prevailing Wage Rates

- a. This is a prevailing wage project falling under the Davis Bacon Act with Contractor and Subcontractor compliance and reporting requirements
- b. Davis Bacon wage determinations are included with the bid documents

#### 17. DBE Participation Goal

- a. DBE Participation Goal: 13.7%
- b. If unable to meet the DBE goal, bidder shall provide good faith effort data as required by the bid documents.



#### 18. Questions Recieved During the Pre-Bid Meeting

1. Question: Will there be anything included in the life cycle cost analysis to dictate how the concrete or asphalt option will be chosen?

Answer: Included in this addendum is more information on the life cycle cost analysis methodology.

2. Question: Will CAD files be provided for this project?

Answer: No. CAD files will be provided to the successful bidder prior to construction.

3. Question: Could P-209 with a CBR of 100 be substituted for the P-304 base course?

Answer: This substitution is not provided for concrete pavement sections in the latest FAA advisory circular regarding pavement design. However, this is comment noted and will be further investigated.

4. Question: Will the project budget be shared with the bidders?

Answer: The project budget will not be shared with the bidders prior to bid.

5. Question: May the bid schedule form be typed rather than hand-written?

Answer: Yes, provided the bid schedule form is properly filled out with prices depicted in both numeric and written form.

6. Question: The bid tab appears to be missing certain pay items in the concrete base bid option, such as mobilization. Will this be re-released?

Answer: Yes, this addendum revises the bid tabulation proposal form. Please see attached.

7. Question: Will indexing be allowed on the asphalt?

Answer: No.

8. Question: Does the Airport have an approved DBE list?

Answer: The DBE list is based on the North Carolina Department of Transportation (NCDOT). All DBE's used on the project must be state-certified. Please note that businesses certified as HUD or small-business do not necessarily qualify as a DBE.

9. Question: Please clarify how the bid date and award date will be determined, as it relates to the 90-day period referenced in the specifications. If the award date is significantly delayed, will we still be required to meet the hard dates? What about submittals required 30-days prior to notice-to-proceed?

Answer: The 90-day window is a standard FAA requirement for holding construction bids. This project will be awarded as soon as possible, with official award expected at the GARAA board meeting on 2/17/2017. The obligation to meet hard dates remain part of the contract, however if the award is significantly delayed and the notice to proceed (NTP) is extended past the anticipated NTP date of March 5, 2017, considerations will be made. Contract time will NOT be extended as a result of an issue that is the fault of the contractor. It is imperative that each bidder provides a complete, correct, and responsive bid proposal to ensure no delay in award of the contract.

10. Question: What percentage is the prime contractor required to perform in-house?





Answer: Per General Provisions Section 80, Paragraph 80-01, the prime contractor shall perform an amount of work equal to at least 40 percent of the total contract cost.

Please submit further questions in writing prior to the deadline of January 20, 2017 at 5:00 pm Eastern Standard Time. All questions received will be included with responses in upcoming addenda.

Site visit followed the meeting, concluding at approximately 12:00 pm.

RS&H Architects-Engineers-Planners, Inc. 1520 South Blvd, Suite 200 Charlotte, NC 28203 PH 704.940.4783 By: Nick Loder, RS&H



Project Name:

Permanent Runway 17-35 Construction Bid Package - 4 Paving, Lighting & NAVAIDs

Meeting Title:

Pre-Bid Meeting

Date:

Name	Company	Phone Number	Email	Subcontractor?	Prime?
RITA YENZ	GARAA	828-654-3252	ryanzo flyavl.com	(Alacanagement) (Pari	Secretaria de la constitución de
Mike Reisman	GARAA	828-654-3253	mreisman oflyauliam	Telephotos Sava sakani filologici e ir ma	Market and a second
Kevan Smith	GARAA	828-684-2726	Ksmith@flyavl.com	Language Hall Control of the Control	
Nick Locler	RSAH		Pationer Orsandh.com	Company of the Company	- ASTIGUIÇÃO - CENTRA I I I I
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James Moose	AVCON		Imase @auconinc.com	The second secon	- manager of
Mike Franklin	Valcan Materials	(328)551-0088	funklin merme mail, com	Supplier	
Willie Breedile	ValeAN MAZEK	825329-435	Dreadlovewowne mail	Supplier	
Robert Bowick	Millby Paving	814-521-9255	rbowicko hiwaypaving.	am	
MARC MOTORN	EUTAN 8	662-813-388	2 MMETCHELL REUTAWO	,s —	
JEFF DAVIS	APAC-ATLANTIC	865-546-3173	J Davispharrisnec.		-
FEBER HILL	HAMILSON CONTR. DIV ST APPRATION	865-546-3173	Vohille harrisance conte		LAND
Eric Ogren	Harrison Const.	828-665-1180		Şiq.	i/
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JOE RICHARDSON	,	C 843-460 · 1216	JRICHARDSONE ATTANTIC	and the second s	
LEE JUNES	SUMMERS-THYLUR		lee & summerstay lov.com	V	
MATT FOGGERAN	Ecs		mfogleman@essimitea		
GARY Thomas	Anthony Allega Cement Contacts		gthomaseallesa.com		1
RICK BRISSEY	Lane Construction	704-301-8004	TRORISIEY @ LANEWNSTRACTED	η	
Josh Parker	Cherokee Enterprise	001/	Sparkera che-sheeenter	1.38.10m	L
Michele Schinda	of MRS Airfield	609-259-	Shelly @mrselectrical sup	DOE Suplier	£.
CHRIS BYERS			chris. byers, @ royersgroupice		L
Todd Tamas	ECS	1	+tamas goes limited an		
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Project Name:

Permanent Runway 17-35 Construction Bid Package - 4 Paving, Lighting & NAVAIDs

Meeting Title:

Pre-Bid Meeting

Date:

Name	Company	Phone Number	Email	Subcontractor?	Prime?
LINDSAY CONVIL	Site Prep	704-262-8252	Carrollesite-prepion	X	
5.63. Webb	Doce Ban Agrand	706-341-227	9 Shire Lh @ precision aproces	dary X	
Jim Zerby	HYPOWER NO	e. 75497893a	> TERRENEHIPOWE	RWC. com	
Davy Riterour	Codus Pecks	9/9-357-1667	Referburg. codar partisto	Sme. 1. Com	Y
STAVE CHAPLETON	FROENLING + POBERS	on 764-271-	SCHAPLION @ FANDR, COM	X PESTING A	mit
John Coon	GARAA	828209-5402	Joon @ Pyaulian	Common Print Print Start to A reco	Maryana.
Bruce Blackwell	GARMA	828 684 277Ce	bblackwell@flyad	aw	Photographic
JAMILS MEDA	AUCOR	7040			
RON mundy	GARAA	828684-2776	rmundy ofly aut. on	Name and State of Sta	-
MARK STEPP	GLF	828 575 6188	NSTEPPE GLFUSA.com	*	X
DAVID MANT	6APAA		I drant 2 JO Tyque. wn		unasida SAC-ID-Prings
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Project Name:

Permanent Runway 17-35 Construction Bid Package - 4 Paving, Lighting & NAVAIDs

Meeting Title:

Pre-Bid Meeting

Date:

Name	Company	Phone Number	Email	Subcontractor?	Prime?
ACTHUR TARELLARY	ALEGA CONSTRUC		atarellois@allepa.ca		X
Matt Brugg	Southerst Site Service	706-713-6460	Mbray & Southeast sixeservices	,con	
Jesse Annis			+ jwannis@southeastsite	services.com	
EdBENWETT	KOBO UTILITY	508-888-2265	ReDecca OKOBOTHITY Con	ELECTRICAL SUBCONTRACTOR	
AShly Schimonework	MRS Arrield & Supple	609-259-6420	mfo o missucincasupilies	Con	
PAP CABBAGE	Paroes GROUP	365-621-4750	brad. calobage Grogersgroupi	1c.an	X
Wike Van Wormer	Hi-Lite Airfreid Sus	315-767-1270	mike@hi-life.com	×	
YIKE BOYLE	Mc Careny Ingravana	× 864-918-61	6 mboyleemees thyings	wnst.an X	X
STALEY GREEN	PRECISION APPROALI	706-485-7201	Stateenoprecisionapprono	hora X	
JESSÉ BOGUÉ	CEDAR PERKS	919-710-5734	sbegue cedarpeaksagma	11.000	X
GREG DEAN	CCPA	919-656-5930	WENDERWENDITE CO	M ASSOCIATI	TION
Jantesse Middleton	FAA	678-757-4558	Confess Middleten @ FAM. gov		
ESE JACOUS	BLE	828-277-010:	jesse jeabene bleamen	Χ	
Tol Colemani	trangle bealing		jeolemon of smale gration		X
ANDREW KANBER	GLF CONS.		2 whamberga gitter con		X
Mark Goodgare	AUCON	Thone Ad			
Janis Devito	RSH				Marine
David Mantz	GARRA			· ·	poores on the same
Carl marthews	FAA				
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			,		



Project Name:

Permanent Runway 17-35 Construction Bid Package - 4 Paving, Lighting & NAVAIDs

Meeting Title:

Pre-Bid Meeting

Date:

Name	Company	Phone Number	Email	Subcontractor?	Prime?
KLAY CAMDEN	KIEWIT INFRAMENTURE SOUTH CD	770-487-2300	KLAY. CAMDEN OKZEWZT.COM		X
DAVID VOGT	RSEH	904-600-4799	DANIS VOGT CRSANDHO CON		
Panay Scent	PECCUSIPUCTUM	,	4 RSCUTTE RCCUNST.M.		X
JOHN POWERS	RCCONSTRUCTION	Lauz-453-2424	JHPUUDZSC TRECONST.	DET.	K
Dawny Endy	Zuchey Const.	704-309-393	Down Eup @ znehog	ospern	and the same of th
VETT BAILIST	Prasouppress	706 485 201	1 T ber/ edipressage, 0	es V	
Tell Green		706 485 7201	isgreen a precisionapproce	hors Gled.	A4
Keith Muelle	Eaton	5136022382	Keithamerellaree	fon. Our no	No
Larry Pierce	Cedar Peaks	9196913616	Ogmails com		X
Stephanie Ambrosa	BLE		Stephanie. ambiorselblecoip.co		X
Julie Kerdael	NHM	828-777-038	2 jKendael@nhincox	structors.com	~
James Kice	1 / /		James, Rice 6 FAA. 6		
Jonathan James	Ferracon	864-292-2901	Jonathan James Otervaion.com		
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BIDDER:	Date:

- 1. Price: Includes all labor, materials, and equipment, etc. required to complete project.
- 2. In submitting this bid, I certify:
  - a. Items bid are in exact accordance with specifications, unless noted in bid.
  - b. Prices in this bid have been arrived at independently, without consultation or agreement with any competitor for purpose of restricting competition.
- 3. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal, which includes initials on each bid form sheet, shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Airport: Asheville Regional Airport

Project: Bid Package 4

Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item		
VOLUME 2 BASE BID - ASPHALT RUNWAY WITH QUARTZ HIRL							
	MOBILIZATION						
GP-105-2.1	atdollars	LS	1	\$	\$		
	andcents						
	REMOVAL OF DRAINAGE STRUCTURES (SIZE AND						
S-140-4.1	MATERIAL VARIES)	EA	14	\$	¢		
3-140-4.1	atdollars	LA	14	Ψ	Ψ		
	andcents						
	REMOVAL OF DRAINAGE PIPES (SIZE AND						
S-140-4.2	MATERIAL VARIES)	LF	1,683	\$	\$		
	atdollars and cents				· <del></del>		
-	andcents				_		
	REMOVAL OF EXISTING CONCRETE LINED DITCH						
S-140-4.3	atdollars	LF	200	\$	\$		
	andcents						
	AIRFIELD PAVEMENT REMOVAL						
P-101-5.1	atdollars	SY	67.100	\$	\$		
	andcents		21,122	·	·		
HAUL ROAD PAVEMENT REMOVAL							
P-101-5.2	at dollars	SY	12,600	\$	\$		
01 0.2	and cents	٥.	,500	<del>*</del>	<b>-</b>		
anuocno							

Airport: Project: Asheville Regional Airport Bid Package 4

	Estimated						
Item No.	Item Description and Unit Price	e in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item	
P-101-5.3	PAVEMENT MILLING (4.75") atand	dollars cents	SY	1,800	\$	\$	
P-101-5.4	PAVEMENT MILLING (2") atand	dollars cents	SY	4,200	\$	\$	
P-101-5.5	CRACK REPAIR atand		LF	1,000	\$	\$	
P-102-1	SAFETY AND SECURITY atand	dollars cents	LS	1	\$	\$	
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars cents	EA	265	\$	\$	
P-102-3	BARRICADE at and	dollars cents	EA	45	\$	\$	
P-102-4	TAXIWAY CROSSING 1 at and	dollars cents	LS	1	\$	\$	
P-102-5	TAXIWAY CROSSING 2 at and	dollars cents	LS	1	\$	\$	
P-102-6	TAXIWAY CROSSING 3 at and	dollars cents	LS	1	\$	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

	Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item		
P-102-7	TAXIWAY CROSSING 4  atdollars andcents	LS	1	\$	\$		
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdollars andcents	LS	1	\$	\$		
P-152-4.1	EMBANKMENT IN PLACE  atdollars andcents	CY	134,400	\$	\$		
P-152-4.2	UNSUITABLE EXCAVATION  atdollars andcents	CY	5,400	\$	\$		
P-152-4.3	SLOPE REPAIR  atdollars andcents	SY	14,500	\$	\$		
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$		
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$		
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION at dollars and cents	EA	46	\$	\$		
P-156-5.1-3	COMPOST SOCK INLET PROTECTION atdollars andcents	EA	16	\$	\$		

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION at	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK atdollars andcents	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE atdollars andcents	LF	18,900	\$	\$
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE at dollars and cents	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars  andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH at	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B at dollars and cents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP  atdollars andcents	LS	1	\$	\$
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" at dollars and cents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" at dollars and cents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" at dollars and cents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" at dollars and cents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M"  atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" at dollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE at dollars andcents	CY	75,800	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE at dollars and cents	CY	400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-401-8.1-1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) at	TN	26,400	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) at	TN	38,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	64,200	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	86,600	\$	\$
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	63,300	\$	\$
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT at	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA at	SF	124,400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	13,000	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item	
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$	
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$	
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$	
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$	
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$	
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$	
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$	
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$	
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	639	\$	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET  atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY at	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,900	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES at	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	377	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24" X24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE atdollars and cents	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM  MODIFICATIONS:  atdollars  andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

-			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	5,885	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	26,300	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	880	\$	\$
L-110-4	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	900	\$	\$
L-110-5	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	1,600	\$	\$
L-110-6	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	400	\$	\$
L-110-7	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,500	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	44,385	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,340	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
4	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-10	DUCT	LF	4 445	Φ	r.
L-110-10 a	atdollars	LF	1,115	Ф	Φ
_	andcents				
6	WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT	LF	230	\$	\$
L-110-11	atdollars	LF	230	Φ	Φ
	andcents				
1	10 WAY 2" SCHEDULE 40 PVC CONCRETE				
L-110-12 E	ENCASED DUCT	LF	75	\$	\$
L-110-12 a	atdollars	LI	75	Ψ	Ψ
а	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED				
L-110-13	DUCT	LF	180	\$	\$
a	atdollars	LF			Ψ
а	andcents				
	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED				
	DUCT	LF	600	\$	\$
a	atdollars			Ψ	Ψ
	andcents				
	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED				
I -110-15	DUCT	LF	250	\$	\$
a	atdollars		200		<b>4</b>
a	andcents				
1	1 WAY 4" SPLIT DUCT CONCRETE ENCASED				
	atdollars	LF	400	\$	\$
	and cents			·	·
	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL				
L-111-1	VAULT at dollars	LS	1	\$	\$
				<del></del>	<del></del>
_	andcents PHOTOMETRIC TESTING OF RUNWAY AND				
1 111 ')	TAXIWAY LIGHTING AND SIGNAGE	LS	1	\$	\$
	atdollars		-		
a	andcents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) atdollars andcents	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) atdollars andcents	EA	80	\$	\$
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW ASPHALT PAVEMENT (N) atdollars andcents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars and cents	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE at	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) at	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$
L-125-44	L-867D JUNCTION CAN atdollars andcents	EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN atdollars andcents	EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	24	\$	\$
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE atdollars andcents	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$

OUN	T OF VOLUME 2 BASE BID - ASPHALT RUNWAY WITH QUARTZ HIRL (IN WORDS)
	Dollars
	Cents
	Total Volume 2 Base Bid - Asphalt Runway with Quartz HIRL Amount: \$
	Sum of Taxes Included in Base Bid - Asphalt Runway with Quartz HIRL: \$

Airport: Project: Asheville Regional Airport Bid Package 4

	Estimated Estimated									
Item No.	Item Description and Unit Price	in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL										
	MODILIZATION				<u> </u>					
GP-105-2.1	MOBILIZATION at	dollars	LS	1	\$	\$				
GF-103-2.1	and		LO	'	Ψ	Ψ				
	REMOVAL OF DRAINAGE STRUCTUR									
	MATERIAL VARIES)	KES (SIZE AIND								
S-140-4.1	at	dollars	EA	14	\$	\$				
	and	_cents								
	REMOVAL OF DRAINAGE PIPES (SIZ	E AND								
S-140-4.2	MATERIAL VARIES) at		LF	1,683	\$	\$				
<b>5</b>	at			.,000	<b>-</b>	<b>—</b>				
	and	_cents								
	REMOVAL OF EXISTING CONCRETE									
S-140-4.3	at		LF	200	\$	\$				
	and	_cents								
	AIRFIELD PAVEMENT REMOVAL									
P-101-5.1	at	dollars	SY	67,100	\$	\$				
	and	_cents								
	HAUL ROAD PAVEMENT REMOVAL									
P-101-5.2	at	dollars	SY	12,600	\$	\$				
	and	_cents		,	·	<del></del>				
	DAY/ENGENT MULTING (4.75%)									
P-101-5.3	PAVEMENT MILLING (4.75")	dollars	SY	1,800	\$	\$				
F-101-3.3	atand	dollars cents	31	1,800	Ψ	Ψ				
	PAVEMENT MILLING (2")									
P-101-5.4	at		SY	4,200	\$	\$				
	and	_cents								
CRACK REPAIR										
P-101-5.5	at	dollars	LF	1,000	\$	\$				
	and	_cents								

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated		
Item No.	Item Description and Unit Price i	in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-102-1	SAFETY AND SECURITY at and	dollars _cents	LS	1	\$	\$
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars _cents	EA	265	\$	\$
P-102-3	BARRICADE atand	dollars _cents	EA	45	\$	\$
P-102-4	TAXIWAY CROSSING 1 atand	dollars _cents	LS	1	\$	\$
P-102-5	TAXIWAY CROSSING 2 atand	dollars cents	LS	1	\$	\$
P-102-6	TAXIWAY CROSSING 3 atand	dollars _cents	LS	1	\$	\$
P-102-7	TAXIWAY CROSSING 4 atand	dollars _cents	LS	1	\$	\$
P-104-5.1	PROJECT SURVEY AND STAKEOUT atand	dollars _cents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atand	dollars _cents	CY	129,200	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atand	dollars _cents	CY	5,200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-152-4.3	SLOPE REPAIR atdollars andcents	SY	14,500	\$	\$
P-152-4.4	DITCH REPAIR atdollars andcents	LF	8,200	\$	\$
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	46	\$	\$
P-156-5.1-3	COMPOST SOCK INLET PROTECTION atdollars andcents	EA	16	\$	\$
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK  atdollars andcents	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE atdollars andcents	LF	18,900	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE atdollars andcents	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH at	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP  atdollars andcents	LS	1	\$	\$
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" at dollars and cents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M"  atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	СҮ	33,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE at	СҮ	400	\$	\$
P-304-8.1	CEMENT TREATED BASE COURSE atdollars andcents	SY	137,000	\$	\$
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP)  at	TN	9,500	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP)  at	TN	21,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	20,800	\$	\$
P-501.1	PORTLAND CEMENT CONCRETE (15") atdollars andcents	SY	133,000	\$	\$
P-501.2	PORTLAND CEMENT CONCRETE (15") - REINFORCED atdollars and cents	SY	333	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	43,400	\$	\$
P-603-5.1	BITUMINOUS TACK COAT  atdollars andcents	GAL	20,900	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT atdollars andcents	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars and cents	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	34,500	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		T
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III at	LF	639	\$	\$
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY at	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,000	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT at dollars and cents	EA	377	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT at dollars and cents	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT at	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM MODIFICATIONS: atdollars andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT atdollars andcents	LF	5,885	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	26,300	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	2 WAY 2" SCHEDULE 40 PVC DIRECT				
L-110-3	EARTHBURIED DUCT	LF	880	Φ	Φ.
L-110-3	atdollars	LF	000	Φ	Φ
	andcents				
	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-4	BURIED DUCT	LF	900	\$	\$
L-110-4	atdollars	LF	900	Φ	Φ
	andcents				
	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-5	BURIED DUCT	LF	1.600	\$	\$
L-110-5	atdollars	LI	1,000	Ψ	Ψ
	andcents				
	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-6	BURIED DUCT	LF	400	\$	\$
L-110-0	atdollars	Li			Ψ
	andcents				
	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED	LF	1,500		
L-110-7	CONDUIT			\$	\$
L 110 7	atdollars			Ψ	Ψ
	andcents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED			\$	
L-110-8	DUCT	LF	44,385		\$
2 110 0	atdollars		11,000	Ψ	<b>V</b>
	andcents				
	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-9	DUCT	LF	1,340	\$	\$
	atdollars	<del>_</del> -	1,010	·	<del></del>
	andcents				
	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-10	DUCT	LF	1,115	\$	\$
	atdollars		, -		*
	andcents				
	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-11	DUCT	LF	230	\$	\$
	atdollars				
	andcents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-12	10 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	75	\$	\$
L-110-13	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	180	\$	\$
L-110-14	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	600	\$	\$
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	\$
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	80	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE atdollars andcents	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE at	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE atdollars andcents	EA	1	\$	\$
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

\ <u></u>			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN at	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 at	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) at	EA	7	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED at	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) at	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-44	L-867D JUNCTION CAN at	rs EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN at	rs EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollar andcents	rs EA	24	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	2	\$	\$
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE atdollars andcents	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars and cents	LS	1	\$	\$

TOTAL AMOUNT	T OF VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL (IN WORDS)					
	Dollars					
	Cents					
	Total Volume 2 Base Bid - Concrete Runway with Quartz HIRL Amount: \$					
	Sum of Taxes Included in Base Bid - Concrete Runway with Quartz HIRL: \$					

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	VOLUME 2	ADD/DEDUC	T ALTERNATE	1 - LED HIRL	
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	(3)	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	(3)	\$	\$
L-125-6	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR, LED (N) at	EA	3	\$	\$
L-125-7	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	3	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	(33)	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	(41)	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) atdollars andcents	EA	(16)	\$	\$
L-125-37	L-862(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR, LED (N) atdollars andcents	EA	33	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	41	\$	\$
L-125-39	L-862E(L) RUNWAY THRESHOLD LIGHT - GREEN/RED, LED (N) atdollars andcents	EA	16	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	2	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	(2)	\$	\$
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE/DEDUCT ALTERNATE 1	- LED HIR	L (IN WORDS	)	
			 Dollars		
			Cents		
	Total Bid Schedule Amount - Additi	ive/Deduct	Alternate 1: \$	S	
	Sum of Taxes I	ncluded in	Alternate 1: \$	S	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
	<b>VOLUME 2 ADDITIVE ALTERNATE 2 - TAXIWAY A SHOULDERS</b>								
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	1,000	\$	\$				
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	7	\$	\$				
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	2,340	\$	\$				
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	5,200	\$	\$				
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	5,370	\$	\$				
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	9,300	\$	\$				
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$				
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$				
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	17,400	\$	\$				

Airport: Asheville Regional Airport

Project: Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
	SEEDING	OTIL	Quantity		70.07.11.100.11.7.11.100.11.
T-901-5.1	at dollars	AC	5	\$	\$
	andcents	7.0	ŭ	<b>V</b>	<b>*</b>
	SODDING				
T-904-5.1	atdollars	SY	5,000	\$	\$
	andcents				
	MULCHING				
T-908-5.1	atdollars	AC	5	\$	\$
	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH		(11,400)		
L-110-2	BURIED DUCT atdollars	LF		\$	\$
	and cents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-8	DUCT	LF	11,400	\$	\$
L-110-0	atdollars	LF		Ψ	Ψ
	andcents L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
	EDGE LIGHT - IN ASPHALT SHOULDER (N)			\$	
L-125-29	atdollars	EA	146		\$
	andcents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-30	EDGE LIGHT - IN TURF (T) atdollars	EA	(146)	\$	\$
	and cents				
TOTAL AMOU		AV A CUOI	II DEDC (INL)A	(ODDC)	
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 2 - TAXIWA	AT A SHOU	JLDEK2 (IN W	IOKD9)	
			Dollars		
			Cents		
	Total Bid Schedule Amoun	t - Additive	Alternate 2:	\$	
	Sum of Taxes	ncluded in	Alternate 2:	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item		
	VOLUME	2 ADDITIVE A	ALTERNATE 3 -	TAXIWAY B2			
P-102	TAXIWAY CROSSING 3 at	LS	1	\$	\$		
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	100	\$	\$		
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	1,900	\$	\$		
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) at	TN	600	\$	\$		
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) at	TN	1,000	\$	\$		
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	1,500	\$	\$		
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	2,200	\$	\$		
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	1,500	\$	\$		

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars and cents	SF	4,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,890	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	25	\$	\$
L-108	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE atdollars and cents	EA	4	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated								
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT at	EA	100	\$	\$			
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	625	\$	\$			
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$			
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,300	\$	\$			
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at	LF	210	\$	\$			
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED at	LF	275	\$	\$			
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	1	\$	\$			
L-125-7	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) at	EA	1	\$	\$			
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	1	\$	\$			

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	2	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	3	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	2	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	(5)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	1	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) at	EA	6	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	1	\$	\$
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	(1)	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	1	\$	\$				
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) at	EA	(1)	\$	\$				
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$				
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$				
L-125	L-867B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) at	EA	3	\$	\$				
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) at	EA	1	\$	\$				
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$				
TOTAL AMOU	TOTAL AMOUNT OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXIWAY B2 (IN WORDS)								
			 Dollars						
			Cents						
				<b>5</b>					
Sum of Taxes Included in Alternate 3: \$									

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price	oo in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item				
item No.	item Description and Onit Fit			· · · · ·		Total Amount Fer item				
VOLUME 2 ADDITIVE ALTERNATE 4 - TAXIWAY B4										
	TAXIWAY CROSSING 2									
P-102	at	dollars	LS	1	\$	\$				
	and	cents								
	EMBANKMENT IN PLACE									
P-152-4.1	at		CY	100	\$	\$				
	and	cents								
	CRUSHED AGGREGATE BASE CO	URSE								
P-209-5.1	at		CY	1,900	\$	\$				
	and									
	BITUMINOUS ASPHALT PAVEMEN	T (SURFACE				_				
P-401-8.1.1	WITHOUT RAP)		TN	600	\$	\$				
1 401 0.1.1	at	dollars	111		Ψ	Ψ				
	andBITUMINOUS ASPHALT PAVEMEN	cents								
	\/\ITH PAD\	•								
P-401-8.1.2	at	dollars	TN	1,000	\$	\$				
	and	cents								
	BITUMINOUS ASPHALT PAVEMEN	T (BASE)								
P-403-8.1	at		TN	1,500	\$	\$				
	and	cents								
	BITUMINOUS PRIME COAT									
P-602-5.1	at	dollars	GAL	2,200	\$	\$				
	and	cents	- · · · -	_,	·	<del></del>				
-	DITUMINOUS TACK COAT									
P-603-5.1	BITUMINOUS TACK COAT at	dollare	GAL	1,500	\$	\$				
F <b>-</b> 003-3. I	and		GAL	1,500	Ψ	φ				
	TEMPORARY AIRFIELD MARKING REFLECTIVE MEDIA	(TELLOVV), VV/O								
P-620-5.2	at	dollars	SF	4,000	\$	\$				
	and	cents								
-										

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,475	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	45	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108	GROUND DISSIPATION PLATE25"x24" X24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	2	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	100	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	630	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,300	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	210	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	275	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) at	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE at	EA	1	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	4	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	4	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	(7)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	7	\$	\$				
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$				
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$				
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$				
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	2	\$	\$				
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$				
TOTAL AMOUNT OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXIWAY B4 (IN WORDS)									
Dollars									
	Total Rid Cabadula Amaunt	م داخانده	Cents	<b>n</b>					
	Total Bid Schedule Amount - Additive Alternate 4: \$								
Sum of Taxes Included in Alternate 4: \$									

Airport: Project: Asheville Regional Airport Bid Package 4

	Estimated									
Item No.	Item Description and Unit Price in	n Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
VOLUME 3 BASE BID - TAXIWAY B CONVERSION AND NAVAIDS										
	MODILIZATION									
GP-105-2.1	MOBILIZATION	dollars	LS	1	\$	\$				
GP-105-2.1	atand	dollars cents	LS	I	Φ	Φ				
	allu	_061103								
	REMOVAL OF DRAINAGE STRUCTURES (SIZE AND									
S-140-4.1	MATERIAL VARIES)		EA	3	\$	\$				
	at	dollars		-	·	T				
	REMOVAL OF DRAINAGE PIPES (SIZE	AND								
S-140-4.2	MATERIAL VARIES) at	dollars	LF	33	\$	\$				
	atand	dollars cents								
-	and	_001103								
	REMOVAL OF EXISTING FENCE									
S-140-4.4	at	dollars	LF	800	\$	\$				
	and	_cents								
	REMOVAL OF EXISTING PERIMETER	BOAD								
S-140-4.5	at	-	SY	5,900	\$	\$				
0 140 4.0	and	cents	0.	0,000	Ψ	Ψ				
	*****									
	REMOVAL OF DIRECTIONAL SIGN									
S-140-4.6	at	dollars	EA	3	\$	\$				
	and	_cents								
	PAVEMENT REMOVAL									
P-101-5.2	at	dollars	SY	550	\$	<b>\$</b>				
1 101 3.2	and	cents	01	330	Ψ	Ψ				
	SAFETY AND SECURITY									
P-102	at		LS	1	\$	\$				
	and	_cents								

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdollars andcents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	45,700	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atdollars andcents	CY	1,800	\$	\$
P-152-4.5	BORROW AREA GRADING, CLEAN UP, AND CLOSE OUT atdollars andcents	LS	1	\$	\$
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	6	\$	\$
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,100	\$	\$
P-156-4.1-10	EXCELSIOR MATTING  atdollars  andcents	SY	9,200	\$	\$
P-156-4.1-20	RIP RAP, CLASS 1 atdollars andcents	CY	130	\$	\$
P-156-4.1-22	RIP RAP, CLASS 2 atdollars andcents	CY	75	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	210	\$	\$
P-156-4.1-26	SHOREMAX PROTECTION MAT atdollars andcents	SF	4,700	\$	\$
P-156-4.1-28	REMOVE EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-4.1-31	REMOVE EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-4.1-33	CONVERT EXISTING SEDIMENT BASIN "D" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-35	REMOVE EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-4.1-37	REMOVE EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-4.1-39	REMOVE EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-4.1-41	REMOVE EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-51	CONVERT EXISTING SEDIMENT BASIN "M" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-53	CONVERT EXISTING SEDIMENT BASIN "N" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-55	REMOVE EXISTING SEDIMENT BASIN "O" at dollars and cents	LS	1	\$	\$
P-156-4.1-59	REMOVE EXISTING SEDIMENT BASIN "Q" at dollars and cents	LS	1	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	510	\$	\$
NCDOT 520-2	PERIMETER ROAD REPAIRS atdollars andcents	SY	1,800	\$	\$
NCDOT 600	PRIME COAT atdollars andcents	GAL	130	\$	\$
NCDOT 610	BITUMINOUS ASPHALT PAVEMENT (9.5C) atdollars andcents	TN	240	\$	\$
P-608-8.1	ASPHALT SURFACE TREATMENT at dollars andcents	SY	93,600	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA at	SF	23,200	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA at	SF	3,300	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	8,300	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	157,400	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	52	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	64	\$	\$
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	140	\$	\$
D-701-5.1-10	48" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	140	\$	\$
D-701-5.1-11	54" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	697	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	1	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	1	\$	\$
D-754-5.1	CONCRETE LINED DITCH atdollars andcents	LF	565	\$	\$
F-160-5.1	20' DOUBLE SWING GATE atdollars andcents	EA	3	\$	\$
F-160-5.2	WILDLIFE FENCE atdollars andcents	LF	769	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	80	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	80	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	79	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	105	\$	\$
L-107-1	L-806(L) WIND CONE, SIZE 1, STYLE 1A, NEW COMPLETE atdollars andcents	EA	1	\$	\$
L-107-2	RELOCATE L-806 (L) LED WINDCONE atdollars andcents	EA	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	16,100	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	10,500	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	65	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	8,426	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	200	\$	\$
L-125-8	L-853 ELEVATED RETROREFLECTIVE MARKER atdollars andcents	EA	10	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE atdollars andcents	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	2	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	12	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-13	L-858C SIGN - SINGLE FACE, NON-LIGHTED, TAXIWAY END MARKER atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	2	\$	\$
L-125-19	L-858B(L) RELOCATE RUNWAY DISTANCE REMAINING SIGN, LED, SIZE 4 atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	7	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	7	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	2	\$	\$
L-125-24	L-860HR(L) OMNIDIRECTIONAL, GREEN, LED ELEVATED HELIPORT LIGHT - IN TURF (T) atdollars andcents	EA	14	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	22	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	19	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	49	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	5	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) at	EA	60	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125	L-867B LIGHT BASE 1/2" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	5	\$	\$
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	6	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	1	\$	\$
N-1005-1	FAA ALLOWANCE at FIFTY THOUSAND DOLLARS and ZERO cents	AL	1	<u>\$50,000.00</u>	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
		SI	UMMARY		
TOTAL AMOUNT	OF VOLUME 2 BASE BID - ASPHALT RUNWAY			VORDS)	
			Dollars Cents		
-	Total Amount Volume 2 Base Bid - Asphalt R	Runway with		\$	
Sum of Ta	axes Included in Volume 2 Base Bid - Asphalt R	-			
TOTAL AMOUNT	OF VOLUME 2 BASE BID - CONCRETE RUNWA	AY WITH QUA	ARTZ HIRL (IN	I WORDS)	
-			Dollars		
			Cents		
	Total Amount Volume 2 Base Bid - Concrete R	Runway with €	Quartz HIRL: \$	\$	
Sum of Tax	ces Included in Volume 2 Base Bid - Concrete R	lunway with	Quartz HIRL: S	\$	
TOTAL AMOUNT	OF VOLUME 2 ADD/DEDUCT ALTERNATE 1 - L	_ED HIRL (IN	I WORDS)		
-			Dollars		
			Cents		
	•	Total Alterna	te 1 Amount: S	\$	
	Sum of Taxe	s Included ir	n Alternate 1: S	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 2 - TAXI	WAY A SHO	ULDERS (IN W	/ORDS)	
			Dollars		
			Cents	_	
				<b></b>	
	Sum of Taxe	s Included in	n Alternate 2: S	<b></b>	
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXI	WAY B2 (IN	WORDS)		
			<u> </u>		
			Dollars		
	<u> </u>	T ( )   A	Cents	<b>.</b>	
				<u> </u>	
	Sum of Taxe	s included in	n Alternate 3: S	<b>.</b>	
TOTAL AMOUNT	FOR VOLUME 2 ADDITIVE ALTERNATE 4 TAVI	NAV DA (INI	WODDC)		
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXI	WAT B4 (IIV	WORDS)		
			 Dollars		
			Cents		
		Total Alterna		\$	
			n Alternate 4: S		

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
TOTAL AMOUN	T OF VOLUME 3 BASE BID - TAXIWAY B CONVER	RSION AND	NAVAIDS (IN \	WORDS)	
			Dollars Cents		
	Total Bid Volume 3 Base Bid - Taxiway B C	onversion a		\$	
Sum of Tax	kes Included in Volume 3 Base Bid - Taxiway B Co				
	-				
	Name of t	biddei (Typei	u or Frinteu)		
	Signature of Bidder (	Same as Pro	posal Form): _		
			Title:		
Addendum:			_		
The Bidder certifies	s that he has acknowledged the addendum(s) to the contra	act indicated be	elow:		
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
		END OF E	SID SCHEDUL	E	

Asheville Regional Airport
Permanent Runway 17-35 Construction
Bid Package 4 - Paving, Lighting and NAVAID's
Bid Opening: January 27, 2017

#### LIFE CYCLE COST ANALYSIS EVALUATION

MATERIAL: Asphalt
DESIGN LIFE: 20 years
EXPECTED LIFE: 30 years

DISCOUNTED RATE/INFLATION

FACTOR: 7%

### Volume 2 Base Bid - Asphalt Runway

YEAR	ACTIVITY	ITEM DESCRIPTION	UNIT	UNIT COST	QUANTITY	TOTAL COST	PRESENT WORTH FACTOR	PRESENT WORTH
0	Initial Construction	Asphalt Runway Section	SY	\$ -	133,334	\$ -	1	\$ -
1							0.9346	
2							0.8734	
3							0.8163	
4	Maintenance	Emulsified Rejuvenator	SY		133,334	\$ -	0.7629	\$ -
5							0.7130	
6							0.6663	
7							0.6227	
		Emulsified Rejuvenator, Crack						
8	Maintenance	Seal (20,000LF)	SY		133,334	\$ -	0.5820	
9							0.5439	
10							0.5083	
11							0.4751	
12							0.4440	
13							0.4150	
14							0.3878	
		2" Mill and Replace, Marking and						
15	Maintenance	grooving	SY		133,334	\$ -	0.3624	
16							0.3387	
17							0.3166	
18							0.2959	
19	Maintenance	Emulsified Rejuvenator	SY		133,334	\$ -	0.2765	
20							0.2584	
21							0.2415	
22							0.2257	
		Emulsified Rejuvenator, Crack						
23	Maintenance	Seal (20,000LF)	SY		133,334	\$ -	0.2109	
24							0.1971	
25							0.1842	
26							0.1722	
27	Maintenance	Emulsified Rejuvenator	SY		133,334	\$ -	0.1609	
28							0.1504	
29							0.1406	
30							0.1314	

Subtotal:	
Less Salvage Value:	\$ -
Present Worth:	

Asheville Regional Airport Permanent Runway 17-35 Construction Bid Package 4 - Paving, Lighting and NAVAID's Bid Opening: January 27, 2017

### LIFE CYCLE COST ANALYSIS EVALUATION

MATERIAL: Concrete 20 years DESIGN LIFE: EXPECTED LIFE: 30 years

DISCOUNTED RATE/INFLATION

FACTOR: 7%

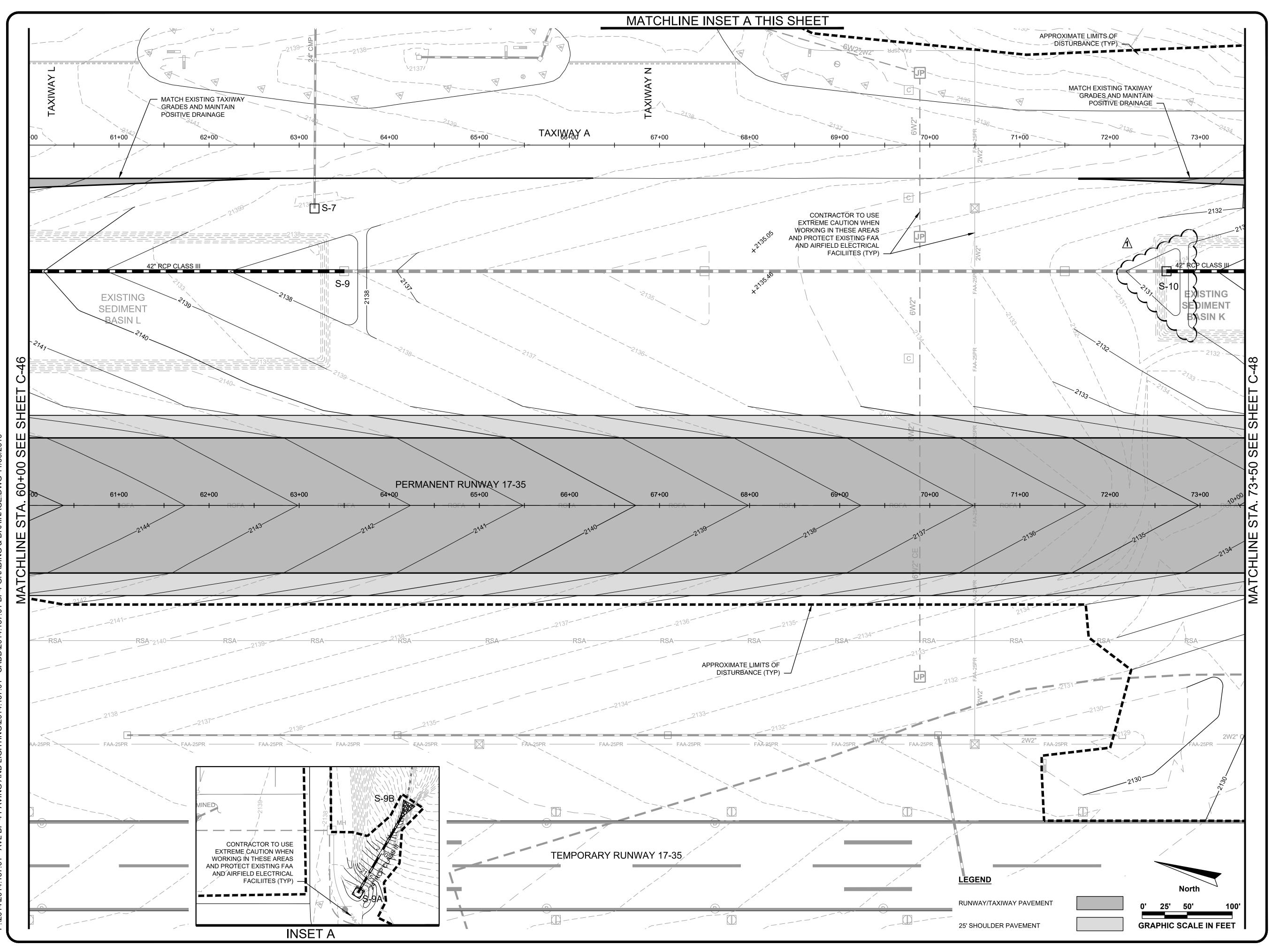
Volume 2 Base Bid - Concrete Runway

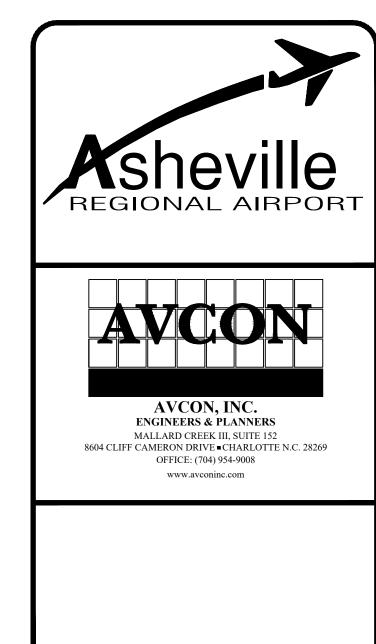
YEAR	ACTIVITY	ITEM DESCRIPTION	UNIT	UNIT COST	QUANTITY	TOTAL COST	PRESENT WORTH	PRESENT WORTH
_							FACTOR	
0	Initial Construction	Concrete Runway Section	SY	\$ -	133,334	\$ -	1	\$ -
1							0.9346	
2							0.8734	
3							0.8163	
4							0.7629	
5							0.7130	
6							0.6663	
7							0.6227	
8							0.5820	
9							0.5439	
10	Maintenance	Joint - Route and Replace	LF		132,400	\$ -	0.5083	\$ -
11							0.4751	
12							0.4440	
13							0.4150	
14							0.3878	
15	Maintenance	Crack Repairs	LF		10,000	\$ -	0.3624	\$ -
16							0.3387	
17							0.3166	
18							0.2959	
19							0.2765	
		5% slab replacement , Joint -						
20	Maintenance	Route and Replace	SY		6,700	\$ -	0.2584	\$ -
21							0.2415	
22							0.2257	
23							0.2109	
24							0.1971	
25							0.1842	
26							0.1722	
27							0.1609	
28							0.1504	
29							0.1406	
30							0.1314	

Subtotal:

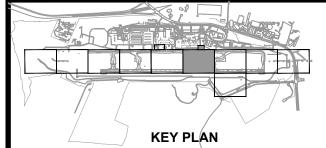
Less Salvage Value: \$

Present Worth:





## **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING,** LIGHTING AND NAVAIDS - VOLUME 2 -**PERMANENT RUNWAY 17-35 CONSTRUCTION** 

> **GRADING AND DRAINAGE** (SHEET 6 OF 10)

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J.M.M. **DESIGNED BY: DRAWN BY: CHECKED BY: APPROVED BY:** DATE: **DECEMBER 2016** 

STATE LICENSE #

PROJECT NO.

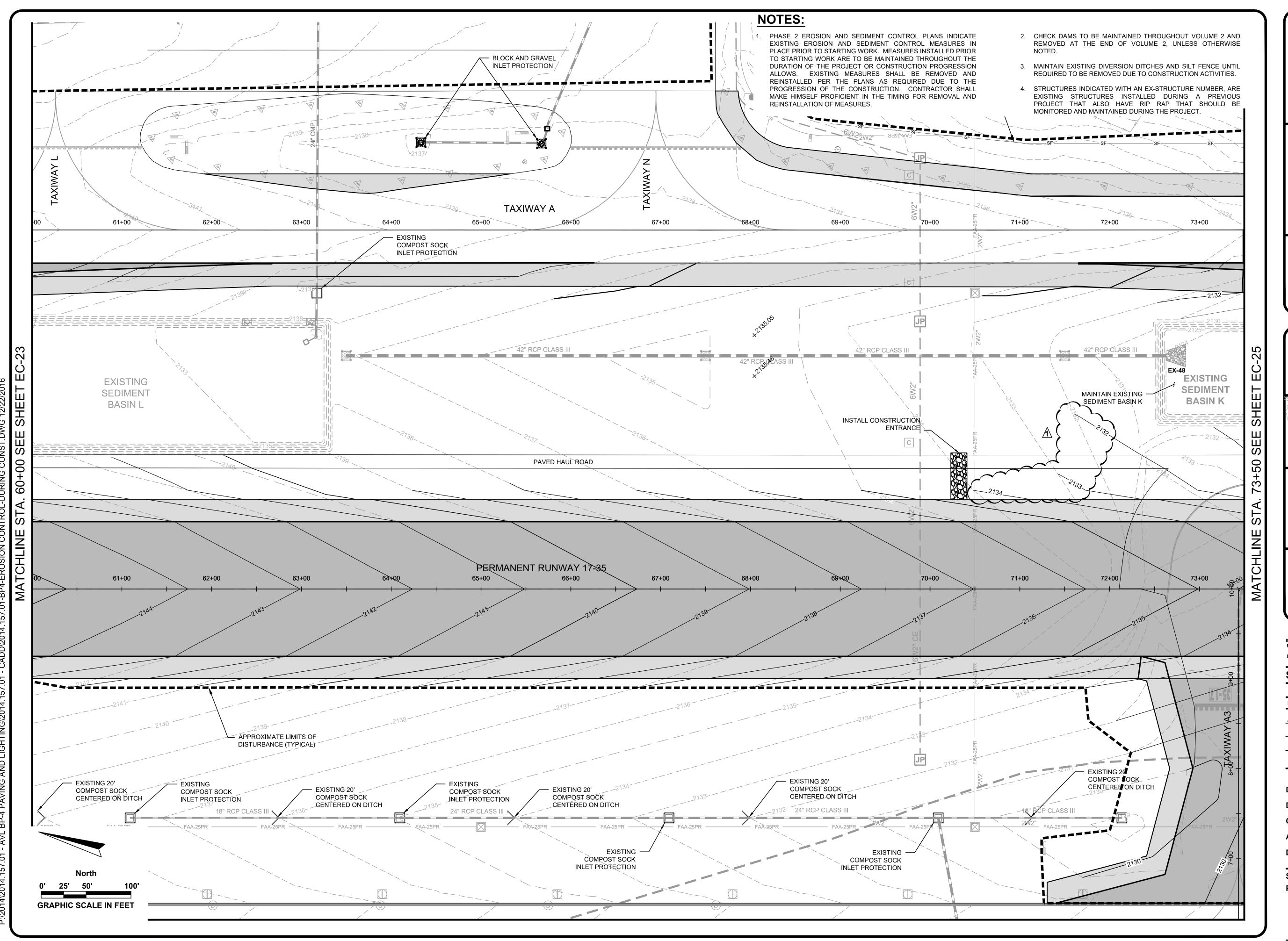
N.C. C-2450

2014.157.01

SHEET NUMBER

C-47

BID DOCUMENTS

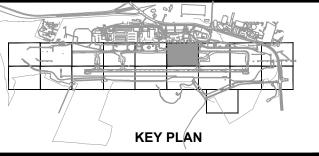






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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

EROSION AND SEDIMENT CONTROL PLAN PHASE 2 (SHEET 6 OF 17)

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DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

J.M.M.

J.M.M.

DATE: DECEMBER 2016

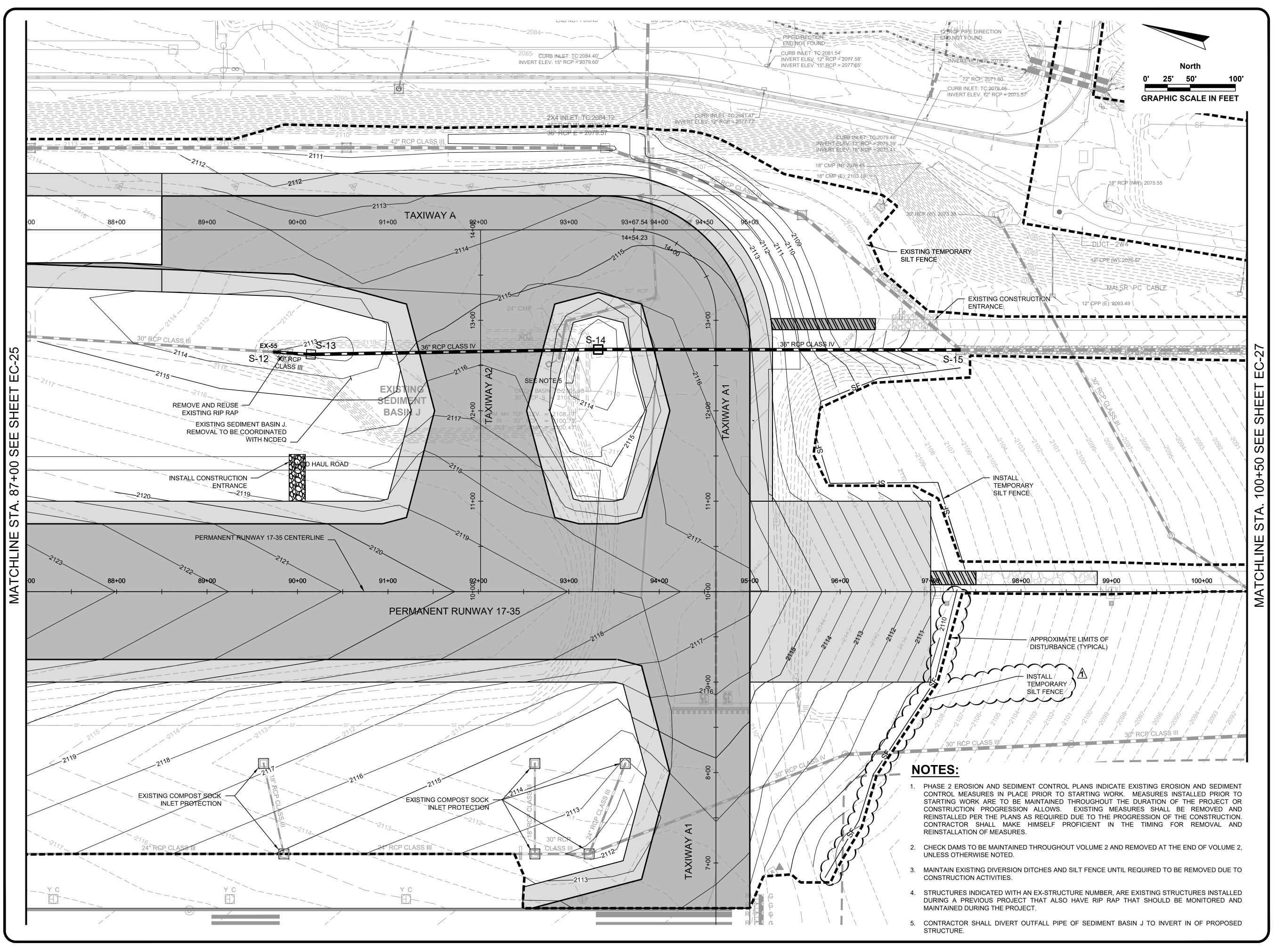
STATE LICENSE # PROJECT NO.

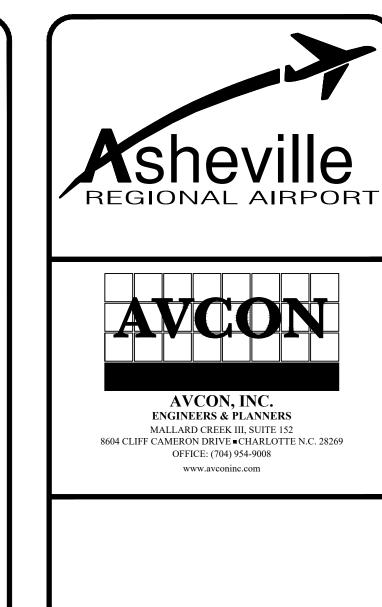
2014.157.01

N.C. C-2450

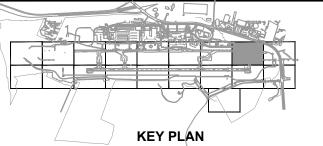
**SHEET NUMBER** 

EC-24
BID DOCUMENTS





# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY

17-35 CONSTRUCTION
EROSION AND

SEDIMENT CONTROL PLAN PHASE 2 (SHEET 8 OF 17)

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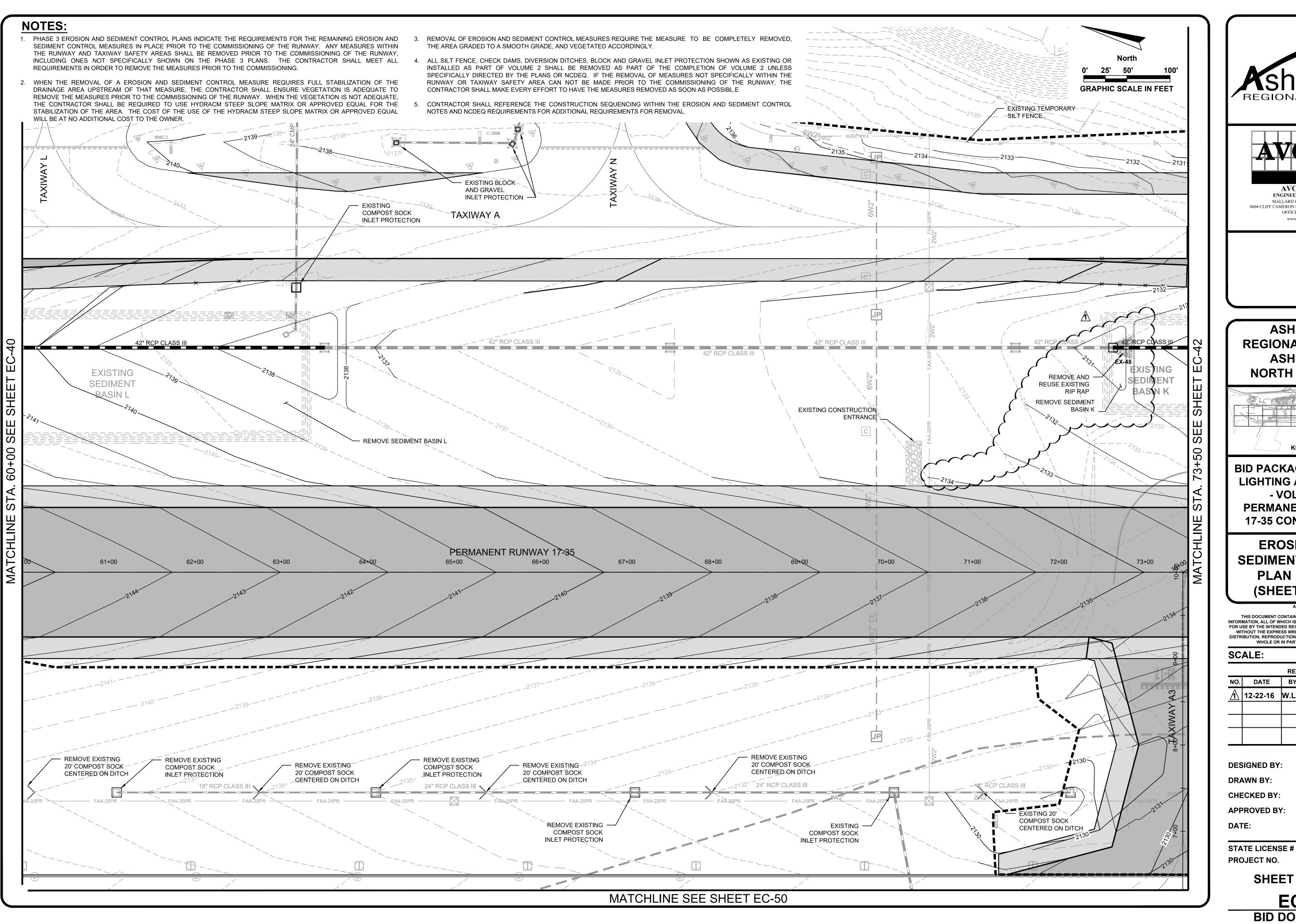
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PROJECT NO. 2014.157.01

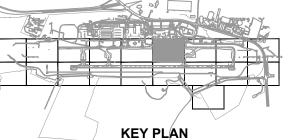
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BID DOCUMENTS





## **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING,** LIGHTING AND NAVAIDS - VOLUME 2 -**PERMANENT RUNWAY 17-35 CONSTRUCTION** 

**EROSION AND** SEDIMENT CONTROL **PLAN PHASE 3** (SHEET 6 OF 17)

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DATE:

**DECEMBER 2016** 

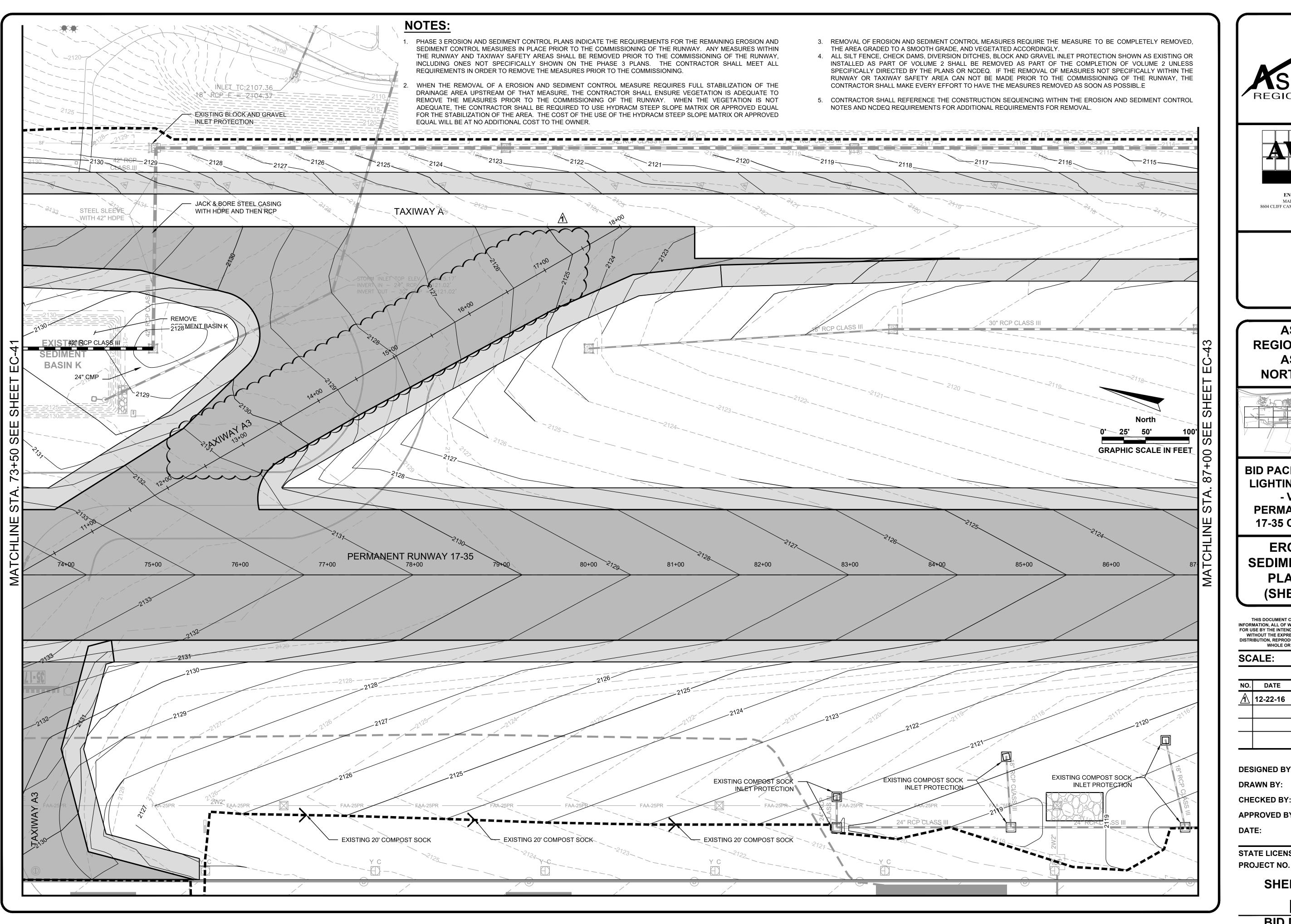
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2014.157.01

**SHEET NUMBER** 

**EC-41** 

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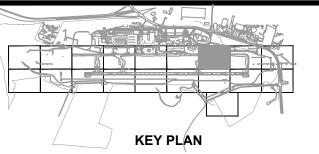






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## **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING,** LIGHTING AND NAVAIDS - VOLUME 2 -**PERMANENT RUNWAY 17-35 CONSTRUCTION** 

**EROSION AND** SEDIMENT CONTROL **PLAN PHASE 3** (SHEET 7 OF 17)

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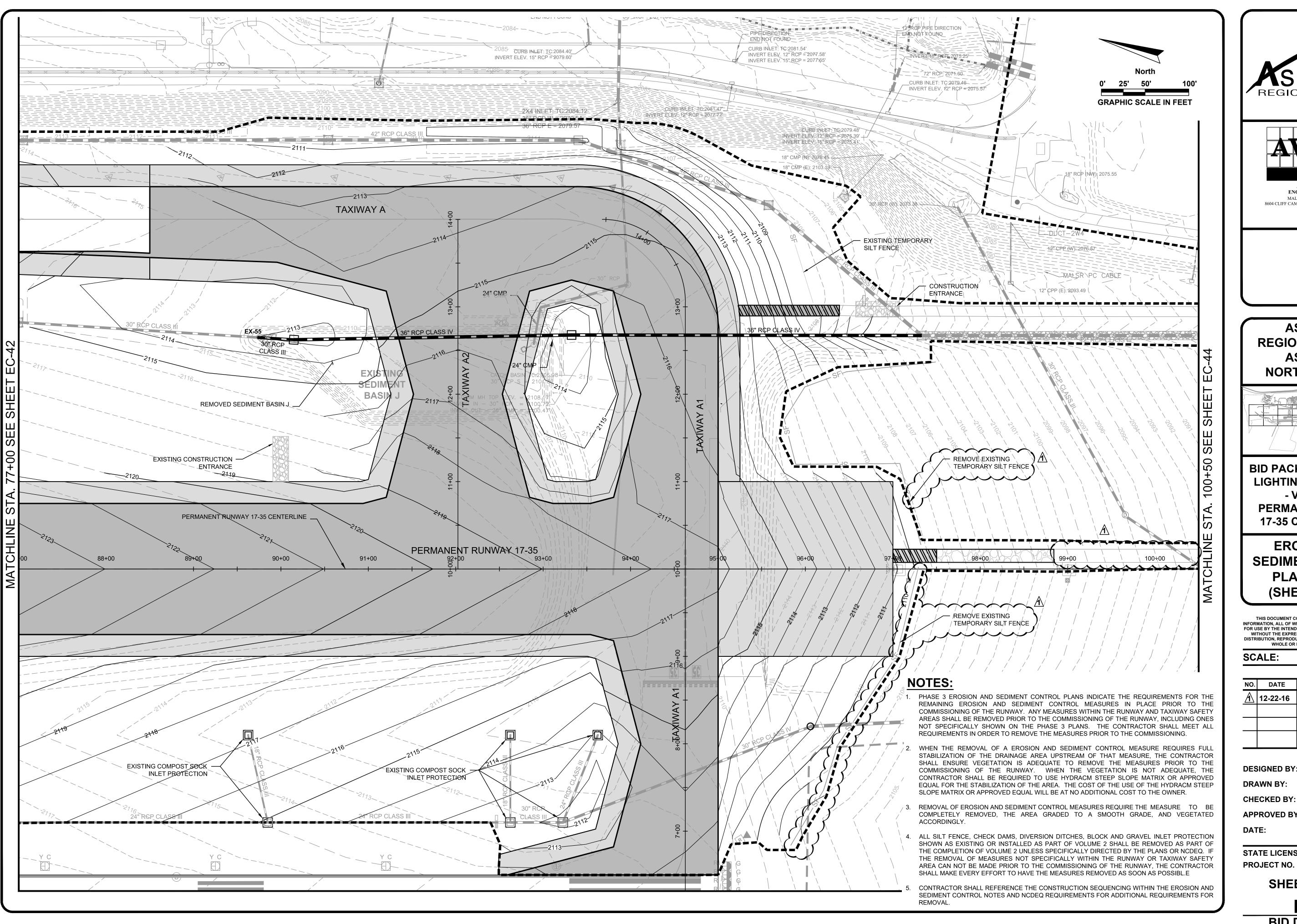
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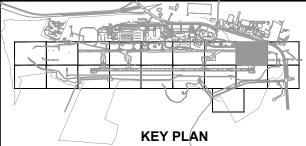






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## **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS** - VOLUME 2 -**PERMANENT RUNWAY** 17-35 CONSTRUCTION

**EROSION AND** SEDIMENT CONTROL **PLAN PHASE 3** (SHEET 8 OF 17)

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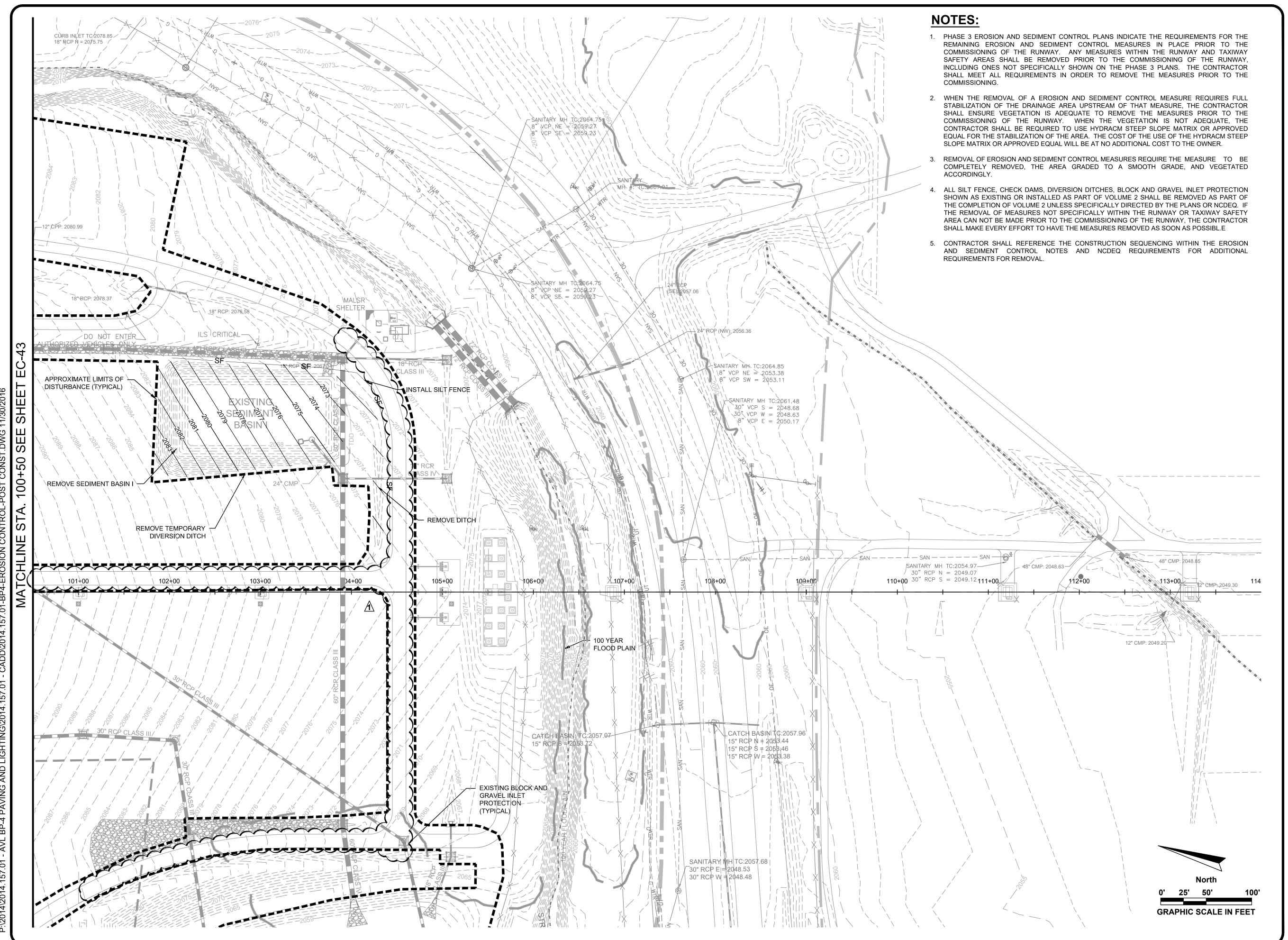
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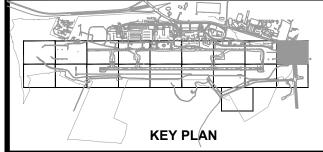






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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

EROSION AND SEDIMENT CONTROL PLAN PHASE 3 (SHEET 9 OF 17)

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DESIGNED BY: J.M.M.

DRAWN BY: W.L.J.

CHECKED BY: J.M.M.

APPROVED BY: J.M.M.

DATE: DECEMBER 2016

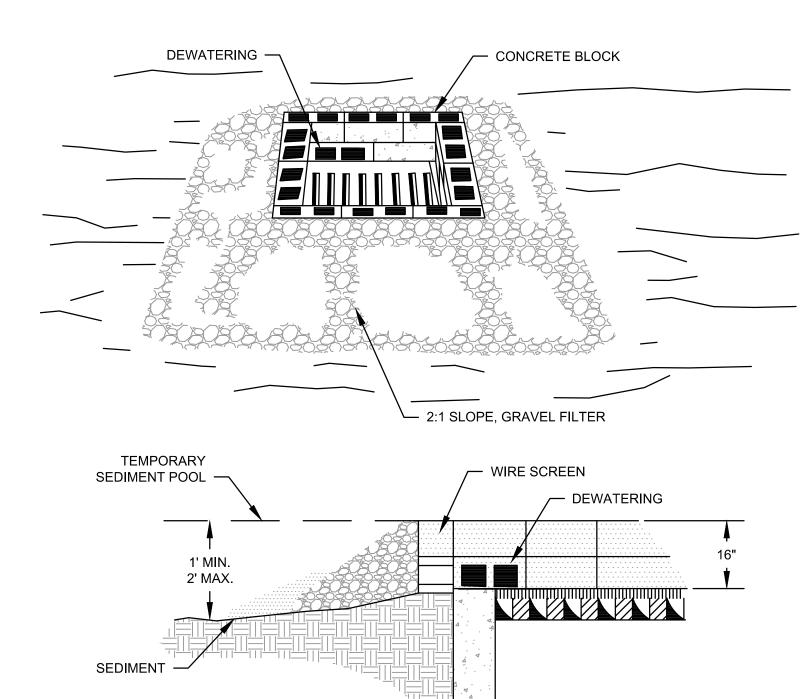
STATE LICENSE #
PROJECT NO.

**SHEET NUMBER** 

N.C. C-2450

2014.157.01

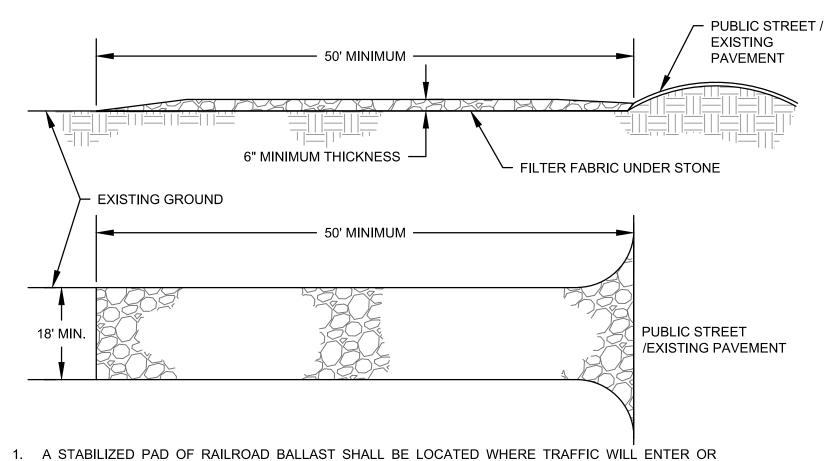
EC-44
BID DOCUMENTS



### **BLOCK AND GRAVEL INLET PROTECTION**

### NOTES:

- 1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE ON THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCH BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF THE BLOCK AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2x4 WOOD STUDS THROUGH BLOCK OPENINGS.
- 2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENING OVER ALL BLOCK OPENING TO HOLD GRAVEL IN PLACE.
- 3. USE CLEAN GRAVEL, 3/4-TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.



- LEAVE A CONSTRUCTION SITE ON TO A PUBLIC STREET.
- 2. STONE TO BE 2" 3" STONE.
- 3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT. STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 4. ALL SEDIMENT SPILLED, DROPPED WASHED OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
- 5. WHEN NECESSARY, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
- 6. FILTER FABRIC SHALL BE MIRAFI 500 OR EQUAL. FABRIC IS INCIDENTAL TO CONSTRUCTION

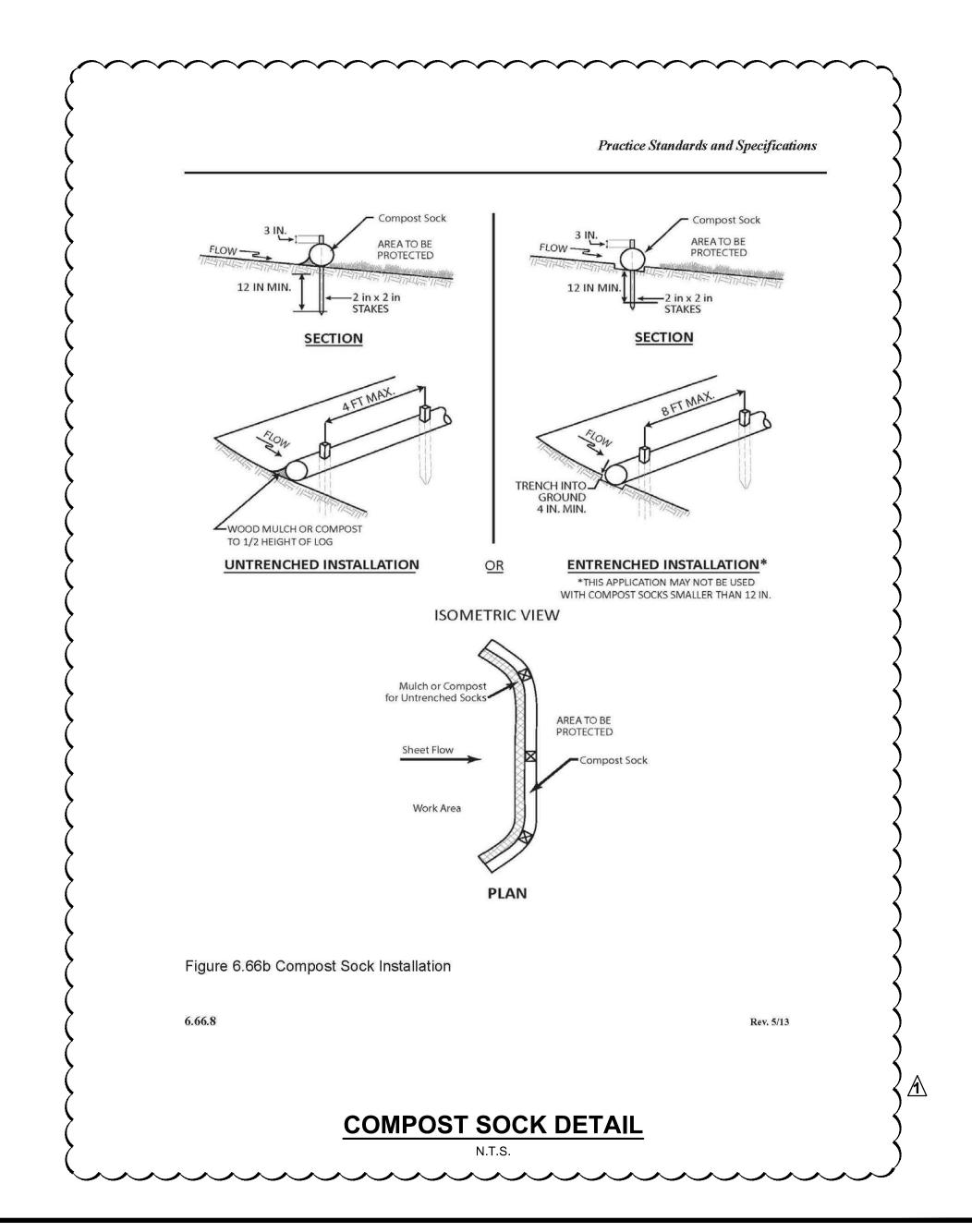
### STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.

### NOTES:

- 1. COMPOST SOCKS SHALL MEET NCDEQ REQUIREMENT FROM CHAPTER 6.66 OF THE NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- 2. COMPOST SOCKS SHALL BE USED AS INLET PROTECTION AND IN DITCHES. THE CONTRACTOR SHALL INSPECT EACH COMPOST SOCK AFTER EACH RAIN EVENT AND PERFORM MAINTENANCE AS REQUIRED.
- 3. IN AREAS WHERE NEW DRAINAGE STRUCTURES ARE TO BE INSTALLED ADJACENT TO EXISTING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO GRADE AWAY FROM THE EXISTING DRAINAGE STRUCTURES THAT HAVE THE COMPOST SOCK AS INLET PROTECTION IN ORDER TO MINIMIZE THE STORMWATER RUNOFF REACHING THE COMPOST SOCK INLET PROTECTION.
- 4. COMPOST SOCKS SHALL BE 18" IN DIAMETER AND INSTALLED PER THE NCDEQ REQUIREMENTS.
- 5. IN AREAS WHERE NEW DRAINAGE STRUCTURES ARE TO BE INSTALLED ADJACENT TO EXISTING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO GRADE AWAY FROM THE EXISTING DRAINAGE STRUCTURES THAT HAVE THE COMPOST SOCK AS INLET PROTECTION IN ORDER TO MINIMIZE THE STORMWATER RUNOFF REACHING THE COMPOST SOCK INLET
- 6. CONTRACTOR MAKE HIMSELF AWARE OF ANY POTENTIAL WEATHER AND RAIN EVENTS WHILE THE COMPOST SOCKS ARE IN USE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE INLETS WITH THE COMPOST SOCKS INCLUDING TEMPORARY GRADING AWAY FROM THE INLETS AS ALLOWED BY SITE CONDITIONS. THE CONTRACTOR SHALL PREPLAN FOR RAIN EVENTS IN ORDER TO ENSURE THE COMPOST SOCKS ARE MAINTAINED BEFORE, DURING AND AFTER A RAIN EVENT.
- 7. ADDITIONAL COMPOST SOCKS MAY BE REQUIRED TO ADDITIONALLY PROTECT WORK BEING COMPLETED BETWEEN PHASED WORK AND WORK BEING COMPLETED AT NIGHT VERSUS DURING THE DAY.

### **COMPOST SOCK NOTES**

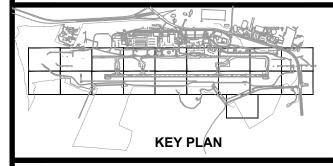






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## **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING,** LIGHTING AND NAVAIDS - VOLUME 2 -**PERMANENT RUNWAY 17-35 CONSTRUCTION** 

**EROSION AND SEDIMENT CONTROL DETAILS** (SHEET 1 OF 4)

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1\ | 12-22-16 | W.L.J. | ADDENDUM NO. 2

**DESIGNED BY:** 

J.M.M. **DRAWN BY:** W.L.J. **CHECKED BY:** J.M.M.

**APPROVED BY:** 

**STATE LICENSE #** 

**DECEMBER 2016** DATE:

J.M.M.

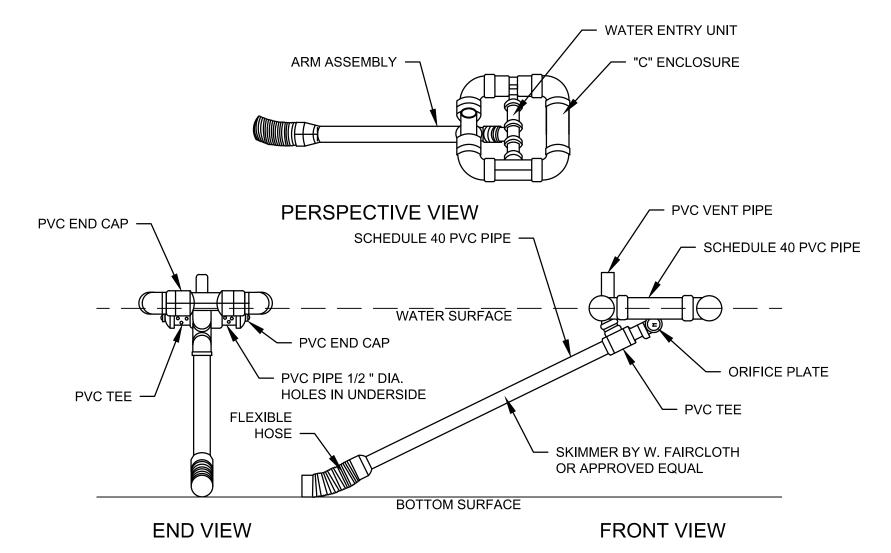
N.C. C-2450

2014.157.01

PROJECT NO.

**SHEET NUMBER** 

**EC-56 BID DOCUMENTS** 



## **SKIMMER DETAIL**

N.T.S.

			SKIMMER	CHART			
	BASIN ID	DRAINAGE AREA (ACRES)	DISTURBED AREA (ACRES)	BASIN SIZE* VOLUME (CF)	SKIMMER SIZE (IN)	ORIFICE SIZE (IN)	STATUS
	А	82.10	6.88	590,013	8	6	EXISTING
	В	4.97	0	31,483	8	2.5	EXISTING
	С	33.97	0	135,675	6	5.75	EXISTING
A	D	(112.71)	0	293,646	8	8	EXISTING
	E	25.14	25.14	94,524	6	5	EXISTING
	F	3.03	2.33	11,011	2	1.5	EXISTING
	G	2.73	1.28	9,294	2	1.75	EXISRING
	Н	6.27	6.27	11,011	4	2.5	EXIISTING
A	I	4.90	(N/A)	28,177	4	3	EXISTING
$\overline{\mathbb{A}}$	J	12.69	(N/A)	33,134	4	3.25	EXISTING
$\overline{A}$	K	9.14	(N/A)	87,879	6	5.25	EXISTING
	L	29.58	7.30	144,549	8	6.25	EXISTING
	M	4.64	0.20	55,525	6	4	EXISTING
	N	29.42	1.87	133,637	8	5	EXISTING
	0	12.88	0.27	25,519	4	3	EXISTING
Ī	Р	8.19	0.80	23,667	3	3	EXISTING
	Q	29.18	2.69	138,487	6	6	EXISTING

 O
 12.88
 0.27
 25,519
 4
 3
 EXISTING

 P
 8.19
 0.80
 23,667
 3
 3
 EXISTING

 Q
 29.18
 2.69
 138,487
 6
 6
 EXISTING

 INSTALL BAFFLES (SEE BAFFLE DETAIL)
 IN BASIN AND LOCATE PER PLAN LAYOUT

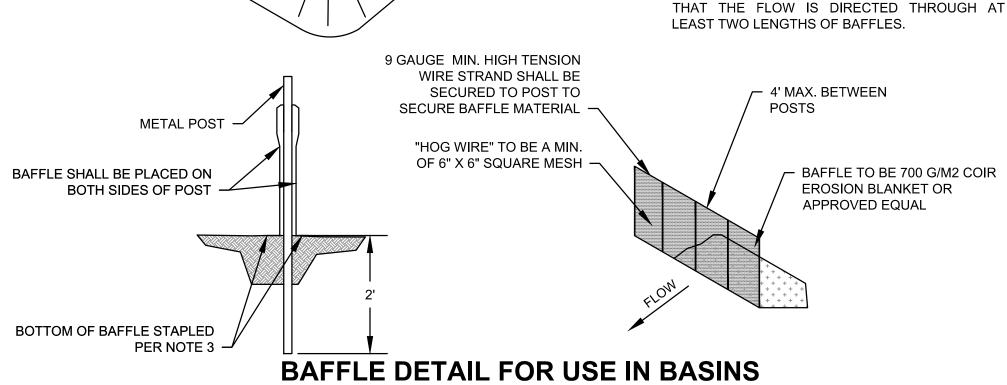
<u>N</u> (	OTES:
<b>&gt;</b> 1.	DRIVE STEEL FENCE POST AT LEAST 2' INTO THE GROUND. FENCE POST SHALL EXTEND A MINIMUM OF 3' ABOVE GROUND.

2. WOOD POSTS ARE NOT ACCEPTABLE.

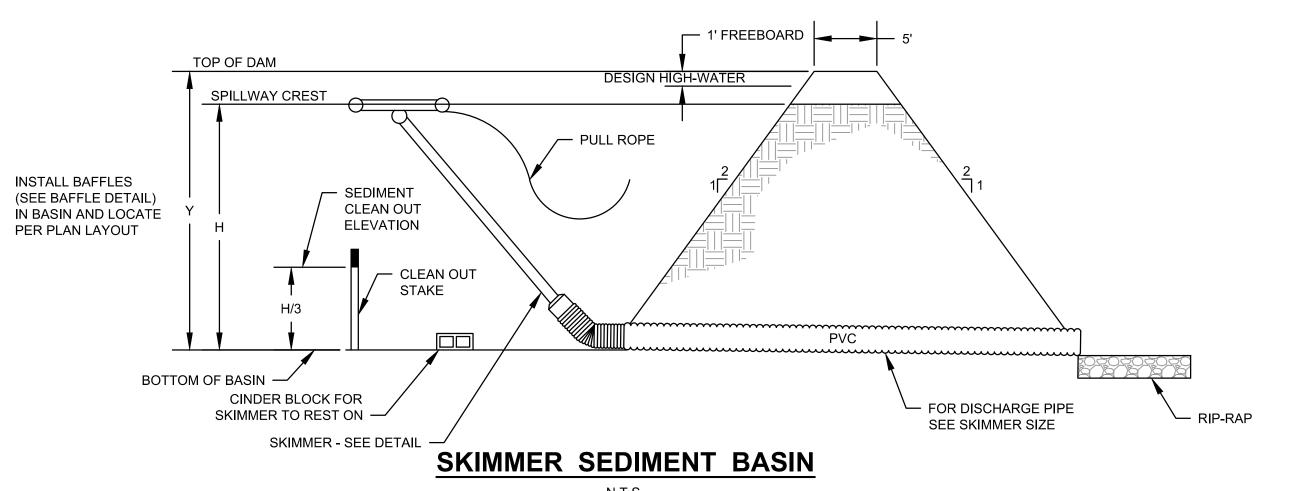
SPACED AT A MINIMUM OF 10' APART).

3. USE 12" 11 GAUGE LANDSCAPING STAPLES 12" APART TO ATTACH FABRIC TO "HOG WIRE".4. BAFFLE SPACED AS PER PLAN (BAFFLES TO BE

5. DIVERSION SWALES SHALL ENTER THE BASIN SO THAT THE FLOW IS DIRECTED THROUGH AT LEAST TWO LENGTHS OF BAFFLES



N.T.S.



TEMPORARY SKIMMER BASIN DATA BLOCK								
SKIMMER BASIN	WIDTH	LENGTH	SURFACE AREA*	Н	Υ	WEIR	REQUIRED VOLUME (CF)	PROVIDED VOLUME (CF)
EXISTING TEMPORARY SKIMMER BASIN F	68'	112'	6,065 S.F.	3.2'	5.0'	20'	6,462	13,809
EXISTING TEMPORARY SKIMMER BASIN G	57'	118'	7,326 S.F.	3.0'	4.5'	17'	6,786	19,176

8,001 S.F.

3.0' 5.0'

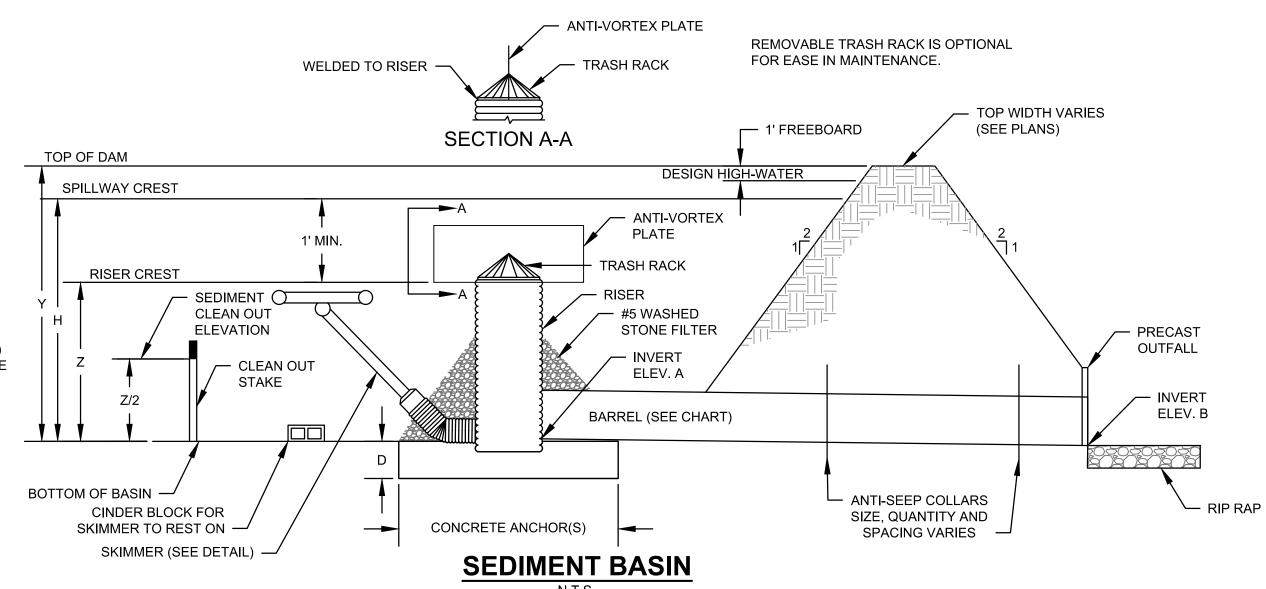
12'

14,742

NOTE:
THE SKIMMER BASINS SHOWN IN THIS CHART ARE CURRENTLY EXISTING SEDIMENT TRAPS EXCEPT FOR M. IF USED, THE CONTRACTOR
NEEDS TO CONVERT TO A SKIMMER BASIN, THEN MAINTAIN THE FACILITY DURING USE. THEREFORE, INFORMATION IN THIS CHART IS FOR
MAINTENANCE ONLY.

128'

EXISTING TEMPORARY SKIMMER BASIN P



## SEDIMENT BASIN DATA BLOCK

BASIN	RISER DIAMETER	BARREL DIAMETER	BARREL LENGTH	BARREL SLOPE	Y	Н	D	Z	TOP ELEV.	SPILLWAY ELEV.	SPILLWAY WIDTH	BOTTOM ELEV.	REQUIRED VOLUME (CF)	PROVIDED VOLUME (CF)	PIPE INVERT ELEV. A	PIPE INVERT ELEV. B
EXISTING SEDIMENT BASIN A	60" CMP	48" CMP	138	0.61%	12.50	9.70	1.0	8.00	2123.50	2120.70	22	2111.00	157,122	290,958	2111.00	2110.16
EXISTING SEDIMENT BASIN B	48" CMP	36" CMP	51	0.80%	5.00	4.00	1.0	3.00	2072.00	2071.00	20	2067.00	25,200	31,483	2067.00	2066.59
EXISTING SEDIMENT BASIN C	48" CMP	36" CMP	58	0.86%	7.50	4.50	1.0	3.50	2062.00	2059.00	10	2054.50	56,142	135,675	2054.50	2054.00
EXISTING SEDIMENT BASIN D	60" CMP	48" CMP	95	1.05%	6.00	5.00	1.0	4.00	2063.00	2062.00	20	2057.00	36,000	293,646	2057.00	2056.00
	48" CMP	EX. 30" RCP	69	0.72%	7.00	6.00	1.0	5.00	2063.00	2062.00		2056.00			2056.00	2055.50
EXISTING SEDIMENT BASIN E	24" CMP	18" CMP	136	1.10%	5.50	4.50	1.0	3.50	2136.00	2135.00	30	2130.50	45,902	94,524	2130.50	2129.00
EXISTING SEDIMENT BASIN H	24" CMP	18" CMP	72	1.39%	6.00	5.00	1.0	4.00	2138.00	2137.00	30	2132.00	11,294	21,984	2132.00	2131.00
EXISTING SEDIMENT BASIN I	36" CMP	24" CMP	47	2.00%	5.00	4.00	1.0	3.00	2072.00	2071.00	10	2067.00	8,820	28,177	2067.00	2066.06
EXISTING SEDIMENT BASIN J	42" CMP	24" CMP	43	2.75%	9.26	8.30	1.0	7.30	2112.00	2111.00	16	2102.74	22,842	33,134	2102.74	2101.56
EXISTING SEDIMENT BASIN K	42" CMP	24" CMP	222	0.50%	7.08	6.08	1.0	5.08	2130.00	2129.00	10	2122.92	16,452	87,879	2122.92	2121.81
EXISTING SEDIMENT BASIN L	48" CMP	24" CMP	49	0.60%	6.08	5.08	1.0	4.08	2138.00	2137.00	10	2131.92	41,058	144,549	2131.92	2131.66
	48" CMP	18" CMP	72	0.50%	3.50	2.48	1.0	1.50	2138.00	2137.00		2134.52			2134.52	2134.12
EXISTING SEDIMENT BASIN M	36" CMP	24" CMP	64	2.90%	9.00	8.00	1.0	7.00	2020.00	2019.00	10	2113.00	6,156	55,525	2113.00	2111.14
EXISTING SEDIMENT BASIN N	36" CMP	30" CMP	63	4.50%	10.00	9.00	1.0	8.00	2126.00	2118.00	28	2117.00	6,498	81,727	2117.00	2114.17
EXISTING SEDIMENT BASIN O	36" CMP	24" CMP	63	8.80%	6.00	5.00	1.0	4.00	2088.00	2087.00	10	2082.00	13,482	25,519	2082.00	2076.46
EXISTING SEDIMENT BASIN Q	60" CMP	36" CMP	56	5.36%	10.00	9.00	1.0	8.00	2115.00	2114.00	10	2105.00	37,035	37,527	2105.00	2102.00





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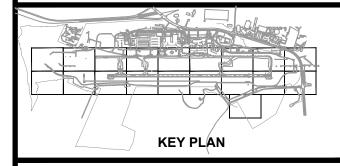
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## ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

EROSION AND
SEDIMENT
CONTROL DETAILS
(SHEET 4 OF 4)

ATTENTIO

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SC	ALE:		AS NOTED REVISIONS:				
		REVIS					
NO.	DATE	BY	DESCRIPTION				
<u> </u>	12-22-16	W.L.J.	ADDENDUM NO. 2				

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

J.M.M.

J.M.M.

DATE: DECEMBER 2016

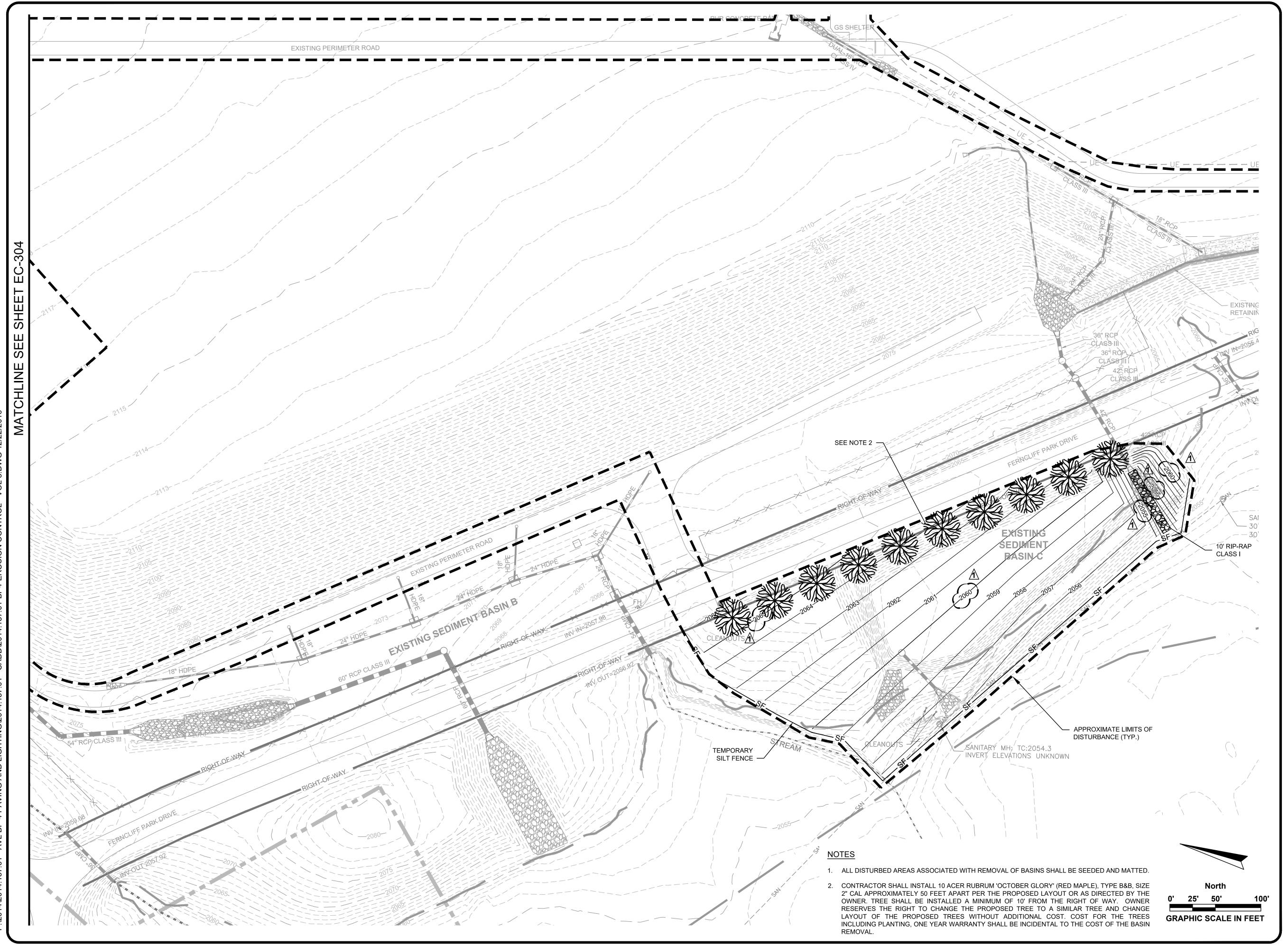
STATE LICENSE #
PROJECT NO.

O. 2014.157.01

N.C. C-2450

**SHEET NUMBER** 

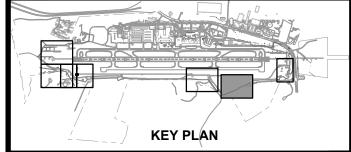
EC-59
BID DOCUMENTS





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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING, AND NAVAIDS - VOLUME 3 -TAXIWAY B CONVERSION AND NAVAIDS

EROSION AND
SEDIMENT
CONTROL PLAN
(SHEET 4 OF 7)

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## SCALE: REVISIONS:

NO.	DATE	BY	DESCRIPTION
$\Lambda$	12-22-16	W.L.J.	ADDENDUM NO. 2

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

J.M.M.

J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450
PROJECT NO. 2014.157.01

SHEET NUMBER

EC-305
BID DOCUMENTS

## ADDENDUM NO. 3 TO PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR

### PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 – PAVING, LIGHTING, AND NAVAIDS

## ASHEVILLE REGIONAL AIRPORT ASHEVILLE, NORTH CAROLINA

TO: ALL PROSPECTIVE BIDDERS

DATE: JANUARY 18, 2017

This Addendum No. 3 forms a part of the Contract Documents and modifies the original Issued for Bid contract documents, plan drawings and specifications dated December 2016 as noted and included herein. <u>Bidder must acknowledge receipt of this ADDENDUM in the space provided on the Bid Form.</u> Failure to do so may subject the Bidder to disgualification.

### **GENERAL**

- 1. The deadline for bids remains Friday, January 27, 2017 at 2:00 PM Eastern Standard Time.
- 2. Deadline for questions and answers remains Friday, January 20, 2017, via email to <a href="mailto:eric.rysdon@rsandh.com">eric.rysdon@rsandh.com</a> and <a href="mailto:nick.loder@rsandh.com">nick.loder@rsandh.com</a>.

### MODIFICATIONS TO CONTRACT PLANS AND SPECIFICATIONS

### **SPECIFICATIONS**

- REVISE Specification L-125 as follows:
  - A. Under **2.3 Basis of Design**, the following line item has been **removed**:
    - 2.3 BASIS OF DESIGN

L-852T(L) LED Taxiway Edge Light 25 VA

B. Under **2.31 Initial Provisioning of Critical Components**, the following line item has been removed from the chart:

INITIAL PROVISIONING OF CRITICAL COMPONENTS							
Category	Description						
	L-852T(L) semi flush taxiway edge light	2					

C. Under **Part 5 – Basis of Payment**, the following changes have been made to the pay item descriptions:

Pay Item	Description	
Item L-125-1	L-850A(L) Runway Centerline Light-Clear/Clear, LED (N) L-850A(L), Bi-directional, Clear/Clear, LED, R/W centerline light, style 3, with arctic kit, mounted on a L-868B deep light base with a properly sized spacer ring (w/concrete ring) and properly sized L-830 transformer, L-823 connectors and all incidentals. Align and level as required.	per Each (EA)
Item L-125-2	L-850A(L) Runway Centerline Light-Red/Clear, LED (N) L-850A(L), Bi-directional, 180 degree, red, 180 degree clear, LED, R/W centerline light, style 3, with artic kit, mounted on a L-868B deep light base with a properly sized spacer ring (w/concrete ring) and properly sized L-830 transformer, L-823 connectors and all incidentals. Align and level as required.	per Each (EA)
Item L-125-3	L-850B(L) Touchdown Zone Light, LED (N) L-850B(L) Unidirectional, LED, touchdown zone light, style 3, with arctic kit, mounted on a L-868B deep light base with a properly sized spacer ring (w/concrete ring) and properly sized L-830 transformer, L-823 connectors, and all incidentals. Align and level as required.	per Each (EA)
Item L-125-6	L-850C(L) Runway Edge Light-Clear/Clear, LED (N) L-850C, Bi-directional, 360 degree clear, LED, HIRL, R/W edge light, style 3, with artic kit, fixture to be mounted on an L-868B deep light base with a properly sized spacer ring (w/concrete ring) and properly sized L-830 transformer, L-823 connectors, and all incidentals. Align and level as required.	per Each (EA)
Item L-125-7	L-850C(L) Runway Edge Light - Clear/Yellow, LED (N) L-850C, Bidirectional, 180 degree clear, 180 degree yellow, LED, HIRL, R/W edge light, style 3, with arctic kit, fixture to be mounted on an L-868B deep light base with a properly sized spacer ring (w/concrete ring) and properly sized L-830 transformer, L-823 connectors, and all incidentals. Align and level as required.	per Each (EA)
Item L-125-37	L-862(L) Runway Edge Light - Clear/Clear, LED (N) L-862, Bi-directional, 360 clear, LED, HIRL R/W edge light, with arctic kit, with column to be mounted on a L-867B/D deep light base with properly sized L-830 transformer, L-823 connectors, bonding jumper and all incidentals. Align and level as required. The overall height shall be 24".	per Each (EA)

## Item L-125-38 L-862(L) Runway Edge Light - Clear/Yellow, LED (N)

-- per Each (EA)

L-862, Bi-directional, 180 degree yellow, 180 degree clear LED, HIRL R/W edge light *with arctic kit*, with column to be mounted on a L-867B/D deep light base with properly sized L-830 transformer, L-823 connectors, bonding jumper and all incidentals. Align and level as required. The overall height shall be 24".

# Item L-125-39 L-862E(L) Runway Threshold Light - Green/Red, LED (N)

-- per Each (EA)

L-862E, Bi-directional, 180 degree green, 180 degree red, LED, HIRL R/W threshold light, *with arctic kit,* with column to be mounted on a L-867B/D deep light base with properly sized L-830 transformer, L-823 connectors, bonding jumper and all incidentals. Align and level as required. The overall height shall be 24".

Specification L-125 is not reissued with this Addendum.

# **PLANS**

- 1. Revise Note 7 of SP-32 to read as follows "See Sheet EC-01 of Volume 2 for detailed erosion and sediment control requirements for this phase.
- 2. Replace G-07 with the G-07 of Addendum 3.
- 3. Replace G-08 with the G-08 of Addendum 3.
- 4. Replace SP-32 with the SP-32 of Addendum 3.
- Replace EC-01 with the EC-01 of Addendum 3.
- Revise "See Note 2" of EC-21 the lower left hand corner of the sheet to be "See Note 3".
- 7. Replace EC-26 with the EC-26 of Addendum 3.
- 8. Replace EC-55 with the EC-55 of Addendum 3.
- Replace EC-56 with the EC-56 of Addendum 3.
- 10. Replace EC-305 with the EC-305 of Addendum 3.
- 11. Replace EC-306 with the EC-306 of Addendum 3.
- 12. Replace EC-311 with the EC-311 of Addendum 3.
- 13. Replace EC-312 with the EC-312 of Addendum 3.

### **ANSWERS TO WRITTEN INQUIRIES RECEIVED**

1. How will the bids be reviewed and awarded?

ANSWER: Bids will be reviewed based on the bidder and subcontractors being responsive and responsible as per the bid documents. The responsive and responsible bidder must meet all requirements of the bid documents, with award made in accordance with FAA General Provisions Section 20.

2. Please provide clarification on how concrete and asphalt options will be compared.

ANSWER: Please see attached for revised life cycle cost analysis spreadsheet in both PDF and Excel format. The total Volume 2 Base Bid price will be entered in Year 0 as "Initial Construction." The concrete runway spreadsheet will be used for the concrete option, and the asphalt runway spreadsheet will be used for the asphalt option.

Estimates for future maintenance work are based on NCDOT Department of Aviation average bid tabulations and historical cost data for previous projects within the region. The concrete runway expected life is 40 years, and the asphalt runway expected life is 30 years. Salvage Value at the end of the 30-year analysis is determined as:

Salvage Value = Initial Cost x [(Life Remaining, Years)/(Life Expectancy, Years)] x (Present Worth Factor at Year 30)

The successful option will have the lowest present worth life cycle cost.

As stated in the Instructions to Bidders, Section 12.3: the Volume 2 Base Bid will be awarded to the lowest asphalt or concrete option that meets the following criteria: 1) Low bid is within GARAA budget, and 2) Life Cycle Cost Analysis.

3. Specification P-152, paragraph 2.1 references that prior to excavation, grading, and embankment, the area shall be completely cleared and grubbed in accordance with Item P-151. Where is the P-151 specification?

ANSWER: P-151 is the clearing and grubbing specification. There is no proposed clearing and grubbing associated with this project. The reference to Item P-151 shall be removed.

4. At the end of each section of the bid form, it states "Sum of Taxes included" in respective bid totals. To avoid any errors or omissions in the bids, please provide the bidding contractors what all tax costs are to be included in these line items on the bid forms.

ANSWER: Sum of Taxes shall be the total anticipated sales tax included in each bid total.

5. Are the existing grades depicted on the Grading and Drainage plans for the new runway Bid Package 4 reflecting any topsoil installed by the previous contractor? If yes, please provide the thickness of topsoil installed by the previous contractor.

ANSWER: Existing grades shown on the plans are "as-design" grades per previous projects. Existing ground elevations are presumed to include 4" of topsoil. Topsoil shall be paid for per T-905 Topsoiling specification.

6. Are the existing structures to be adjusted to grade equipped with the appropriate frames and grates for the Bid Package 4 contractor?

ANSWER: Yes.

7. Structures counted under Volume 3 Base Bid Taxiway B Conversation and NAVAIDs quantities total 5 drop inlets. Please confirm bid quantities for Item D-751-5.1-5 page P-68.

ANSWER: Quantity to be changed to 5.

8. Drawing C-317 shows dual 48" RCP pipe to replace the existing skimmer at the existing Sediment Basin D. The 140 linear foot of 48" RCP pipe shows two each 48" flared end sections, a concrete emergency spillway, and Rip Rap Class I. All these items are not included in the bid form quantities for Volume 3 Base Bid Taxiway B Conversion and NAVAIDs. Please review and add the missing bid items to the proposal form?

ANSWER: As referenced in Specification P-156-3.10, the cost for the pipe, flared end sections, concrete spillway, rip rap, and any other items indicated on the plans as part of the conversion of Existing Sediment Basin D to Detention Basin D shall be incidental to the pay item P-156-4.1-33 CONVERT EXISTING SEDIMENT BASIN "D" TO DETENTION BASIN. This also applies to the conversion of Basins M and N.

9. Please confirm that the topsoil at the borrow area is completely striped and stockpiled at a separate area of the borrow site for later respreads for the Bid Package 4 project?

ANSWER: Within the borrow area, there is a separate stockpile containing topsoil which may be used on the Bid Package 4 project.

10. Does the Engineer have a quantity measured of the stockpiled topsoil available at the borrow area for this Bid Package 4 project?

ANSWER: No.

11. Is the existing grades shown for the borrow area on page EC-53 accurate and current for the Bid Package 4 bidding?

ANSWER: No.

12. Volume 3 Base Bid Taxiway B Conversion and NAVAIDs Item No. S-140-4.2 Removal of Drainage Pipes appears to be missing removal quantities. After reviewing these sheets C-301 through C-310 these quantities exceeds 400 linear feet versus noted bid quantities of 33 linear feet. Please review and advise.

ANSWER: Pipe removal associated with sediment/skimmer basins and the removal or conversion of the sediment/skimmer basins are to be considered incidental to the cost of the associated bid item for removal or conversion for each sediment/skimmer basin. Please reference Specification P-156-3.10.

13. Where is the concrete wash out to be located for the project?

ANSWER: The concrete clean out area for the project shall be located at the staging area. The contractor shall take all precautions to secure the area and control run off. Concrete dumping or washing out of trucks shall not occur in other areas of the site.

14. Could you confirm if the L-861T(L) and L-852T(L) Elevated Taxiway Lights are to be provided with Arctic kit?

ANSWER: Arctic kits will not be provided with L-861T(L) taxiway edge lights. There are no L-852T(L) taxiway edge light pay items.

15. Is there a limit to the amount of personnel a contractor can request for SIDA badging through AVL?

ANSWER: The contractor may only request SIDA badging for key personnel, such as supervisory personnel, crossing guards, and gate guards.

16. What is the cost to replace a SIDA badge if lost or damaged?

ANSWER: Cost is \$70, and subject to change.

17. What duration will the background check be performed?

ANSWER: Ten-year background checks will be performed.

18. Will all contractor employees who have been SIDA badged be trained to communicate with the tower and receive a call sign?

ANSWER: No. This will be at the discretion of the Airport and based on the needs of the Contractor to have personnel trained with movement privileges.

19. Outside of the prescribed requirements, is there a specific type of badge layout preferred by the owner/AOR?

ANSWER: No, however a sample from previous projects will be provided to the contractor for his/her convenience.

20. Reference Special Conditions Section 5, where will the required 4-hour meeting take place? Can the contractor be responsible for holding the class or does the airport have to lead? If the airport teaches the class, how often will it be offered and how much notice will be needed to request the class? Please provide clarification on "personnel assigned to the project." Would truck drivers hauling material be considered "personnel assigned to the

project?" Will there be any test or additional documentation required before, during, or after the 4-hour class?

ANSWER: The Airport will attend and assist with instruction for the class, however the Contractor will take the lead. Typically the meetings are held at the Contractor's staging area. Contractor is requested to provide at least 72 hours' notice to the Owner and AOR prior to holding a safety meeting to coordinate scheduling. Personnel assigned to the project are defined as any personnel intended to be working on the project. Truck drivers hauling material are required to undergo the four-hour training. Contractor shall maintain a log of all personnel issued contractor badges and the date that each personnel received safety training.

21. Does the AOR/Owner want a list of employees that are on site that week or a list of all badged employees with any changes noted per contract requirements?

ANSWER: Refer to Special Conditions, Section 5, Number 7.

22. Will contractor badges need to be inspected upon entrance to the airfield? Will those inspecting the badge be required to check each badge against a list upon entering the airfield?

ANSWER: Badges shall be inspected upon entrance to the airfield by the Contractor's gate guard. Gate guards shall ensure each badge is valid and current. Refer to Sheet SP-05, Security Notes.

23. Please provide more clarification on the term "replacement" as used in Special Conditions Section 5, Number 7?

ANSWER: The word "replacement" is defined as the person assigned to replace another individual removed from working at the job site.

24. Does the AOR/Owner want the contractor badge list to be updated and submitted every time a change occurs?

ANSWER: Refer to Special Conditions, Section 5, Number 7.

25. What is the earliest the contractor can start submitting personnel for SIDA badge background checks?

ANSWER: Contractor may begin submitting personnel for SIDA badge background checks immediately upon notice of award.

26. If the Contract is awarded within 2-3 weeks prior to the notice of proceed and the period needed to complete background checks on contractor employees is 2-3 weeks will additional contract time be granted?

ANSWER: No.

27. Will the potential crossing guard personnel need to present a high school diploma or GED equivalent during the badging process?

ANSWER: No.

28. How long does the AOR have to review names of potential crossing guard personnel before the Contractor can schedule them in the badging process?

ANSWER: Review of crossing guard personnel will follow the same procedures and time frames a shop drawing submittal.

29. What other documentation will be needed for each of the potential crossing guard personnel during the badging process? What is needed on the resumes for each of the potential crossing guards? Can someone who can be determined as competent that is under 25 years of age be considered for a SIDA badge?

ANSWER: Documentation required for crossing guards will be the same as that required for an Airport-issued badge. Refer to Special Conditions, Section 6 for crossing guard requirements.

30. When will specialized crossing guard training be offered? Is there a minimum or maximum amount of crossing guard personnel required per training session? How long will the specialized training last?

ANSWER: Crossing guard training will be offered at the Contractor's request, to be submitted in writing with names of personnel attending the training at least one week prior to training date. Number of trainees in each class will be at the discretion of the Airport. Training will last approximately four hours.

31. Will the Asheville Airport be providing the two-way handheld VHF aviation radios?

ANSWER: No. Refer to Special Conditions Section 6.

32. How would AVL like the assignments of crossing guards be submitted? Letterhead, email, or handwritten?

ANSWER: Crossing guard assignments may be submitted via email.

33. How often can the contractor update the assignments of crossing guards?

ANSWER: Contractor may update the assignments of crossing guards as necessary provided the AOR is notified in writing.

34. In the case of the termination of a crossing guard, if an extra guard is available on site can this guard take the place of the terminated guard so that work on the project may continue?

ANSWER: Yes, provided the replacement guard is properly trained per the specifications and is not being taken away from another duty (i.e. leaving a gate

unattended or a taxiway crossing unattended). All taxiway crossings are required to have a guard on each side at all times, per the plans.

35. In the case of crossing guard termination and the contractor is required to "immediately suspend all construction operations" does this mean all personnel on site have to return to the contractor laydown yard for a safety briefing?

ANSWER: Yes. Refer to Special Conditions Section 6, Number 3.

36. Regarding the sales, use tax, and subcontractor reporting forms, may Excel versions of these documents be provided to the contractor?

ANSWER: Yes.

37. Is there a set time limit that the AOR/Engineer has to review, comment, and return submittals, product data, and samples? What is the A/E time length of "reasonable promptness?"

ANSWER: Refer to Specification L-106-2.1(c).

38. If ample time for the approved submittals, product data, or samples delays work, will additional contract days be granted?

ANSWER: Refer to General Provisions Section 80, Paragraph 80-07.

39. Can the CM direct subcontractors of the GC without the GC being included in the communication (email/phone) or present in the field?

ANSWER: Refer to Section 80, Paragraph 80-01.

40. Will there be other contractors on site working within close proximity to this phase of work where communication will be heavily needed for coordination? (ex. using same haul route on site?)

ANSWER: As stated in the previous addendum, the BP-3 Contractor (GLF) will be on site during the next contract with Precision Approach to complete the Phase 2 NAVAIDs work (MALSR and Localizer tune-up and final construction) concurrently with the Bid Package 4 construction.

41. If the CM directs the GC in completing work not per the contract specifications, is the GC entitled to compensation for additional work?

ANSWER: Refer to Special Conditions 4, Section 2(G).

42. Will all field directives and minor changes of work be provided to the contractor in written form?

ANSWER: Yes.

43. If the CM changes its opinion on a previously decided field directive or change in minor work that it or one of its members directed the contractor, is the contractor entitled to additional time and compensation? If the CM directs the contractor through a field directive or minor change and either the A/E, Owner, or other overriding entity mandates the work be completed in a different way, is the contractor entitled to additional time and compensation?

ANSWER: Refer to Special Conditions 4, Section 2(G).

44. If another contractor working for the Owner has a schedule that prevents the work or hinders the production of the AVL BP-4 contractor, are they entitled to additional time and compensation?

ANSWER: Refer to General Provisions Section 80, Paragraph 80-07.

45. How will the CM coordinate the determination of dates of substantial completion and of final completion with the A/E, Owner, and Contractor?

ANSWER: Refer to Special Conditions, Section 1, Paragraph H.

46. Will the Contractor be privileged to reports from outside inspectors representing public or other agencies that complete inspections with the RPR?

ANSWER: No.

47. How will the RPR be recording the weather conditions into the RPR diary? Primarily where will the RPR be getting the rain totals from?

ANSWER: Refer to General Provisions, Paragraph 10-11.

48. Is the Contractor allowed to view and dispute any records kept in the RPR diary or log book?

ANSWER: No.

49. How many hydrants will the contractor be able to access on the site?

ANSWER: There are two hydrants accessible to the Contractor: one located at the Fuel Farm depicted on Sheet G-07, and the other located adjacent to Access Point 4 depicted on Sheet G-08. Contractor is responsible for establishing water meter and making payments for water. See Special Conditions Section 3, Paragraph 9.

50. If the Contractor will have a concrete/asphalt plant on site, can the Contractor furnish a waterline to the area designated for the concrete/asphalt plant?

ANSWER: Yes.

51. What does the CM consider a "timely notice" for testing and inspecting, as referenced in Section 3, Paragraph 12?

ANSWER: Seventy-two hours unless otherwise noted in the specifications or plans.

52. When will all submitted questions be returned for review by the Bidders?

ANSWER: Questions will be answered as soon as possible and returned for review by Bidders via addendum.

53. Will the test results from any tests and inspections completed by the Owner's testing representatives be provided to the Contractor?

ANSWER: Refer to General Provisions Section 60, Paragraph 60-02.

54. What actions will be taken in the event that the Owner's testing representative and the contractor's quality assurance tester have a difference in test results?

ANSWER: Refer to Special Conditions Section 3, Number 12.

55. Are there any access points, that if used have additional requirements (notice of use)? If so, what access points would those be?

ANSWER: Refer to Access and Haul Road Notes on Sheets G-07 and G-08.

56. Are there any areas of the project where the contractor cannot work at night?

ANSWER: Work within the borrow pit at night may be restricted between the hours of 10:00 pm and 7:00 am to avoid noise complaints from neighboring.

57. In the case of a second contractor in close proximity or using the same haul routes, is the contractor still obligated to strict dust control in these areas?

ANSWER: The BP-4 contractor is responsible for controlling dust as a result of BP-4 construction.

58. Is there a required amount of water trucks or any other method for dust control?

ANSWER: Refer to Sheet G-06, Number 14 and Special Conditions Section 3, Number 23.

59. When the Engineer produces supplemental instruction will the updated drawings sheets be provided, at no charge to the Contractor?

ANSWER: Yes.

60. Is there a standard form for cost proposals for extra work? What backup information will the Contractor be required to provide in the cost proposal approval process?

ANSWER: Contractor shall submit backup justifying cost and a cost proposal that clearly indicates cost for time, materials, profit, and overhead in accordance with the specifications. See General Provisions Section 90.

61. Does the designated, qualified of the Contractor who has to be on site while subcontractors are on site need to be badged by the Airport?

ANSWER: Yes. Refer to General Provisions 80-05.

62. Will the Owner issue the notice to proceed directly to the Contractor or will correspondence go through the AOR?

ANSWER: Refer to General Provisions 80-03.

63. Can the Contractor and its Subcontractors begin prepping the Contractor lay down yard and mobile offices prior to notice to proceed? Can the 4-hour badging class occur prior to the notice to proceed?

ANSWER: Yes.

64. Provide clarification on "Sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications."

ANSWER: See General Provisions Section 80.

65. Will additional time and compensation be allotted to the contractor in the instances where a late flight or insubordinate aircraft delays the start of a runway closure?

ANSWER: No.

66. Is the Contractor responsible for providing as-built data on localizer and MALSR's that were previously installed in the prior contract?

ANSWER: No.

67. Please provide clarification on how as-built data of runway thresholds and runway profile are to be submitted 31 days prior to the required completion of all pavement construction, as referenced in General Provisions Section 80-08, Task No. 1?

ANSWER: Please refer to General Provisions Section 80-08, Task No. 1. The as-built data shall be provided by 9/1/2017.

68. If the FAA flight check is changed, will the completion dates change also?

ANSWER: No.

69. During the 24 hours before the flight check date, what areas of the project is the Contractor allowed to work?

ANSWER: Refer to Section 80, Task No. 1 Checklist. Contractor shall remain clear of the active runway safety areas, TOFA's and NAVAID critical areas during flight check.

70. Would the AOR recommend that the FOD checks prior to the flight check be completed by equipment or by personnel on foot?

ANSWER: It is up to the Contractor to determine means and methods. Surfaces to be utilized by flight check aircraft shall be clear of FOD to the Owner and AOR's satisfaction.

71. Will any NCDOT standard cones or temporary barricades be used to block the construction entrances during the flight check?

ANSWER: Contractor may use either Contractor-provided traffic cones or Contractor-provided barricades to block construction entrances.

72. Are there any permits that only the owner has to apply for?

ANSWER: The Owner is obtaining the erosion and sedimentation control permitting.

73. Will the owner be providing any low-profile barricades for use on the project?

ANSWER: Refer to Sheet SP-20, Note 19.

74. When General Provisions Section 70 references "public use," is it referring to aircraft operations?

ANSWER: Yes.

75. How much time will the Contractor be given, in the event of suspension of work, to prevent damage to the work that has been completed? If this suspension is outside the control of the Contractor, is the Contractor entitled to additional time and compensation?

ANSWER: The Contractor will not be allowed additional time and compensation to repair damages incurred due to the Contractor's failure to complete the work on time.

76. Will the FAA maintenance personnel be wearing proper PPE upon entering the work site?

ANSWER: Yes.

77. Does the seven-day notice of construction activities referenced in General Provisions Section 70-15.1(b) need to be requested per phases, or can the request cover the entire project? Does the seven-day notice also need to request the FAA facilities to be remarked?

ANSWER: Contractor may request the entire project be marked. Contractor is strongly suggested to survey and record field-locate data for future use, in the event marker flags are lost in the field. The seven-day notice applies for facilities to be remarked.

78. How will the FAA personnel mark any active cable or facility? What is the tolerance zone (distance perpendicular from the marking) the contractor is responsible for hand-digging? In the event that the cable is outside the tolerance zone, who is responsible for damage that may occur?

ANSWER: FAA personnel may use instruments to field-locate cables. Field verification of existing utilities and FAA cables is the sole responsibility of the Contractor. Refer to Utility Notes on Sheet G-06.

79. Will the Engineer be completing tests and inspections on material as it arrives on site or after material has been installed or utilized?

ANSWER: Testing may occur either prior to installation or after installation, depending on the nature of the materials to be tested and the test to be taken. Refer technical specifications for more information on specific items.

80. In instances where ASTM, AASHTO, Federal Specifications, Commercial Item Descriptions, Permanent Runway 17-35 Construction Bid Package 4 Contract and Bid Documents, and another cited methods are in conflict with one another, which one will be utilized on the project?

ANSWER: Refer to General Provisions Section 50-03.

81. Will the Contractor be notified of failing tests as they occur?

ANSWER: Yes. Refer to General Provisions Section 60-02.

82. Is the approval of the Owner or CM required for work directed by the FAA point-of-contact?

ANSWER: Yes. Refer to Special Conditions Section 4, Paragraph 2.

83. Please provide clarification on where the Contractor is to have a copy of the plans and specifications.

ANSWER: Location in which the Contractor keeps their plans and specifications is considered means and methods, at the Contractor's discretion. Refer to Special Conditions Section 1, Chapter 8 for Contractor's requirements to maintain record drawings.

84. When another contractor is present on site, what responsibilities will be shared (security, dust control, etc)?

ANSWER: Other contractors working on site will be responsible for their own access, safety, and supervision.

85. How often will the Owner have its independent surveyor on site?

ANSWER: The Owner reserves the right to survey the site and construction at any time.

86. If the Engineer is to check all stakes before work can begin, how much time is needed for review?

ANSWER: No more than 14 calendar days.

87. How are survey notes to be submitted to the Engineer? What information is the Engineer looking for in the survey notes?

ANSWER: Survey notes may be submitted in PDF form. Refer to General Provisions 50-06.

88. If the Contractor plans on using GPS for completing work, will the Owner's surveyor need to confirm the model?

ANSWER: The Owner reserves the right to request that the Contractor submit the GPS model for verification.

89. Are the clearing and grubbing perimeter stakes to be completed prior to work, or after work has been completed? Or both?

ANSWER: There is no clearing and grubbing on this project.

90. Will there be any load restriction on any surfaces of the AOA?

ANSWER: Per Sheet GP-07, only rubber tired vehicles shall be allowed on existing Airport pavement. Contractor is responsible for all damage to existing and proposed airfield pavement as a result of Contractor's operations.

91. Please provide clarification on Section 40-08, "the Contractor shall cut all brush and woods within the limits indicated..."

ANSWER: There is no clearing and grubbing on this project.

92. When and where was the Mandatory Pre-bid Meeting?

ANSWER: Refer to Invitation to Bid.

93. In the pre-bid meeting that occurred December 15, 2016, RSH said that all bid forms must be "hand-written." Please provide clarification on Instruction to Bidders, Paragraph 4.2 that states the blanks on the bid forms must be completed in ink or typed.

ANSWER: All blanks on the bid forms must be completed in ink or typed. Typing is acceptable provided the forms are filled out correctly and completely.

94. Is the contractor entitled to overhead that is lost when the Greater Asheville Regional Airport purchases materials, supplies, or equipment as part of the contract?

ANSWER: The Contractor may not charge overhead on materials, supplies, or equipment provided by the Owner.

95. If the amount of equipment is not deemed sufficient (See 80-05) when will the Greater Asheville Regional Airport Authority provide the contractor the necessary equipment that it deems sufficient?

ANSWER: It is the Contractor's responsibility to provide necessary equipment in accordance with the Contract documents.

96. If quantities are exceeded is the Contractor entitled to additional contract time?

ANSWER: Refer to FAA General Provisions. Sections 40 and 80.

97. At what percentage does a line item need to exceed in order to request a change in unit rate?

ANSWER: Refer to FAA General Provisions, Section 40.

98. The pre-bid meeting that occurred on December 15, 2016 was not noted as a mandatory pre-bid meeting. If a contractor failed to be at the pre-bid meeting on December 15, 2016, is the contractor disqualified?

ANSWER: Refer to Instructions to Bidders, Section 11.

99. Does the Owner anticipate to use the full 90 calendar day period to award the Contract?

ANSWER: No.

100. Will additional time be granted to the contractor if the award is within the 90 calendar day period but after the determined Notice to Proceed date?

ANSWER: Considerations will be made if the award does not occur by the anticipated Notice to Proceed date. However, it is anticipated the award will occur by the anticipated Notice to Proceed date.

101. Please provide clarification on the first paragraph of the bidder's declaration and understanding to "the OWNER, its agents and employees, are not to be in any manner held responsible for the accuracy of, or bound by, any estimate or plans of underground structures relating to the work."

ANSWER: Depiction of any existing underground utilities, structures, items, fixtures, and appurtenances on the Contract plans is an approximation only. The Contractor is solely responsible for field verification of existing underground utilities, structures, items, fixtures, and appurtenances.

102. Can the clause, found on NONSEGREGATED FACILITIES REQUIREMENT (b) "the term does not include separate or single-user restrooms or necessary dressing or sleeping areas provided to assure privacy between the sexes" be added to Proposal Form 9?

ANSWER: No.

103. Is the contractor required to inquire the race information of subcontractor owners? This information is not listed on the NCDOT list the contractor is asked to use.

ANSWER: Yes.

104. Can the Proposal Form 12 – Subcontractor List, be completed electronically or may it be hand-written?

ANSWER: All blanks on the bid forms must be completed in ink or typed. Typing is acceptable provided the forms are filled out correctly and completely.

105. The minority and female participation requirements add up to 15.4% of the total contract. If this total for the project is met, can the individual percentage breakdown vary from what is stated?

ANSWER: The goals are applicable for minority and female participation as listed in the Affirmative Action Requirement on page MCP-2.

106. As stated on page MCP-18 of the Disadvantaged Business Enterprise provision, prompt payment to subcontractor is to be released when work has been determined "satisfactorily

complete." Who determines when work is "satisfactorily complete?" Please provide clarification on what makes work "satisfactorily complete."

ANSWER: The Contractor is responsible for determining when its subcontractor's work is satisfactorily complete for the purpose of the prime contractor paying its subcontractors.

107. If the Contractor or Contractor's personnel invents something during the course of the project, will the contactor or contractor's personnel be recognized for their achievement?

ANSWER: No.

108. As stated in General Provisions, Paragraph 10-11, please provide clarification on what "at least 50% of a normal working day" is.

**ANSWER:** Four hours.

109. If the number of inclement weather days exceeds that designated in the contract, does the contractor receive the days over the contract amount or total amount of days?

ANSWER: An extension in contract time due to weather will only be granted if the number of inclement weather days in the contract duration exceeds the number of baseline normal inclement weather days as provided in the table in Paragraph 10-11 of General Provisions Section 10.

110. How must the contractor request to receive the inclement weather days?

ANSWER: Requests shall be made in writing to the AOR, complete with all data and records required in Paragraph 10-11 of the General Provisions, Section 10. A request for to receive inclement weather days does not obligate the AOR or Owner to approve the inclement weather days. Please note that the critical milestone dates shall be met regardless of inclement weather. Refer to General Provisions 80-08.

111. If one of the inclement weather days occurs on one of the observed legal holidays, does it count towards the monthly total?

ANSWER: No. The Contractor is not allowed to work on holidays listed in Paragraph 10-11 of the General Provisions, Section 10.

112. The RPR is required to be on site when the Contractor is working. Are there any days that the contractor will not be permitted to work because the CM does not have a representative on site?

ANSWER: No. The RPR will be required to be on site at the sole discretion of the Owner.

113. Is the Contractor entitled to additional contract days when additional or extra work has been provided through supplemental instruction. RFI, or other written directive from the CM or Owner?

ANSWER: Refer to General Provisions Section 40.

114. Is the site available for examination prior to the bid?

ANSWER: The site was available for examination during the field visit provided in the mandatory pre-bid conference. An additional site visit may be scheduled.

115. Will personnel placed on exterior gates require a SIDA badge?

ANSWER: Yes.

116. Can airport perimeter gate guards sit in a vehicle? Or does the contractor need to furnish shacks for each of the gates?

ANSWER: Gate guard personnel may sit in a vehicle. Gate guards sleeping at their posts or not properly checking badges at the gates will be terminated immediately. Being allowed to sit in a vehicle shall not impair or impact their ability to properly fulfill the responsibilities and duties of that role.

117. Is the "use of existing perimeter road" defined in Number 8 on page CSPP-8 only applicable to those that are not labeled as haul routes?

ANSWER: Use of existing perimeter road applies to any perimeter road on the site. Hauling is allowed on roads as indicated in the plans.

118. Per page CSPP-9, Number 14 -- may equipment and vehicles be left in interior phases overnight? Specifically equipment that would need a low-boy to move?

ANSWER: In general, Contractor shall remove all equipment and vehicles from infield areas while no construction is being performed. There may be cases where equipment may be left in place overnight within interior phases, provided the equipment will be used on the following day. This is at the discretion of the Airport. At no times may equipment be left idle within the runway object free area, taxiway object free area, FAR Part 77 Surface, or in a location that interferes with aircraft operations.

119. Will the Contractor be responsible for storage areas of previous projects that are not used on BP-4?

ANSWER: No.

120. Will the contractor be responsible for removing undesired objects (rocks, sticks, trash, etc.) from owner-supplied topsoil?

ANSWER: Yes. See Topsoil Specification T-905-3.4.

121. How much notice will RPR/Owner need for perimeter road closures? If a detour of a section of perimeter road is needed, how many days of notice of the detour is required by the RPR/Owner? Is the contractor responsible for putting up detour signs?

ANSWER: The RPR/Owner requires at least 72 hours of notice for perimeter road closures and detours. The Owner reserves the right to deny a closure request for any reason. The contractor is responsible for marking the detour route with barricades and/or traffic cones to the satisfaction of the Owner.

122. How much notice does airport maintenance need for marking any utilities that are not part of the FAA? After a request is made for marking of AVL cables, how much time until the contractor can dig in that area?

ANSWER: Refer to Section 70, Paragraph 70-15 of the General Provisions.

123. Per CSPP Paragraph 207(B)(d), please provide clarification on what changes to traffic control procedures can be made?

ANSWER: Air traffic control procedure changes will only be made by FAA air traffic organization (ATO).

124. How much time should the contractor anticipate for crossing taxiways? Does it change and vary throughout the day?

ANSWER: Contractor may cross active taxiways as allowed by air traffic control.

125. Can material be stockpiled in the inner phases as long as they are outside the RSA, ROFZ, ROFA, TSA, and TOFA?

ANSWER: The airport reserves the right to limit the size of stockpiles as necessary if stockpiles interfere with air traffic operations. Stockpiles shall not obstruct the FAA Part 77 surfaces.

126. Can the Contractor elect to stockpile demolished material in the borrow area and haul at a later time?

ANSWER: Yes, however all material shall be hauled off site prior to the end of the contract duration. Substantial completion of the borrow area will not be given until such time the stockpiled demolished materials are removed and the site brought to appropriate conditions.

127. If a vehicle is equipped with a rotating or flashing amber light, is an orange and white checkerboard flag required?

ANSWER: Refer to Sheet G-06, General Notes No. 11. Contractor passenger vehicles shall be required to operate in both day and night with a flashing amber light and appropriate placards.

128. Can any of the contractor personnel escort the hauling vehicles that do not have rotating/flashing amber lights or flags?

ANSWER: No. Requirement for flashing lights and flags pertains to all vehicles on site.

129. CSPP Paragraph 209 is referencing FAA document AC 150/5210-5. Construction vehicles in this document fall into the category of "other vehicles" (page 2, point 2, sub point d). The category restricts the painting of vehicles from using "solid black or solid white." Generally the contractor vehicles are solid white. Please provide clarification on what color contractor vehicles can be.

ANSWER: Contractor vehicles may be any color, provided they are equipped with the proper identification and lighting required by plans.

130. Where can the AVL escort procedures and requirements be found? Is the contractor responsible for the training or will the owner?

ANSWER: Escort procedures shall be provided by the Owner during the badging and training process.

131. Will all contractor personnel be responsible for having a general knowledge of crossing procedures by "signal light or other means appropriate for the particular airport?"

ANSWER: Crossing with light gun signals shall be part of training provided during the badging process. Individuals receiving an airport badge will be required to retain this knowledge.

132. When will the contractor receive a copy of DOT/FAA/AR-00/52 from either the Airport Consultants Council, Airports Council International, or American Association of Airport Executives? According to this document, all guard stations should be sheltered to permit maximum visibility. Does a POV meet these requirements? Is the contractor responsible for providing sufficient space to "direct a person or vehicle to one side for further inspection without blocking access?" This document "communications between all sheltered security checkpoint stations and airport security services office." Will personal cell phones suffice for this purpose?

ANSWER: Document may be obtained online. Contractor is responsible for providing guard stations as described in the plans and Special Conditions Section 6. Cell phones are a part of this requirement.

133. Is the Contractor obligated to stay with, follow, or track wildlife found within the wildlife fence until the airport personnel arrive?

ANSWER: No. However, the Contractor is asked to report all wildlife to the AOR immediately.

134. Please provide clarification on what the CM views as a power sweeper?

ANSWER: A power sweeper is a self-propelled motorized broom with the built purpose of cleaning pavement of dirt and/or FOD.

135. Is the contractor responsible for cleaning and removal of hazardous materials created or brought onto the site by owner or airline companies? If hazardous material is found on site is the contractor entitled to extra time and compensation for the removal of such material?

ANSWER: Removal of hazardous materials is not expected as part of this runway paving, lighting, and NAVAIDs project. Contractor is solely responsible for the reporting and cleanup of any spills of hazardous materials occurring by the Contractor's own personnel or equipment.

136. How much notice does AVL need to initiate or cancel a NOTAM?

ANSWER: Refer to Safety and Security Notes, Sheet SP-05, No. 16.

137. In the case of an emergency during the day, who will contact the contractor in the emergency that mandates the contractor's personnel and/or equipment to immediately vacate an area? In such an emergency, can equipment such as excavators and dozers cross taxiways and other surfaces without being hauled on a low-boy? Is the contractor responsible for developing procedures and methods in coordination with ARFF personnel or will the ARFF personnel develop these procedures and methods for the contractor to follow?

ANSWER: The contractor will be contacted by the AOR, Owner, or Air Traffic Control. At no times may the Contractor cross taxiways or runways without clearance from Air Traffic Control. Specific procedures or situations will be further discussed in the pre-construction conference, with ARFF personnel in attendance.

138. Is the contractor responsible for submitting FAA Form 7460-1?

ANSWER: No.

139. As the paving of runway and taxiways are completed, how is the contractor to identify to aircraft that these paved surfaces are off-limits?

ANSWER: Refer to closure and crossing plans provided in Volume 1 of the Contract Plans.

140. Where is the contractor recommended to store the lighted X's used for runway closures? Is the contractor responsible for replacing burnt out bulbs? If so, what kind of bulbs are needed? How are the lighted X's moved around the site? What is the fuel source for the lighted X?

ANSWER: Contractor will be directed by the Airport as to where to store lighted X's. Normally, this is adjacent the airport electrical vault on the commercial apron, however subject to change at direction of the Airport. The Contractor is responsible for replacing burnt out bulbs. Lighted X's shall be moved around the site in the retracted position while turned off. Contractor is responsible for all fuel, oil, and maintenance to the lighted X's. Lighted X's are powered via diesel generator. Bulbs shall be 130-volt, 100 watt spot, BRL-38.

141. Please provide clarification for "comprehensible warning indicators" listed in Section 220 (A) of the CSPP.

ANSWER: In the case of this project, this refers to construction barricades. Refer to closure and crossing plans provided in Volume 1 of the Contract Plans for barricade placement.

142. How much notice does AVL need to initiate or cancel a NOTAM?

ANSWER: Refer to Safety and Security Notes, Sheet SP-05, No. 16.

143. If the contractor intends on starting with Phase 4A, can he provide the required notice of Taxiway A and A1 closure prior to the notice to proceed?

ANSWER: The contractor may provide the required notice prior to the notice to proceed. However, it is expected that work will begin immediately upon any airfield closure. No airfield pavement may be closed unless the Contractor is prepared to begin work, with all appropriate personnel and materials on hand.

144. If the contractor intends on starting with Phase 4A and has provided the needed notice of closure for this taxiway, is the Contractor allowed to not install the orange safety fence along the closed portions of Taxiway A and A1?

ANSWER: No.

145. Can milled asphalt be stockpiled on site and used for haul road upkeep?

**ANSWER: Yes** 

146. If the contractor directs the contractor to haul the stone off site, will the owner pay for the hauling and disposal of the material?

ANSWER: No.

147. What is the depth of range for each of the Pavement Milling unit price? (0"≤2"≥\_\_\_ "will be considered Item P-101-5.4) ( "≤4.75"≥ " will be considered Item P-101-5.3)

ANSWER: General limits of proposed depth are indicated on the plans. There is no specific range of milling for the unit price.

148. How often are cross sectional data required to be submitted? How will the items be paid for until cross sectional data is provided?

ANSWER: Cross sectional data shall be submitted for payment for earthwork. See Specification P-152 for more information.

149. Can survey and stake out begin prior to the notice to proceed?

**ANSWER: Yes** 

150. "Topsoil shall be stockpiled for future uses in areas designated on the plans or by the Engineer." What would be the estimated distance the engineer would direct the contractor to stock pile?

ANSWER: The stockpile area is indicated on Sheet G-07, labeled as "BORROW PIT."

151. In the case of the contractor being instructed to stockpile excavated material, will the contractor be entitled to time and compensation?

ANSWER: See Specification P-152, Part 3 for method of measurement for payment of excavated material. No payment will be made for stockpiling or excavation that may be required to access suitable material within the borrow pit.

152. If a borrow source outside the borrow area designated by the airport is needed will the contractor be able to provide a new unit price for borrow material?

ANSWER: All required material for this project will be obtained from the on-site borrow pit.

153. Is there a minimum amount or size of pump that the contractor must maintain on site at all times?

ANSWER: At minimum, the contractor shall have at least two 6" pumps on site, each with at least 100 feet of discharge hose. In addition, the contractor shall maintain the size and number of pumps required to fulfill the dewatering requirements of Specification P-152.

154. Is there a required distance of intake or discharge the contractor is to maintain on site at all times?

ANSWER: The requirement is up to the contractor in order to meet the requirements of the P-156 specification.

155. Is the contractor required to grade to drain areas not within the areas of disturbance or where no grading is occurring?

ANSWER: The intent of the project is for the contractor to not be required to specifically grade areas to drain not within the areas of disturbance, however, the requirements of the primary and secondary work areas per Sheets G-11 and G-12 are to be met at all times. If any work impacts areas outside the limits of disturbance, the contractor will be required to repair the areas, including grading areas to drain.

156. Are there slopes that might need repair that could only be repaired during night work?

ANSWER: Slopes within active runway safety area and taxiway object free areas will be required to be repaired during runway and/or taxiway closures, at night.

157. Is the depth of the washout incidental to the area of the disturbed area requiring slope repair?

**ANSWER: Yes.** 

158. Will the slope repair areas need to be surveyed prior to the start of the repair?

ANSWER: Slope and ditch repair areas will be measured in the field by the Contractor prior to repair. Measurements shall be provided to the AOR for verification and concurrence.

159. Are there ditches that might need repair that could only be repaired at night?

ANSWER: Ditches within the taxiway object free areas will be required to be repaired during runway and/or taxiway closures at night.

160. Please provide clarification for what "minor grading" is.

ANSWER: Minor grading is considered work required to direct water as required by the plans, AOR, Engineer, or NCDEQ. Minor grading may generally be done with minimal equipment and minimal hauling of material to or from the area.

161. For payment of slope repair will survey be needed to justify quantity?

ANSWER: Slope and ditch repair areas will be measured in the field by the Contractor prior to repair. Measurements shall be provided to the AOR for verification and concurrence.

162. For payment of ditch repair will survey be needed to justify quantity?

ANSWER: Slope and ditch repair areas will be measured in the field by the Contractor prior to repair. Measurements shall be provided to the AOR for verification and concurrence.

163. Can wattles/compost sock be used in the place of block and gravel since the wattles/compost sock promote grass growth around inlet structures?

ANSWER: No.

164. Will maintaining existing construction entrance be payed per each existing construction entrance or every time the contractor is requested to refresh the existing construction entrance?

ANSWER: Maintenance of the construction entrance is considered to be throughout the duration of the project, not every time the construction entrance needs to be maintained per the plan details. Unit price shall be for the duration of the project.

165. Will the backfilling of basins per contract plans be incidental to the remove existing sediment basin line items?

ANSWER: Backfilling is not incidental to the removal of existing sediment basin line item.

166. Should the removal of skimmers, risers, and the pipe be considered incidental to the remove existing sediment basin line items?

ANSWER: Yes.

167. Should the removal of baffles and erosion control stone be considered incidental to the remove existing sediment basin line items?

ANSWER: Yes.

168. How far in advance is the contractor required to layout markings?

ANSWER: Contractor shall layout markings with enough time for them to be verified by the AOR and completed based on the required schedule.

169. How much time is required before vehicles and aircraft can pass over the marking after application?

ANSWER: Time shall be based on requirements of the specification, weather conditions, and recommendation of the manufacturer. The time shall be confirmed prior to allowing traffic to cross marking.

170. Where will the contractor be required to complete the test strip for P-620 Pavement Marking?

ANSWER: The Contractor may choose an appropriate location for the test strip. If the test strip is unacceptable, Contractor shall re-paint the test strip accordingly. Contractor shall coordinate with AOR prior to establishing the test strip.

171. When the contractor is painting markings for the permanent runway where existing taxiways are located, can the painting be applied under an escort or will the taxiway have to be closed?

ANSWER: The Airport reserves the right to provide an escort for any work that is within the Runway Safety Area or Taxiway Object Free Area. Painting on active Taxiways shall occur during taxiway closures.

172. Will the test strip be required before each type of line and color or each day before work begins?

ANSWER: Test strip is required at the beginning of the marking or as requested by the Owner and AOR. If the Owner or AOR deem the marking to be unsatisfactory, they may request additional test strips prior to allowing additional marking to be placed on new asphalt.

173. Does the FAA have a list of approved marking contractors they can make available to the bidders list?

**ANSWER: No** 

174. Can manufacture specification for equipment be provided to the AOR for approval?

ANSWER: Yes, however, the use of the manufacturer specification does not guarantee approval.

175. Can a contractor that has had experience on a previous airports of a lower airport classification be approved if deemed competent?

ANSWER: Approval of experience shall be at the discretion of the Owner or AOR.

176. Will the pavement marking need to be surveyed for final payment?

ANSWER: Yes.

177. Will the pavement marking removed need to be surveyed for final payment prior to Removal?

ANSWER: Pavement marking removal may be measured in the field submitted to the AOR for concurrence prior to final payment.

178. Is permanent pavement marking required for the FAA test flight?

ANSWER: No. Temporary marking is acceptable for FAA Flight Check.

179. Please clarify the requirement to "hand dig" in the CCB areas. To locate only; or does this mean all depths, all areas within 3 linear feet of the boundaries?

ANSWER: Any excavation that requires the contractor to be within 3 feet of the linear, both vertically and horizontally shall be hand dug in order to not breach the liner.

180. These CCB areas are quite large and are well within the work area. Is it anticipated that this project will impact these areas?

ANSWER: It is not anticipated that this project will impact the liner, however, the contractor shall make all precautions to protect the liner during construction.

181. Can you provide information on the CCB liner and the process for repairing it if disturbed?

ANSWER: The material utilized for the cap liner in Area 3 and Area 4 is an impermeable 40 mil HDPE product. The repair method involves patching the damaged area with liner material in a manner that secures the area and alleviates infiltration through the liner. The original liner was installed by Chesapeake Containment Systems. Any costs for repairs shall be borne by the contractor. Such repairs shall only be performed by Duke Energy and/or Charah, with the BP-4 Contractor bearing all costs.

182. Please provide details pertaining to the existing pavement to be removed. i.e. material (asphalt/concrete), thickness, underlying base material (CTB, aggregate base, etc.).

ANSWER: Please see geotechnical report with the bid documents and Notes 9, 14 and 18 of C-20.

183. To expand on the previous question; will the underlying courses be allowed to be utilized as fill material in the embankment areas?

ANSWER: Please reference Note 17 on C-20.

184. Please confirm that Additive Alternates 2, 3, & 4 will be almost entirely night work, given their location inside the RSA. Or will there be any day-time shut-downs of temporary runway 17-35 allowed?

ANSWER: Work for the additive Alternates 2, 3, and 4 shall be scheduled as required by the work being completed in the location it is being completed. There is expected to be night work with the additive Alternates 2, 3 and 4. Day time shut downs of the runway shall not be allowed.

185. Given the amount of night work that will be required with respect to embankment, and given the time of year and accelerated schedule, will lime treatment for drying be allowed? If so will there be any special conditions for performing this work on the airfield?

ANSWER: Lime treatment may be considered as needed and as requested by the contractor. Any lime treatment would need to be done in a manner to reduce the amount of lime lost due to wind and rain. The owner reserves the right to place

additional requirements depending on the location and duration of the lime treatment.

186. Note in CSPP regarding Borrow material: States that "stockpiled material" shall be used prior to "on-site" material. Please clarify this statement and the location of the referenced "stockpiled" materials.

ANSWER: The borrow area contains stockpiled material from previous projects. It is the intent of this project to use any stockpiled material to the greatest extent possible.

187. Please confirm that the AOR's field office is to be relocated from its current site on Airport property, and that this work is to be performed by the Contractor.

ANSWER: At the end of the project, the existing AOR's field office will be relocated from its existing location and the work is to be completed by the contractor. The field office shall be relocated to a site within the boundary of the Airport. Relocation shall not require travel over public roads, but stay within the interior of the Airport. The cost of the relocation shall be incidental to the project.

188. Can the material removed from the sediment basins be hauled and spread at the borrow pit location or must it be disposed of off-site?

ANSWER: Material removed from the sediment basins can be reused in the borrow area, however, the material must be reused in a manner that mitigates erosion or loss of the material due to wind or rain. The material must be vegetated and meet all other requires per the specifications.

189. Note 9 on G-07 states "Contractors staging area #2 and #3 shall only be used as allowed by the AOR". Can you clarify if these areas will be usable?

ANSWER: Staging Area 2 and 3 shall be used as allowed by the AOR in order to require the contractor to use Staging Area 1 as the primary staging area. Staging Area 2 and 3 shall not be used for placement of trash, parking of personal vehicles, or other items that may be conflicting to the overall safety and security of the project site.

190. Reference G-11 and G-12. G-11 does not show Staging Area #4. G-12 does not show Area 3, nor Access Point #2. If desired, will Contractor be allowed to use all staging areas and access points at any time through the duration of the project, or are these intentionally sequenced to minimize construction traffic crossing the centerline of the active runway?

ANSWER: The access points and staging areas are intentionally sequenced in order to minimize construction traffic around the site. If requested, the Owner reserves the

right to allow access and staging to occur at locations not specifically allowed per the plans. A request by the contractor to use other access and staging location does not obligate the Owner to approve the request.

191. Reference note 11 on SP-20. Will the days listed be counted against our contract time?

**ANSWER: Yes** 

192. Is there contractor access to water on site? If so, can you provide the location of access?

ANSWER: Yes, See C-02. There is also a hydrant located off Ferncliff Park Dr. adjacent to Access Point 4.

193. Reference plan sheet SP-21. The "Project Schedule" indicates that the Flight Check will take place after completion of Phase 4F. At that time, the final pavement will not yet be completed (Phase 4H) and there are multiple areas that are still in the RSA of the new permanent runway. Please clarify if all phases (4A-4K) will need to be completed prior to the flight check.

ANSWER: The intent for the flight check is that the final lift of pavement for the runway is completed. This will require the completion of Phases 4A, 4B, 4C, 4D, 4E, and 4F. The final paving and marking for the runway associated with 4H needs to be completed prior to the flight check, however, permanent marking, TDZ lights, centerline lights, and grooving may occur after the flight check but prior to the runway commissioning.

194. Could you confirm if the L-861T(L) and L-852T(L) Elevated Taxiway Lights are to be provided with arctic kit?

ANSWER: Arctic Kits will not be provided with Taxiway Edge Light fixtures.

195. Confirm Item L-125-13 for the L-858C Sign – Non-Light Taxiway End Marker has been removed per addendum 2 revised bid form?

ANSWER: Item L-125-13 L-858C Sign – Non-Lighted Taxiway End Marker shall be provided in Volume 3 base bid work.

196. Confirm Item L-125-20 on page P-21 Addendum 2 Bid Schedule applies to Volume 3 Sign Schedule on Sheet Number E-905? There are no relocated Signs listed in the Volume 2 Sign Schedule Drawings. If yes, should the quantity be (9) nine instead of (8) eight?

ANSWER: The quantity of relocated signs for Volume 2 base bid and alternates is (8). See plan sheet E-109 notes 10 & 11.

197. Confirm Item L-125-21 on page P-21 Addendum 2 Bid Schedule applies to Volume 2 Sign Schedule on Sheet Number E-512? If yes, should the quantity be (7) seven?

ANSWER: The quantity for pay item L-125-21 Volume 2 base bid is (3). The quantity for Volume 2 Add. Alt.3 is (2). The quantity for Volume 2 Add Alt.4 is (2). See Sign Schedule sheet E-512 "Bid Schedule" column.

198. Confirm Item L-125-21 on page P-61 Alt 4, TWY B applies to Volume 3 Sign Schedule on Sheet E-902? If yes, should the quantity be four (4)?

ANSWER: Yes, the quantity is (4).

199. Confirm Item L-125-25 on page P-71 Addendum 2 Bid Schedule should be L-852T(L) Inpavement Taxiway Light per the Airfield Electrical Legend Description "A" on Drawing Sheet E-001?

ANSWER: No, in Volume 3 base bid all Taxiway Edge lights are L-861T(L) elevated lights. There are no L-852T(L) semi-flush Taxiway Edge lights in this project.

200. Verify your count on Item L-125-32 L-861T(L) with the symbol "68". I count a total of (85) in the Volume 3 Airfield Lighting Layout Plan Sheet Numbers E-701, E-702A, E-702B, E-703, E-704, E-705, E-706A, E-706B, E-707 and E-708, the bid form only contains a total count of (73).

ANSWER: In Volume 3 base bid the quantity of Taxiway Edge lights L-861T(L)68 is (60). If Add. Alt.3 or 4 is awarded the quantities will be adjusted accordingly, see "Sheet Note" in upper right corner of plan sheets E-702A and E-706A.

201. Please confirm Item L-125-51 7.5kW L829 3-Step quantity on Addendum 2 Bid Form Proposal, Sheet P-24 is correct? I count only one (1) on Sheets E-403 and E-411.

Please confirm Item L-125-53 7.5KW L829 CCR 5-Step quantity on Addendum 2 Bid Form Proposal, Page P-24 is correct? I count two (2) on Sheets E-403 and E-411.

Please confirm Item L-125-55 20KW L829 CCR 5-Step quantity on Addendum 2 Bid Form Proposal, Page P-24 is correct? I count three (3) on Sheets E-403 and E-411.

ANSWER: The bid form quantities are correct.

202. Is the ALCMS to have redundant computers?

ANSWER: The ALCMS shall have redundant computers.

203. Please confirm if the requirement in Detail A (on plan sheets E-506, E-507, E-508) is for an L-868B ¾" Flange Ring with 5/8" Dam "AF5402XY" or L-868B ¾" Spacer Ring with 5/8" Dam "AR5421XY"? The L-868B ¾" Flange Ring comes with O-Ring Groove and O-Ring. The L-868B ¾" Spacer Ring does not have the O-Ring Groove and O-Ring.

ANSWER: All L-868B light bases for in-pavement fixtures will be installed with a spacer ring with concrete ring, no flange rings with O-rings.

204. Clarify if Bid Form Item No's L-125-4 and L-125-5 located on page P-20 Addendum No. 2 are to include the L-868B top section, spacer ring and light base can or does this required material apply to Bid Form Item No. L-125-42 located on page P-23 Addendum No. 2 Bid Form?

ANSWER: The materials apply to L-125-42 pay item.

205. Please confirm on sheet E-534 Temporary Lighting Plan Sheet 4 of 5 if the (1) L-850C Y/C, (1) L-850C C/C and (1) L-862 Y/C lights are required against the Bid Form Item L-104-1?

ANSWER: There is no temporary runway lighting shown on sheet E-534 only temporary taxiway lighting. During construction, should the contractor need to provide temporary lighting for Temporary Runway 17-35; that would be paid for under pay item L-104-1 as long as the lighting provided is not relocated to a permanent location before construction is completed.

206. Can millings be used on site to improve or supplement gravel roads?

ANSWER: Yes.

207. The specifications indicate embankments are to be built with suitable soils, could you give a definition as to what are suitable soils?

ANSWER: Reference P-152 for guidance on suitable materials and embankment.

208. Our analysis shows that a considerable amount of dirt is being moved at the Borrow Area. Is material being moved to allow for the owner to select suitable material?

ANSWER: The current project is moving material in the borrow area to allow for positive drainage. It is expected the material in the borrow area is suitable material.

209. How or who will determine if the material meets the Definition of suitable material?

ANSWER: Quality Assurance Testing Firm and/or AOR.

210. Will the Contractor that is currently on site cleanout/remove sediment from the existing ponds after their construction is complete?

ANSWER: Yes.

211. Except for the borrow area, there doesn't appear to be any soil boring representing the current conditions. Are we to assume that the areas requiring embankment do not have to be stripped of topsoil?

ANSWER: All areas requiring embankment shall be stripped of topsoil.

212. Please clarify the requirements for maintaining sediment basins.

**ANSWER: Please reference Specification P-156-3.5.** 

213. Will the contractor be required to remove sediment buildup?

ANSWER: Yes. Removal of sediment build up shall be incidental to the ongoing maintenance of each basin or part of the removal, depending on when the removal is required.

214. What frequency will be required for sediment to be removed?

ANSWER: As required to meet NCDEQ requirements, contract plans and specifications, and as directed by NCDEQ. Basins to be left in-place shall be maintained throughout the duration of the project.

215. If erosion items that are paid for in the contract have to be replaced will they be paid for?

ANSWER: Once the contractor for the project takes over existing sediment and erosion control measures, the contractor will be responsible for maintenance. If ongoing maintenance requires the replacement of the sediment and erosion control measures, the replacement will be the responsibility of the contractor for no additional cost to the owner other than the unit rate for maintenance of those items.

216. What work is included in this pay item for removal of the existing basins?

ANSWER: Work required for removal of the existing basins includes the removal of existing risers, skimmers, outfall pipes, flared end sections and any rip rap. Any other work required for the removal of the basin will be paid for as part of the specific unit prices unless specifically called out in the plans or specifications.

217. Our analysis indicates there is considerable amount of embankment needed for the basins will that be paid for as embankment?

ANSWER: Yes.

218. Will topsoil placement and seeding be paid for?

ANSWER: Yes, per their unit price.

219. Are the existing conditions shown on plan page EC-53 representative of current conditions?

ANSWER: No.

220. Are the proposed contour elevation required or just positive drainage?

ANSWER: Proposed contours provide the contractor elevations to grade to. These are preferred elevations, if additional soil is needed, the Owner must approve the additional grading.

221. Is topsoiling and seeding required in the borrow area? If so is it paid for?

ANSWER: If topsoil is available and directed to be spread by the AOR, it shall be paid for per the contract unit price. Seeding and mulching are required and shall be paid for per the contract unit price.

222. What is considered minor grading, based on the grades given and our analysis approximately 500,000 cy excavation is needed, well in excess of embankment needed, please define what is to happen here?

ANSWER: The amount of excavation mentioned appears to include material moved as part of the previous project. Reference other responses within the addendum for guidance on minor grading.

223. How will this excavation in the borrow area be paid for?

ANSWER: Excavation in the borrow area will not be paid for specifically. Embankment in place will be paid for in the proposed areas on the plans.

224. If the contractor is required to perform all this excavation, where do the excess soils go on site?

ANSWER: The contractor is to only excavate the amount of material needed to completed the embankment in place requirement of the project and to grade the borrow area to drain.

225. Please confirm Pay Items L-125-14, L-125-15, L-125-16 and L-125-18 Construct Sign Pad for Future Signs are to include the L-867D Light Base and Galvanized Steel Cover with Gasket?

ANSWER: Yes, see pay item descriptions for L-125-14, L-125-15, L-125-16, and L-125-18.

226. Specification P-152-2.2 b Undercutting, states the unsuitable soils have to be disposed off the airport; can the soils be disposed at the borrow area?

ANSWER: If soils within the limits of the project are considered unsuitable, they may be allowed to be placed in the borrow area at the discretion of the AOR. Unsuitable soils containing trash, debris, or other materials not suitable for the purposed of construction per the project specifications shall be disposed of offsite.

227. Regarding Specification S-140-3.8 Removal of Existing Perimeter Road- are we to assume the placement of suitable fill is paid for under embankment?

ANSWER: Yes.

- 228. Could a narrative describing the work (Scope) and materials that are included within the following pay items:
  - a. P-156-5.1-15: "Maintain Existing Rock Check Dams."
  - b. P-156-5.1-17, P-156-5.1-19, P-156-5.1-21, P-156-5.1-23: "Maintain Existing Rip Rap Class...."
  - c. NCDOT 520-2: "Perimeter Road Repairs."

ANSWER: In response to a. and b., please reference P-156-3.5. In response to c., Perimeter Road repairs paid for specifically by this line item shall be repairs to the existing perimeter roads to be completed as directed by the Owner or AOR that are not a direct result of the project or Contractor. If there are any repairs required to the perimeter or haul roads that are a direct result of the project or contractor, those repairs shall be made by the Contractor at no additional cost to the Owner.

229. On the demolition plans there are various locations where pipe is capped and abandoned, how is it paid for?

ANSWER: Pipes specifically called out as capped or abandoned have been completed prior to the start of this project. The cost to cap or abandon pipes as part of this project shall be incidental to the work requiring the cap or abandonment.

230. Please confirm you require Arctic kits for these fixtures: L-850A(LED), L-850B(LED), L-862(LED), and L-850C(LED)

ANSWER: Yes, see fixtures, as well as the L-862E(LED), are to come with the Arctic kits.

231. Please confirm height for elevated lights is 24".

ANSWER: Elevated fixture height is 24".

232. Although it says in the bid documents that a bid security in the amount of 5% needs to be included, the bond forms actually look for a hard number, which is very unusual. Generally, the bid amount can change until it's dropped off, which the surety has no real way of verifying, and when the premium on the bond might also really fluctuate. Respectfully, can this be changed to reflect a more standard 5% bid bond and Surety Bond Affidavit?

ANSWER: Proposal Forms No. 4 and 5 may be completed to indicate the bid bond is "5% OF THE TOTAL AMOUNT BID" in lieu of writing in the precise amount of the bid in dollars.

**END OF ADDENDUM NO. 3** 

Asheville Regional Airport Permanent Runway 17-35 Construction Bid Package 4 - Paving, Lighting and NAVAID's Bid Opening: January 27, 2017

### LIFE CYCLE COST ANALYSIS EVALUATION

MATERIAL: Asphalt DESIGN LIFE: 20 years EXPECTED LIFE: 30 years

DISCOUNTED RATE/INFLATION

FACTOR: 7%

### Volume 2 Base Bid - Asphalt Runway

sphalt Runw	/ay								
YEAR	ACTIVITY	ITEM DESCRIPTION	UNIT	UNIT COST	QUANTITY	TOTAL COS	PRESENT WORTH FACTOR	PRESENT WORTH	
0	Initial Construction	Asphalt Runway Section	SY	\$ -	133,334	\$	- 1	0.00	
1				T		<u> </u>	0.9346	0.00	
2							0.8734		
3							0.8163		
4	Maintenance	Emulsified Rejuvenator	SY	2.28	133,334	\$ 304,00		231,921.30	
5						, , , , , , , , , , , , , , , , , , , ,	0.7130	1 , 1 1 1 1	
6							0.6663		
7							0.6227		
		Emulsified Rejuvenator, Crack							
8	Maintenance	Seal (20,000LF)	SY	2.31	133,334	\$ 308,00	1.54 0.5820	179,259.70	
9		, ,,,,,,				, , , , , , , , , , , , , , , , , , , ,	0.5439	1, 11	
10							0.5083		
11							0.4751		
12							0.4440		
13							0.4150		
14							0.3878		
		2" Mill and Replace, Marking and							
15	Maintenance	grooving	SY	18.18	133,334	\$ 2,424,01	2.12 0.3624	878,573.54	
16							0.3387		
17							0.3166		
18							0.2959		
19	Maintenance	Emulsified Rejuvenator	SY	2.28	133,334	\$ 304,00	1.52 0.2765	84,058.95	
20							0.2584		
21							0.2415		
22							0.2257		
		Emulsified Rejuvenator, Crack							
23	Maintenance	Seal (20,000LF)	SY	2.31	133,334	\$ 308,00	0.2109	64,971.96	
24							0.1971		
25							0.1842		
26							0.1722		
27	Maintenance	Emulsified Rejuvenator	SY	2.28	133,334	\$ 304,00	1.52 0.1609	48,923.08	
28						·	0.1504		
29							0.1406		
30							0.1314		
		<u>'</u>			•		Subtotal	1 /187 708 5/	

Subtotal: 1,487,708.54 Less Salvage Value: 0.00 Present Worth: 1,487,708.54

**Asheville Regional Airport** Permanent Runway 17-35 Construction Bid Package 4 - Paving, Lighting and NAVAID's

Bid Opening: January 27, 2017

### LIFE CYCLE COST ANALYSIS EVALUATION

MATERIAL: Concrete DESIGN LIFE: 20 years EXPECTED LIFE: 40 years

DISCOUNTED RATE/INFLATION

FACTOR: 7%

Volume 2 Base Bid - Concrete Runway

YEAR	ACTIVITY	ITEM DESCRIPTION	UNIT	UNIT COST	QUANTITY	TOTAL COST	PRESENT WORTH	PRI	ESENT WORTH
					•		FACTOR		
0	Initial Construction	Concrete Runway Section	SY	\$ -	133,334	\$ -	1	\$	-
1							0.9346		
2							0.8734		
3							0.8163		
4							0.7629		
5							0.7130		
6							0.6663		
7							0.6227		
8							0.5820		
9							0.5439		
10	Maintenance	Joint - Route and Replace	LF	2.57	132,400	\$ 340,268.00	0.5083	\$	172,974.9969
11							0.4751		
12							0.4440		
13							0.4150		
14							0.3878		
15	Maintenance	Crack Repairs	LF	2.57	10,000	\$ 25,700.00	0.3624	\$	9,314.8627
16							0.3387		
17							0.3166		
18							0.2959		
19							0.2765		
		5% slab replacement , Joint -							
20	Maintenance	Route and Replace	SY	152.41	6,700	\$ 1,021,147.00	0.2584	\$	263,883.7895
21							0.2415		
22							0.2257		
23							0.2109		
24							0.1971		
25							0.1842		
26							0.1722		
27							0.1609		
28							0.1504		
29							0.1406		
30							0.1314		
		•							

Subtotal: \$ 446,173.65

Less Salvage Value: \$

Present Worth: \$ 446,173.65

BIDDER:	Date:

- 1. Price: Includes all labor, materials, and equipment, etc. required to complete project.
- 2. In submitting this bid, I certify:
  - a. Items bid are in exact accordance with specifications, unless noted in bid.
  - b. Prices in this bid have been arrived at independently, without consultation or agreement with any competitor for purpose of restricting competition.
- 3. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal, which includes initials on each bid form sheet, shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Airport: Asheville Regional Airport

Project: Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
	VOLUME 2 BASE BID - ASPHALT RUNWAY WITH QUARTZ HIRL								
	MOBILIZATION								
GP-105-2.1	atdollars	LS	1	\$	\$				
	andcents								
	REMOVAL OF DRAINAGE STRUCTURES (SIZE AND								
S-140-4.1	MATERIAL VARIES)	EA	14	\$	¢				
3-140-4.1	atdollars	LA	14	Ψ	Ψ				
	andcents								
	REMOVAL OF DRAINAGE PIPES (SIZE AND				\$				
S-140-4.2	MATERIAL VARIES)	LF	1,683	\$					
	atdollars and cents			·	· <del></del>				
-	andcents				_				
	REMOVAL OF EXISTING CONCRETE LINED DITCH								
S-140-4.3	atdollars	LF	200	\$	\$				
	andcents								
	AIRFIELD PAVEMENT REMOVAL								
P-101-5.1	atdollars	SY	67.100	\$	\$				
	andcents		21,122	·	·				
	HAUL ROAD PAVEMENT REMOVAL								
P-101-5.2	at dollars	SY	12,600	\$	\$				
01 0.2	and cents	٥.	,500	<del>*</del>	<b>-</b>				

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated		
Item No.	Item Description and Unit Price	e in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-101-5.3	PAVEMENT MILLING (4.75") atand	dollars cents	SY	1,800	\$	\$
P-101-5.4	PAVEMENT MILLING (2") atand	dollars cents	SY	4,200	\$	\$
P-101-5.5	CRACK REPAIR atand		LF	1,000	\$	\$
P-102-1	SAFETY AND SECURITY atand	dollars cents	LS	1	\$	\$
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars cents	EA	265	\$	\$
P-102-3	BARRICADE at and	dollars cents	EA	45	\$	\$
P-102-4	TAXIWAY CROSSING 1 at and	dollars cents	LS	1	\$	\$
P-102-5	TAXIWAY CROSSING 2 at and	dollars cents	LS	1	\$	\$
P-102-6	TAXIWAY CROSSING 3 at and	dollars cents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-102-7	TAXIWAY CROSSING 4  atdollars andcents	LS	1	\$	\$
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdollars andcents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	134,400	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atdollars andcents	CY	5,400	\$	\$
P-152-4.3	SLOPE REPAIR  atdollars andcents	SY	14,500	\$	\$
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	46	\$	\$
P-156-5.1-3	COMPOST SOCK INLET PROTECTION  atdollars andcents	EA	16	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK  atdollars andcents	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE atdollars andcents	LF	18,900	\$	\$
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE at dollars and cents	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars  andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH at	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP  atdollars andcents	LS	1	\$	\$
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" at dollars and cents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" at dollars and cents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" at dollars and cents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" at dollars and cents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M" atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	75,800	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-401-8.1-1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) at	TN	26,400	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	38,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	64,200	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	86,600	\$	\$
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	63,300	\$	\$
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT at	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA at	SF	124,400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	13,000	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

	Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$			
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$			
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$			
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$			
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$			
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$			
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$			
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$			
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	639	\$	\$			

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET  atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY at	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,900	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	377	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24" X24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM  MODIFICATIONS:  atdollars  andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH				
L-110-1	BURIED DUCT	LF	F 00F	Φ.	Φ.
L-110-1	atdollars	LF	5,885	<b>\$</b>	<b>\$</b>
	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-2	BURIED DUCT	LF	26,300	\$	\$
L-110-2	atdollars	LI	20,300	Ψ	Ψ
	andcents				
	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-3	BURIED DUCT	LF	880	\$	\$
L-110-3	atdollars	Li	000	Ψ	Ψ
	andcents				
	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-4	BURIED DUCT	LF	900	\$	\$
L 110 4	atdollars	<u> </u>	000	Ψ	Ψ
	andcents				
	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-5	BURIED DUCT atdollars	LF	1,600	\$	\$
			.,000	<b>-</b>	<del></del>
	andcents				
	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-6	BURIED DUCT atdollars	LF	400	\$	\$
				<del>,</del>	*
	and cents				
	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-7	DUCT atdollars	LF	1,500	\$	\$
	andcents  1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-8	at dollars	LF	44,385	\$	\$
	and cents				
	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT				
L-110-9	at dollars	LF	1,340	\$	\$
	and cents				
	anaoents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-10	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,115	\$	\$
L-110-11	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	230	\$	\$
L-110-12	10 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	75	\$	\$
L-110-13	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	180	\$	\$
L-110-14	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT at	LF	600	\$	\$
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	\$
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) at	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) at	EA	80	\$	\$
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW ASPHALT PAVEMENT (N) atdollars andcents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) at	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE at	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE at	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE at	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) at	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$
L-125-44	L-867D JUNCTION CAN atdollars andcents	EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN atdollars andcents	EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	24	\$	\$
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Harra NIa	Harry December 1 and Half Dates in Woods		Estimated	Helt Dates in Neural and	Total Assessed Danillass
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE at	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$

	Dollars
	Cents
Total Volume 2 Base Bid - Asphalt Runw	vay with Quartz HIRL Amount: \$
Sum of Taxes Included in Base Bid - Asph	halt Runway with Quartz HIRL: \$

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated					
Item No.	Item Description and Unit Pr	ice in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL									
	MOBILIZATION								
GP-105-2.1	at	dollars	LS	1	\$	\$			
G1 100 2.1	and			'	Ψ	Ψ			
-	REMOVAL OF DRAINAGE STRUCT	TURES (SIZE AND							
	MATERIAL VARIES)	•							
S-140-4.1	at	dollars	EA	14	\$	\$			
	and	cents							
	REMOVAL OF DRAINAGE PIPES (	SIZE AND							
S-140-4.2	MATERIAL VARIES)		LF	1,683	\$	\$			
0 140 4.2	at	dollars	L.	1,000	Ψ	Ψ			
	and	cents							
	REMOVAL OF EXISTING CONCRE	TE LINED DITCH							
S-140-4.3	at	dollars	LF	200	\$	\$			
	and	cents							
	AIRFIELD PAVEMENT REMOVAL								
P-101-5.1	at	dollars	SY	67,100	\$	\$			
1 101 3.1	and	dollars cents	01	07,100	Ψ	Ψ			
	HAUL ROAD PAVEMENT REMOVA								
P-101-5.2	at	dollars	SY	12,600	\$	\$			
	and	cents							
	PAVEMENT MILLING (4.75")								
P-101-5.3	at	dollars	SY	1.800	\$	\$			
	and			1,000	·	·			
-									
	PAVEMENT MILLING (2")								
P-101-5.4	at		SY	4,200	\$	\$			
	and	cents							
	CRACK REPAIR								
P-101-5.5	at	dollars	LF	1,000	\$	\$			
	and			.,	<del></del>	<del>*</del>			

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated		
Item No.	Item Description and Unit Price i	in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-102-1	SAFETY AND SECURITY at and	dollars _cents	LS	1	\$	\$
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars _cents	EA	265	\$	\$
P-102-3	BARRICADE atand	dollars _cents	EA	45	\$	\$
P-102-4	TAXIWAY CROSSING 1 atand	dollars _cents	LS	1	\$	\$
P-102-5	TAXIWAY CROSSING 2 atand	dollars cents	LS	1	\$	\$
P-102-6	TAXIWAY CROSSING 3 atand	dollars _cents	LS	1	\$	\$
P-102-7	TAXIWAY CROSSING 4 atand	dollars _cents	LS	1	\$	\$
P-104-5.1	PROJECT SURVEY AND STAKEOUT atand	dollars _cents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atand	dollars _cents	CY	129,200	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atand	dollars _cents	CY	5,200	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

-			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-152-4.3	SLOPE REPAIR atdollars andcents	SY	14,500	\$	\$
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION at dollars and cents	EA	46	\$	\$
P-156-5.1-3	COMPOST SOCK INLET PROTECTION at dollars and cents	EA	16	\$	\$
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK  atdollars andcents	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE atdollars andcents	LF	18,900	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE atdollars andcents	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH at	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP  atdollars andcents	LS	1	\$	\$
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" at dollars and cents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

,			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" at dollars and cents	LS	1	\$	\$
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M"  atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	СҮ	33,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE at	СҮ	400	\$	\$
P-304-8.1	CEMENT TREATED BASE COURSE atdollars andcents	SY	137,000	\$	\$
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP)  at	TN	9,500	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP)  at	TN	21,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	20,800	\$	\$
P-501.1	PORTLAND CEMENT CONCRETE (15") atdollars andcents	SY	133,000	\$	\$
P-501.2	PORTLAND CEMENT CONCRETE (15") - REINFORCED atdollars and cents	SY	333	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	43,400	\$	\$
P-603-5.1	BITUMINOUS TACK COAT  atdollars andcents	GAL	20,900	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT atdollars andcents	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars and cents	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	34,500	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		T
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III at	LF	639	\$	\$
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY at	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,000	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT at dollars and cents	EA	377	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT at dollars and cents	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT at	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM MODIFICATIONS: atdollars andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT at	LF	5,885	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	26,300	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	2 WAY 2" SCHEDULE 40 PVC DIRECT		880	\$	\$
L-110-3	EARTHBURIED DUCT	LF			
	atdollars				
	andcents				
	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH	LF	900	\$	\$
L-110-4	BURIED DUCT				
	atdollars				
	andcents				
L-110-5	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH	LF	1,600	\$	\$
	BURIED DUCT atdollars				
	andcents				
L-110-6	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH	LF	400	\$	\$
	BURIED DUCT atdollars				
	and cents  1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED				
	CONDUIT	LF	1,500	\$	\$
L-110-7	atdollars				
	and cents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED	LF	44,385	\$	
	DUCT				
L-110-8	atdollars				\$
	and cents				
	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-9	DUCT	LF	1,340	\$	\$
	atdollars				
	andcents				
L-110-10	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT	LF	1.115	\$	Φ.
	atdollars	LF	1,115	Φ	Φ
	andcents				
L-110-11	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
	DUCT	LF	230	\$	\$
	atdollars				
	andcents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-12	10 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	75	\$	\$
L-110-13	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	180	\$	\$
L-110-14	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT at	LF	600	\$	\$
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	\$
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	80	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE at	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE at	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE at	EA	1	\$	\$
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

\ <u></u>			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN at	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN at	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 at	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) at	EA	7	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED at	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) at	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-44	L-867D JUNCTION CAN atdollars andcents	EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN at	EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	24	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	2	\$	\$
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE atdollars andcents	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars and cents	LS	1	\$	\$

TOTAL AMOUN	NT OF VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL (IN WORDS)	
	Dollars	
	Cents	
	Total Volume 2 Base Bid - Concrete Runway with Quartz HIRL Amount: \$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	VOLUME 2	ADD/DEDU	CT ALTERNATE	1 - LED HIRL	
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	(3)	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	(3)	\$	\$
L-125-6	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR, LED (N) atdollars andcents	EA	3	\$	\$
L-125-7	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	3	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	(33)	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	(41)	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) atdollars andcents	EA	(16)	\$	\$
L-125-37	L-862(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR, LED (N) atdollars andcents	EA	33	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	41	\$	\$
L-125-39	L-862E(L) RUNWAY THRESHOLD LIGHT - GREEN/RED, LED (N) atdollars andcents	EA	16	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	2	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	(2)	\$	\$
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE/DEDUCT ALTERNATE 1	- LED HIR	L (IN WORDS	)	
			 Dollars		
			Cents		
	Total Bid Schedule Amount - Additi	ive/Deduct	Alternate 1: \$	S	
	Sum of Taxes I	ncluded in	Alternate 1: \$	S	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	VOLUME 2 ADI	DITIVE ALTER	NATE 2 - TAXIV	VAY A SHOULDERS	
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	1,000	\$	\$
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	7	\$	\$
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	2,340	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	5,200	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	5,370	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	9,300	\$	\$
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	17,400	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		T
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	SEEDING				
T-901-5.1	atdollars	AC	5	\$	\$
	andcents				
	SODDING				
T-904-5.1	atdollars	SY	5,000	\$	\$
	andcents				
	MULCHING				
T-908-5.1	atdollars	AC	5	\$	\$
	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH		(11,400)		
L-110-2	BURIED DUCT atdollars	LF		\$	\$
	and cents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
1 440 0	DUCT		11,400	\$	\$
L-110-8	atdollars	LF		\$	
	andcents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-29	EDGE LIGHT - IN ASPHALT SHOULDER (N) at dollars	EA	146	\$	\$
	atdollars and cents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-30	EDGE LIGHT - IN TURF (T)	EA	(146)	\$	\$
L-125-30	atdollars	EA	(140)	Φ	Φ
	and cents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	VOLUME	2 ADDITIVE A	ALTERNATE 3 -	TAXIWAY B2	
P-102	TAXIWAY CROSSING 3 at	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	100	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	1,900	\$	\$
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) atdollars andcents	TN	600	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) at	TN	1,000	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	1,500	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	2,200	\$	\$
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	1,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars and cents	SF	4,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,890	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	25	\$	\$
L-108	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE atdollars and cents	EA	4	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT atdollars andcents	EA	100	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	625	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at	LF	1,300	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at dollars and cents	LF	210	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED at	LF	275	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	1	\$	\$
L-125-7	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	1	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	2	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	3	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	2	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	(5)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	1	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	6	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	1	\$	\$
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	(1)	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	1	\$	\$				
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	(1)	\$	\$				
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (If atdollars andcents	N) EA	2	\$	\$				
L-125-43	L-867B JUNCTION CAN at	EA	2	\$	\$				
L-125	L-867B LIGHT BASE 3/4" THICK GALVANIZED STEE COVER (NE) at	EA	3	\$	\$				
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEE COVER (NE) at	EA	1	\$	\$				
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$				
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAX	(IWAY B2 (IN \	WORDS)						
			Dollars						
			_Cents	Φ.					
				\$					
	Sum of Taxes Included in Alternate 3: \$								

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price	oo in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
item No.	item Description and Onit Fit			· · · · ·		Total Amount Fer item
		VOLUME 2	2 ADDITIVE A	LTERNATE 4 -	TAXIWAY B4	
	TAXIWAY CROSSING 2					
P-102	at	dollars	LS	1	\$	\$
	and	cents				
	EMBANKMENT IN PLACE					
P-152-4.1	at		CY	100	\$	\$
	and	cents				
	CRUSHED AGGREGATE BASE CO	URSE				
P-209-5.1	at		CY	1,900	\$	\$
	and					
	BITUMINOUS ASPHALT PAVEMEN	T (SURFACE				_
P-401-8.1.1	WITHOUT RAP)		TN	600	\$	\$
1 401 0.1.1	at	dollars	I IN		Ψ	Ψ
	andBITUMINOUS ASPHALT PAVEMEN	cents				
	\/\ITH PAD\	•				
P-401-8.1.2	at	dollars	TN	1,000	\$	\$
	and	cents				
	BITUMINOUS ASPHALT PAVEMEN	T (BASE)				
P-403-8.1	at		TN	1,500	\$	\$
	and	cents				
	BITUMINOUS PRIME COAT					
P-602-5.1	at	dollars	GAL	2,200	\$	\$
	and	cents	- · · · -	_,	·	<del></del>
-	DITUMINOUS TACK COAT					
P-603-5.1	BITUMINOUS TACK COAT at	dollare	GAL	1,500	\$	\$
F <b>-</b> 003-3. I	and		GAL	1,500	Ψ	φ
	TEMPORARY AIRFIELD MARKING REFLECTIVE MEDIA	(TELLOVV), VV/O				
P-620-5.2	at	dollars	SF	4,000	\$	\$
	and	cents				
-						

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars and cents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars and cents	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,475	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD at	EA	45	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108	GROUND DISSIPATION PLATE25"x24" X24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	2	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	100	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	630	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,300	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	210	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	275	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	1	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	4	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	2	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	4	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE LED, TAXIWAY EDGE LIGHT (A) atdollars and cents	EA	(7)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated						
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	7	\$	\$				
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$				
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$				
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$				
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	2	\$	\$				
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$				
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXIWA	AY B4 (IN	_						
	Dollars								
	Total Rid Cabadula Amaunt	م داخانده	Cents	<b>n</b>					
				\$					
Sum of Taxes Included in Alternate 4: \$									

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated						
Item No.	Item Description and Unit Price i	n Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
	VOLUME 3 BASE BID - TAXIWAY B CONVERSION AND NAVAIDS									
	MODILIZATION									
GP-105-2.1	MOBILIZATION	dollare	LS	1	\$	\$				
GF-103-2.1	atand	cents	LO	'	Ψ	Ψ				
REMOVAL OF DRAINAGE STRUCTURES (SIZE AND										
S-140-4.1	MATERIAL VARIES)	dellese	EA	3	\$	\$				
	atand	dollars cents								
	REMOVAL OF DRAINAGE PIPES (SIZE									
	MATERIAL VARIES									
S-140-4.2	at	dollars	LF	33	\$	\$				
	and	_cents								
-	REMOVAL OF EXISTING FENCE									
S-140-4.4	at	dollars	LF	800	\$	\$				
G-140-4.4	and	dollars cents	LI	000	Ψ	Ψ				
	REMOVAL OF EXISTING PERIMETER	ROAD								
S-140-4.5	at	dollars	SY	5,900	\$	\$				
	and	_cents								
	DEMOVAL OF DIDECTIONAL CION									
S-140-4.6	REMOVAL OF DIRECTIONAL SIGN at	dollars	EA	3	\$	\$				
3-140-4.0	and	cents	LA	3	Ψ	Φ				
	PAVEMENT REMOVAL									
P-101-5.2	at		SY	550	\$	\$				
	and	_cents								
-	SAFETY AND SECURITY									
P-102	at	dollars	LS	1	\$	\$				
1 102	and	cents	LO	•	Ψ	Ψ				
		<u> </u>								

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdollars andcents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	45,700	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atdollars andcents	CY	1,800	\$	\$
P-152-4.5	BORROW AREA GRADING, CLEAN UP, AND CLOSE OUT atdollars andcents	LS	1	\$	\$
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	6	\$	\$
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,100	\$	\$
P-156-4.1-10	EXCELSIOR MATTING  atdollars  andcents	SY	9,200	\$	\$
P-156-4.1-20	RIP RAP, CLASS 1 atdollars andcents	CY	130	\$	\$
P-156-4.1-22	RIP RAP, CLASS 2 atdollars andcents	CY	75	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	210	\$	\$
P-156-4.1-26	SHOREMAX PROTECTION MAT atdollars andcents	SF	4,700	\$	\$
P-156-4.1-28	REMOVE EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-4.1-31	REMOVE EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-4.1-33	CONVERT EXISTING SEDIMENT BASIN "D" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-35	REMOVE EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-4.1-37	REMOVE EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-4.1-39	REMOVE EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-4.1-41	REMOVE EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		_
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-51	CONVERT EXISTING SEDIMENT BASIN "M" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-53	CONVERT EXISTING SEDIMENT BASIN "N" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-55	REMOVE EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-4.1-59	REMOVE EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	510	\$	\$
NCDOT 520-2	PERIMETER ROAD REPAIRS atdollars andcents	SY	1,800	\$	\$
NCDOT 600	PRIME COAT atdollars andcents	GAL	130	\$	\$
NCDOT 610	BITUMINOUS ASPHALT PAVEMENT (9.5C) atdollars andcents	TN	240	\$	\$
P-608-8.1	ASPHALT SURFACE TREATMENT atdollars andcents	SY	93,600	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

Estimated								
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	23,200	\$	\$			
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	3,300	\$	\$			
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	8,300	\$	\$			
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	157,400	\$	\$			
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	52	\$	\$			
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	64	\$	\$			
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	140	\$	\$			
D-701-5.1-10	48" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	140	\$	\$			
D-701-5.1-11	54" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	697	\$	\$			

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN at	EA	1	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	5	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	1	\$	\$
D-754-5.1	CONCRETE LINED DITCH atdollars andcents	LF	565	\$	\$
F-160-5.1	20' DOUBLE SWING GATE atdollars andcents	EA	3	\$	\$
F-160-5.2	WILDLIFE FENCE atdollars andcents	LF	769	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	80	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	80	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	79	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	105	\$	\$
L-107-1	L-806(L) WIND CONE, SIZE 1, STYLE 1A, NEW COMPLETE atdollars andcents	EA	1	\$	\$
L-107-2	RELOCATE L-806 (L) LED WINDCONE atdollars andcents	EA	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	16,100	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	10,500	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE atdollars andcents	EA	4	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	65	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	8,426	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	200	\$	\$
L-125-8	L-853 ELEVATED RETROREFLECTIVE MARKER atdollars andcents	EA	10	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE atdollars andcents	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	2	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	12	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-13	L-858C SIGN - SINGLE FACE, NON-LIGHTED, TAXIWAY END MARKER atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 at	EA	2	\$	\$
L-125-19	L-858B(L) RELOCATE RUNWAY DISTANCE REMAINING SIGN, LED, SIZE 4 atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	7	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	4	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	7	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	2	\$	\$
L-125-24	L-860HR(L) OMNIDIRECTIONAL, GREEN, LED ELEVATED HELIPORT LIGHT - IN TURF (T) atdollars andcents	EA	14	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	22	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	19	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	49	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	5	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) at	EA	60	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125	L-867B LIGHT BASE 1/2" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	5	\$	\$
L-125	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	6	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	1	\$	\$
N-1005-1	FAA ALLOWANCE at FIFTY THOUSAND DOLLARS and ZERO cents	AL	1	<u>\$50,000.00</u>	\$50,000.00

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
		S	UMMARY		
TOTAL AMOUNT	OF VOLUME 2 BASE BID - ASPHALT RUNWAY	WITH QUAF	RTZ HIRL (IN V	VORDS)	
_			 Dollars		
_			Cents		
	Total Amount Volume 2 Base Bid - Asphalt R	Runway with	Quartz HIRL: 5	\$	
Sum of Ta	axes Included in Volume 2 Base Bid - Asphalt R	Runway with	Quartz HIRL:	\$	
	•	•			<del></del>
TOTAL AMOUNT	OF VOLUME 2 BASE BID - CONCRETE RUNWA	AY WITH QU	ARTZ HIRL (IN	WORDS)	
			(	, , , , , , , , , , , , , , , , , , , ,	
-			 Dollars		
_			Cents		
_	Total Amount Volume 2 Base Bid - Concrete R	Runway with	Quartz HIRL:	\$	
Sum of Tax	tes Included in Volume 2 Base Bid - Concrete R				
Jun or rux		turring triur	~ ~ ~ · · · · · · · · · · · · · · · · ·	*	
TOTAL AMOUNT	OF VOLUME 2 ADD/DEDUCT ALTERNATE 1 - L	LED HIRL (IN	WORDS)		
-			 Dollars		
_			Cents		
_	•	Total Alterna	te 1 Amount:	\$	
			n Alternate 1: S		
					<del></del>

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated			
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item	
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 2 - TAXI	WAY A SHO	ULDERS (IN W	/ORDS)		
			Dollars			
			Cents	_		
Total Alternate 2 Amount: \$						
Sum of Taxes Included in Alternate 2: \$						
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXI	WAY B2 (IN	WORDS)			
			<u> </u>			
			Dollars			
	<u> </u>	T A	Cents	<b>.</b>		
	Total Alternate 3 Amount: \$ Sum of Taxes Included in Alternate 3: \$					
	Sum of Taxe	s included in	n Alternate 3: S	<b></b>		
TOTAL AMOUNT	FOR VOLUME 2 ADDITIVE ALTERNATE 4 TAVI	DAY DA (INI	MODDC)			
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXI	WAY B4 (IIV	WORDS)			
	Dollars					
	Cents					
	Total Alternate 4 Amount: \$					
	Sum of Taxes Included in Alternate 4: \$					

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

	Estimated								
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item				
TOTAL AMOUN	T OF VOLUME 3 BASE BID - TAXIWAY B CONVER	SION AND	NAVAIDS (IN )	WORDS)					
			Dollars						
	Total Did Valuma 2 Daga Did Taviway D Co	nyaralan a	Cents	Φ					
Sum of Tax	Total Bid Volume 3 Base Bid - Taxiway B Co kes Included in Volume 3 Base Bid - Taxiway B Co								
	Name of Bidder (Typed or Printed):								
	Signature of Bidder (S	ame as Pro	posal Form):						
			Title:						
Addendum: The Bidder certifies	s that he has acknowledged the addendum(s) to the contra	ct indicated b	elow:						
Addendum No.:		Dated:							
Addendum No.:		Dated:							
Addendum No.:		Dated:							
Addendum No.:		Dated:							
Addendum No.:		Dated:							
Addendum No.:		Dated:		_					
		END OF E	SID SCHEDUL	E					

# **ACCESS & HAUL ROAD NOTES**

- HAUL ROADS TO BE USED FOR THIS PROJECT SHALL BE THOSE INDICATED ON THE DRAWINGS OR OTHERWISE SPECIFICALLY AUTHORIZED BY THE AIRPORT OWNERS REPRESENTATIVE (AOR). IN GENERAL, THE CONTRACTOR SHALL CONFINE EQUIPMENT AND VEHICLES TO HAUL ROADS AND TO THE AREAS UNDER CONSTRUCTION. DEBRIS SHALL BE CLEANED FROM THE ROADWAYS OR AIRPORT PAVED SURFACES AS DIRECTED BY THE AOR. THE RUNWAY, TAXIWAYS AND APRON SHALL BE KEPT FREE OF DEBRIS AT ALL TIMES. OTHER PAVEMENTS SHALL BE CLEANED BY THE CONTRACTOR AS REQUIRED, USING POWER BROOMS TO KEEP ALL ACCESS AND CONSTRUCTION AREAS CLEAR OF SOILS, CLODS OR OTHER DEBRIS
- THE ACCESS POINTS TO THE PROJECT SITE ARE SHOWN ON THE PLANS. THE OWNER RESERVES THE RIGHT TO CHANGE AN ACCESS POINT AT ANY TIME. THE ACCESS POINTS ARE TO BE USED AS FOLLOWS:

CONTRACTOR AND EMPLOYEES ARE TO USE ACCESS POINT 1 FOR PRIMARY ACCESS TO THE SITE.

#### **ACCESS POINT 2**

ACCESS POINT FOR WORK ON SOUTHERN END OF PROJECT. ACCESS POINT 2 SHALL BE USED ONLY FOR STAGING MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL SIGNAGE AT HWY 280 PER NCDOT STANDARDS, AT ACCESS POINT 2, INDICATING TRUCKS ENTERING HIGHWAY.

#### **ACCESS POINT 3:**

ACCESS POINT FOR ACCESS TO THE BORROW AREA. CONTRACTOR SHALL CONTROL ACCESS IN AND OUT OF THE BORROW AREA. IT SHOULD BE NOTED THAT THE BORROW AREA ACCESS ALLOWS FOR ONE-WAY TRAFFIC.

#### ACCESS POINT 4:

MATERIALS FROM THE STAGING AREA TO THE SITE. THE USE OF THIS ACCESS POINT SHALL BE COORDINATED WITH THE OWNER. WHEN NOT IS USE, THE CONTRACTOR 7. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SHALL ENSURE THE GATE IS CLOSED AND LOCKED.

HAUL ROUTES FOR THIS PROJECT ARE SHOWN ON THE PLANS. ANY DAMAGE TO THE EXISTING PERIMETER ROADS USED FOR HAULING SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER RESERVES THE RIGHT TO CHANGE THE HAUL ROUTES AT ANY TIME. HAUL ROUTES ARE TO BE USED AS FOLLOWS:

#### **HAUL ROUTE 1**

HAUL ROUTE 1 SHALL BE USED DURING THE CONSTRUCTION OF THE PERMANENT RUNWAY AND ASSOCIATED TAXIWAYS. AS AREAS OF VOLUME 2 ARE COMPLETED. THE HAUL ROUTE IN THAT AREA SHALL BE RESTRICTED TO RUBBER TIRE VEHICLES ONLY. IF NON RUBBER TIRED VEHICLES OR LARGE RUBBER TIRED VEHICLES THAT CAN DAMAGE THE NEW ASPHALT ARE NEEDED WITHIN COMPLETED AREAS, THE VEHICLE SHALL BE TRANSPORTED BY METHODS THAT WOULD NOT DAMAGE THE ASPHALT AND AS APPROVED BY THE OWNER.

HAUL ROUTE 1 CAN BE USED DURING THE DAY WHILE THE TEMPORARY RUNWAY 17-35 IS OPEN AND ACTIVE. THE CONTRACTOR SHALL MAINTAIN EACH TAXIWAY CROSSING PER THE PLANS AND SPECIFICATIONS WHILE HAUL ROUTE 1 IS IN USE. THE OWNER HAS THE RIGHT, BUT NOT OBLIGATION, TO ALLOW CLOSURE OF INDIVIDUAL TAXIWAYS ALONG THE HAUL ROUTE AS REQUESTED BY THE CONTRACTOR. A REQUEST BY A CONTRACTOR DOES NOT GUARANTEE APPROVAL BY THE OWNER. ANY TAXIWAY ALLOWED TO BE CLOSED DURING DAY TIME OPERATIONS SHALL BE REQUIRED TO MAINTAIN ONE FLAGMAN FOR TAXIWAY CROSSINGS AT CLOSED TAXIWAYS, HOWEVER, THE CONTRACTOR SHALL ALSO BE REQUIRED TO KEEP THE TAXIWAY CROSSINGS CLEAN OF ALL DEBRIS AT ALL TIMES DURING HAULING OPERATIONS.

IF HAUL ROUTE 1 IS USED AT NIGHT, WHEN THE TEMPORARY RUNWAY IS CLOSED AND ALL TAXIWAY CONNECTORS ARE CLOSED, THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ONE FLAGMEN AT EACH TAXIWAY CROSSING BEING USED. THE CONTRACTOR SHALL BE REQUIRED TO KEEP THE TAXIWAY CROSSINGS CLEAN OF ALL DEBRIS AT ALL TIMES DURING HAULING OPERATIONS.

#### **HAUL ROUTE 2**

HAUL ROUTE 2 SHALL BE USED FOR HAULING BETWEEN THE AIRFIELD AND THE BORROW AREA. THROUGH SECTIONS OF HAUL ROUTE 2, THE WIDTH IS NOT CONDUCIVE TO TWO-WAY HAULING. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS TO CONTROL TRAFFIC WITHIN THESE AREAS TO AVOID DAMAGE TO THE HAUL ROAD, ADJACENT SLOPES, AND SURROUNDING AREAS.

#### **HAUL ROUTE 3**:

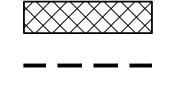
HAUL ROUTE 3 SHALL ONLY BE USED AT NIGHT WHILE THE TEMPORARY RUNWAY 17-35 IS CLOSED OR AS ALLOWED BY OWNER DURING DAYTIME OPERATIONS

- 4. THE CONTRACTOR SHALL RESTORE ALL TURFED AND PAVED AREAS USED FOR HAUL ROADS TO THEIR ORIGINAL CONDITION, INCLUDING THE ESTABLISHMENT OF TURF. ALL COST FOR CONSTRUCTING, REMOVING AND RESTORING OF HAUL ROADS REQUIRED FOR THE COMPLETION OF THE WORK SHALL BE BORNE BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 5. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. THE CONTRACTOR SHALL MAKE USE OF A GATE GUARD AT ALL ACCESS POINTS BEING USED BY THE CONTRACTOR, OTHERWISE THE GATES AT EACH ACCESS POINT ARE TO REMAIN LOCKED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE CONSTRUCTION AREAS WITHIN THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEANUP OF ANY DEBRIS DEPOSITED AT THE PROJECT SITE AND ALONG ANY ROAD AS A RESULT OF HIS/HER CONSTRUCTION TRAFFIC.
- ACCESS POINT 4 SHALL BE USED ALONG WITH ACCESS POINT 1 FOR DELIVERY OF 6. ONLY RUBBER TIRED VEHICLES SHALL BE ALLOWED ON EXISTING AIRPORT PAVEMENT
  - SUBCONTRACTOR EMPLOYEES AND VEHICLES AUTHORIZED TO OPERATE ON THE SITE. AN UPDATED LIST SHALL BE PROVIDED TO AOR WEEKLY.
  - 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS), AND OBTAIN ANY REQUIRED PERMITS WITH THE APPROPRIATE AGENCY HAVING JURISDICTION OVER THE AFFECTED ROUTE.
  - 9. ALL CONTRACTOR VEHICLES ARE TO BE MAINTAINED, AND TRAFFIC SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION AREAS, STAGING AREAS AND/OR HAUL ROUTES.
  - 10. ALL CONTRACTOR VEHICLES SHALL DISPLAY IN FULL VIEW LOGOS CONSPICUOUSLY PLACED ON EACH SIDE OF THE VEHICLE. ALL VEHICLES OPERATING IN THE ACTIVE AIRSIDE OPERATION AREA (AOA) DURING HOURS OF LOW VISIBILITY OR DARKNESS SHALL BE EQUIPPED WITH A FLASHING AMBER DOME-TYPE LIGHT MOUNTED ON TOP OF THE VEHICLE, THE FLASHING LIGHT SHALL BE OF SUCH INTENSITY TO CONFORM TO AIRPORT CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
  - 11. NO CONTRACTOR VEHICLES ARE TO CROSS ACTIVE RUNWAYS, NAVAID CRITICAL AREAS OR TAXIWAYS WITHOUT PRIOR APPROVAL FROM THE AOR AND SHALL BE CONTROLLED BY PERSONNEL IN DIRECT COMMUNICATION WITH AOR AND MONITORING AIRPORT TRAFFIC FREQUENCIES ON TWO-WAY RADIO.
  - 12. THE CONTRACTOR SHALL PROVIDE PAINTED SIGNS TO DIRECT MATERIAL SUPPLIERS AND EMPLOYEES TO THE CONSTRUCTION SITE. SIGN AT ENTRANCE GATE SHALL BE PROFESSIONALLY PAINTED 4'X8' AND READ "CONSTRUCTION VEHICLES ONLY - NO VENDORS ALLOWED".
  - 13. CONTRACTOR TO SAFELY CONTROL TRAFFIC AROUND HAUL ROAD. CONTROL OF TRAFFIC ONSITE SHALL BE INCIDENTAL TO PROJECT.

- 14. AT NO TIME SHALL THE CONTRACTOR OPERATE VEHICLES OR EQUIPMENT ON THE AIRPORT ROADWAY SYSTEM OTHER THAN THOSE ROADS IDENTIFIED ON THIS SHEET
- CONTRACTOR SHALL MAINTAIN TWO CROSSING GUARDS AT EACH TAXIWAY CROSSING LOCATION SHOWN ON THE PLANS THAT ARE IMPACTED BY THE PHASED VACUUM TRUCK ONSITE AT ALL TIMES. EACH CROSSING GUARD, BROOM TRACTOR OPERATOR, AND VACUUM TRUCK OPERATOR SHALL BE BADGED FROM THE AIRPORT AND MEET ALL TESTING AND PROCEDURAL PROCESSES REQUIRED BY THE AIRPORT PRIOR TO STARTING WORK. EACH CROSSING GUARD SHALL HAVE A RADIO AND MONITOR THE REQUIRED RADIO FREQUENCIES AT ALL TIMES AND SHALL BE PROFICIENT IN AIR TRAFFIC RADIO COMMUNICATIONS. EACH CROSSING GUARD SHALL HAVE A BROOM AND SHOVEL FOR DEBRIS CLEAN UP AND A CELL PHONE FOR COMMUNICATIONS. CROSSING GUARDS, BROOM TRACTOR OPERATORS AND VACUUM TRUCK OPERATORS MAY BE TERMINATED BY THE AIRPORT STAFF AT ANY TIME FOR ANY REASON. CROSSING GUARDS, BROOM TRACTOR OPERATORS AND VACUUM TRUCK OPERATORS MUST BE PROFICIENT IN ENGLISH. AIR TRAFFIC CONTROL (ATC) WILL DIRECTLY GOVERN CLEARANCES ACROSS ACTIVE PAVEMENT, NOT THE CROSSING GUARDS. ADDITIONAL INFORMATION FOR CROSSINGS IS INDICATED IN THE FRONT END DOCUMENTS.
- 16. CONTRACTOR MAY BE REQUIRED TO INCLUDE A SINGLE CROSSING GUARD ON THE SIDE OF AN OPEN TAXIWAY THAT WAS PREVIOUSLY USED WITH CROSSING GUARDS, TO ENSURE CONTRACTOR PERSONNEL DO NOT ACCIDENTALLY CROSS.
- 17. CONTRACTOR SHALL COORDINATE HAUL ROUTES AND ACCESS POINTS WITH EROSION AND SEDIMENT CONTROL PLANS AND MEASURES. AS THE PROJECT PROGRESSES. HAUL ROUTES SHALL BE COORDINATED WITH EROSION AND SEDIMENT CONTROL PLANS. ANY COORDINATION BETWEEN PLANS OR SLIGHT ADJUSTMENTS SHALL BE INCIDENTAL TO THE PROJECT.

# **CONTRACTOR STAGING AREA NOTES**

- THE EXACT LIMITS, LIGHTING, AND SECURITY REQUIREMENTS OF THE CONTRACTOR'S STAGING AND STORAGE AREAS SHALL BE ESTABLISHED BY THE CONTRACTOR (WITH THE APPROVAL OF THE AOR) IN THE GENERAL AREAS AS SPECIFIED ON THE PLANS.
- ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR DIRECTLY
- 3. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE AOR
- 4. THE CONTRACTOR SHALL USE STAGING AREA #1 AS SHOWN ON THE PLANS FOR ITS FIELD OFFICE, SHOP, MATERIAL AND EQUIPMENT STORAGE, AND OTHER PROJECT RELATED ACTIVITIES, INCLUDING EMPLOYEE PARKING. ALL COST ASSOCIATED WITH PREPARING THE STORAGE AND STAGING AREA SITE SHALL BE BORNE BY THE CONTRACTOR.
- LIMITS OF STAGING AREA 1 SHALL BE ADJUSTED AS NEEDED TO ACCOMMODATE BATCH PLANT OR ONSITE ASPHALT PLANT. ADJUSTMENT OF THE STAGING AREA TO ACCOMMODATE NEEDED FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 6. THE CONTRACTOR SHALL MAINTAIN CONTRACTOR STAGING AREA SUCH THAT THE ENGINEER FIELD OFFICE IS INCLUDED. THIS INCLUDES STONE FOR PARKING AND ACCESS. THE MAINTENANCE OF THIS AREA SHALL BE INCLUDED WITH THE COST OF THE CONTRACTORS STAGING AREA.
- 7. IF THE CONTRACTOR DISTURBS ANY AREA OUTSIDE OF PROJECT AREAS, THE CONTRACTOR SHALL REPAIR AT NO COST TO THE OWNER. THIS SHALL INCLUDE GRADING. SEEDING AND MULCHING.
- 8. THE COST FOR OBTAINING AND MAINTAINING POWER FOR THE CONTRACTOR'S STAGING AREA SHALL BE INCIDENTAL TO THE CONTRACTOR'S EXISTING STAGING AREA. THIS INCLUDES POWER FOR THE CONTRACTOR AND ENGINEERS FIELD OFFICE. THE CONTRACTOR SHALL COORDINATE POWER NEEDS WITH UTILITY COMPANY OR USE GENERATOR.
- 9. CONTRACTOR'S STAGING AREA #2 AND STAGING AREA #3 SHALL ONLY BE USED AS ALLOWED BY AOR.
- 10. ALL CONTRACTOR'S STAGING AREAS SHALL BE MAINTAINED THROUGHOUT THE PROJECT. STAGING AREA #3 SHALL BE REMOVED AT THE END OF VOLUME 2.
- 11. LOCATION OF THE CONCRETE WASH OUT AREA TO BE LOCATED AT STAGING AREA 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND DETAILING / /1\ CONFIGURATION OF CONCRETE WASH IN ORDER TO MEET THE NEEDS OF THE LEGEND



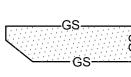
CONTRACTOR'S STAGING AREA



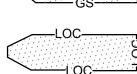
HAUL ROUTE

AIRPORT PROPERTY LINE

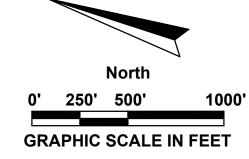
PROJECT LIMITS



GLIDE SLOPE CRITICAL AREA



LOCALIZER CRITICAL AREA



**ENGINEERS & PLANNERS** MALLARD CREEK III, SUITE 152 8604 CLIFF CAMERON DRIVE ■ CHARLOTTE N.C. 28269 OFFICE: (704) 954-9008 Digitally signed

by James M.

Moose, P.E.

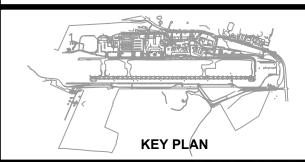
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AVCON, INC.



**ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA** 



**BID PACKAGE 4 - PAVING. LIGHTING AND NAVAIDS** - VOLUME 1 -**GENERAL, PHASING AND SAFETY PLANS** 

**VOLUME 2 - PROJECT** LAYOUT, HAUL ROUTES **AND STAGING AREAS** 

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**AS NOTED** SCALE: **REVISIONS:** 

NO. DATE BY DESCRIPTION 1\ | 01-16-17 | W.L.J.| ADDENDUM NO. 3

**DESIGNED BY:** J.M.M. **DRAWN BY:** W.L.J. **CHECKED BY:** J.M.M. **APPROVED BY:** J.M.M.

DATE: **DECEMBER 2016** 

**STATE LICENSE #** N.C. C-2450

PROJECT NO.

**SHEET NUMBER** 

2014.157.01

**G-07** 

**BID DOCUMENTS** 

#### **ACCESS & HAUL ROAD NOTES**

- HAUL ROADS TO BE USED FOR THIS PROJECT SHALL BE THOSE INDICATED ON THE DRAWINGS OR OTHERWISE SPECIFICALLY AUTHORIZED BY THE AIRPORT OWNERS REPRESENTATIVE (AOR). IN GENERAL, THE CONTRACTOR SHALL CONFINE EQUIPMENT AND HAULING TO THE AREAS UNDER CONSTRUCTION. DEBRIS SHALL BE CLEANED FROM THE ROADWAYS OR AIRPORT PAVED SURFACES AS DIRECTED BY THE AOR. THE RUNWAY, TAXIWAYS AND APRON SHALL BE KEPT FREE OF DEBRIS AT ALL TIMES. OTHER PAVEMENTS SHALL BE CLEANED BY THE CONTRACTOR AS REQUIRED. USING POWER BROOMS TO KEEP ALL ACCESS AND CONSTRUCTION AREAS CLEAR OF SOILS, CLODS OR OTHER DEBRIS
- 2. THE ACCESS POINTS TO THE PROJECT SITE ARE SHOWN ON THE PLANS. THE OWNER RESERVES THE RIGHT TO CHANGE AN ACCESS POINT AT ANY TIME. THE ACCESS POINTS ARE TO BE USED AS FOLLOWS:

#### ACCESS POINT

ACCESS POINT 1 IS TO BE USED BY THE CONTRACTOR AND EMPLOYEES AS PRIMARY ACCESS TO

#### ACCESS POINT 2

ACCESS POINT 2 SHALL BE USED ONLY FOR STAGING MATERIALS AND EQUIPMENT. AS NEEDED FOR VOLUME 3. CONTRACTOR SHALL INSTALL SIGNAGE AT HWY 280 PER NCDOT STANDARDS. AT ACCESS POINT 2, INDICATING TRUCKS ENTERING HIGHWAY. AT END OF THE PROJECT ACCESS POINT 2 SHALL BE REPAIRED (REMOVED AND REPLACED) AS REQUIRED TO REPLACE DAMAGED ASPHALT BETWEEN HIGHWAY 280 AND THE ACCESS GATE.

#### **ACCESS POINT 3**

ACCESS POINT 3 SHALL BE USED FOR ACCESS TO THE BORROW AREA. CONTRACTOR SHALL CONTROL ACCESS IN AND OUT OF THE BORROW AREA. IT SHOULD BE NOTED THAT THE BORROW AREA ACCESS ALLOWS FOR ONE-WAY TRAFFIC.

#### **ACCESS POINT 4**

CONTRACTOR SHALL BE ALLOWED TO USE ACCESS POINT 4 AS THE PRIMARY ACCESS TO THE PROJECT SITE DURING VOLUME 3.

3. HAUL ROUTES TO BE USED FOR THIS PROJECT ARE SHOWN ON THE PLANS. ANY DAMAGE TO THE EXISTING PERIMETER ROADS USED FOR HAULING SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER RESERVES THE RIGHT TO CHANGE THE HAUL ROUTES AT ANY TIME. HAUL ROUTES ARE TO BE USED AS FOLLOWS:

#### HAUL ROUTE 1

HAUL ROUTE 1 FROM VOLUME 2 SHALL NOT BE USED FOR VOLUME 3.

#### HAUL ROUTE 2

HAUL ROUTE 2 SHALL BE USED FOR HAULING BETWEEN THE AIRFIELD AND THE BORROW AREA. THROUGH SECTIONS OF HAUL ROUTE 2, THE WIDTH IS NOT CONDUCIVE TO TWO-WAY HAULING. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS TO CONTROL TRAFFIC WITHIN THESE AREAS TO AVOID DAMAGE TO THE HAUL ROAD AND SURROUNDING AREAS.

#### HAUL ROUTE 3

HAUL ROUTE 3 SHALL BE USED TO ACCESS SEDIMENT BASIN D FOR MAINTENANCE, SEEDING AND MULCHING AND PERIMETER ROAD AND EROSION AND SEDIMENT CONTROL REPAIRS ON THE SOUTH SIDE OF THE AIRFIELD. HAUL ROUTE 3 CAN ONLY BE USED IN THIS MANNER WHEN THE PERMANENT RUNWAY IS COMMISSIONED AND THE 35 GLIDE SLOPE ANTENNA IS RELOCATED. HAUL ROUTE 3 CAN ONLY BE USED DURING AIRPORT CLOSURES OR AS ALLOWED BY AOR. (GSCA CROSSING PROCEDURE)

#### **HAUL ROUTE 4**

HAUL ROUTE 4 SHALL BE USED FOR ACCESS THROUGH THE SITE BETWEEN ACCESS POINT 4 AND STAGING AREA.

- THE CONTRACTOR SHALL RESTORE ALL TURFED AND PAVED AREAS USED FOR HAUL ROADS TO THEIR ORIGINAL CONDITION. INCLUDING THE ESTABLISHMENT OF TURF. ALL COST FOR CONSTRUCTING, REMOVING AND RESTORING OF HAUL ROADS REQUIRED FOR THE COMPLETION OF THE WORK SHALL BE BORNE BY THE CONTRACTOR AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. THE CONTRACTOR SHALL MAKE USE OF A GATE GUARD AT ALL ACCESS POINTS BEING USED BY THE CONTRACTOR, OTHERWISE THE GATES AT EACH ACCESS POINT ARE TO REMAIN LOCKED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE CONSTRUCTION AREAS WITHIN THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEANUP OF ANY DEBRIS DEPOSITED AT THE PROJECT SITE AND ALONG ANY ROAD AS A RESULT OF HIS/HER CONSTRUCTION TRAFFIC.
- 6. ONLY RUBBER TIRED VEHICLES SHALL BE ALLOWED ON EXISTING AIRPORT PAVEMENT.
- 7. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUBCONTRACTOR EMPLOYEES AND VEHICLES AUTHORIZED TO OPERATE ON THE SITE. AN UPDATED LIST SHALL BE PROVIDED TO AOR WEEKLY.
- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS), AND OBTAIN ANY REQUIRED PERMITS WITH THE APPROPRIATE AGENCY HAVING JURISDICTION OVER THE AFFECTED ROUTE.
- ALL CONTRACTOR VEHICLES AND TRAFFIC SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION AREAS, STAGING AREAS AND/OR HAUL ROUTES.
- 10. ALL CONTRACTOR VEHICLES SHALL DISPLAY IN FULL VIEW LOGOS CONSPICUOUSLY PLACED ON EACH SIDE OF THE VEHICLE. ALL VEHICLES OPERATING IN THE ACTIVE AIRSIDE OPERATION AREA (AOA) DURING HOURS OF LOW VISIBILITY OR DARKNESS SHALL BE EQUIPPED WITH A FLASHING AMBER DOME-TYPE LIGHT MOUNTED ON TOP OF THE VEHICLE, THE FLASHING LIGHT SHALL BE OF SUCH INTENSITY TO CONFORM TO AIRPORT CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
- 11. NO CONTRACTOR VEHICLES ARE TO CROSS ACTIVE RUNWAYS, NAVAID CRITICAL AREAS, OR TAXIWAYS WITHOUT PRIOR APPROVAL FROM THE AOR AND SHALL BE CONTROLLED BY PERSONNEL IN DIRECT COMMUNICATION WITH AOR AND MONITORING AIRPORT TRAFFIC FREQUENCIES ON TWO-WAY RADIO.
- 12. THE CONTRACTOR SHALL PROVIDE PAINTED SIGNS TO DIRECT MATERIAL SUPPLIERS AND EMPLOYEES TO THE CONSTRUCTION SITE. SIGN AT ENTRANCE GATE SHALL BE PROFESSIONALLY PAINTED 4'X8' AND READ "CONSTRUCTION VEHICLES ONLY - NO VENDORS ALLOWED".
- 13. CONTRACTOR TO SAFELY CONTROL TRAFFIC AROUND HAUL ROAD. CONTROL OF TRAFFIC ONSITE SHALL BE INCIDENTAL TO PROJECT.
- 14. AT NO TIME SHALL THE CONTRACTOR OPERATE VEHICLES OR EQUIPMENT ON THE AIRPORT ROADWAY SYSTEM OTHER THAN THOSE ROADS IDENTIFIED ON THIS SHEET.
- 15. CONTRACTOR SHALL COORDINATE HAUL ROUTES AND ACCESS POINTS WITH EROSION AND SEDIMENT CONTROL PLANS AND MEASURES. AS THE PROJECT PROGRESSES. HAUL ROUTES SHALL BE COORDINATED WITH EROSION AND SEDIMENT CONTROL PLANS. ANY COORDINATION BETWEEN PLANS OR SLIGHT ADJUSTMENTS SHALL BE INCIDENTAL TO THE PROJECT.

## **CONTRACTOR STAGING AREA NOTES**

- THE EXACT LIMITS, LIGHTING, AND SECURITY REQUIREMENTS OF THE CONTRACTOR'S STAGING AND STORAGE AREAS SHALL BE ESTABLISHED BY THE CONTRACTOR (WITH THE APPROVAL OF THE AOR) IN THE GENERALLY AREAS SHOWN ON THE PLANS.
- 2. ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR DIRECTLY.
- 3. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE AOR.
- 4. THE CONTRACTOR SHALL USE STAGING AREA #1 AS SHOWN ON THE PLANS FOR ITS FIELD OFFICE, SHOP, MATERIAL AND EQUIPMENT STORAGE, AND OTHER PROJECT RELATED ACTIVITIES, INCLUDING EMPLOYEE PARKING. ALL COST ASSOCIATED WITH PREPARING THE STORAGE AND STAGING AREA SITE SHALL BE BORNE BY THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL MAINTAIN CONTRACTOR STAGING AREA SUCH THAT THE ENGINEERS FIELD OFFICE IS INCLUDED. THIS INCLUDES STONE FOR PARKING AND ACCESS. THE MAINTENANCE OF THIS AREA SHALL BE INCLUDED WITH THE COST OF THE CONTRACTORS STAGING AREA.
- 6. IF THE CONTRACTOR DISTURBS ANY AREA OUTSIDE OF PROJECT AREAS, THE CONTRACTOR SHALL REPAIR AT NO COST TO THE OWNER. THIS SHALL INCLUDE GRADING, SEEDING AND MULCHING.
- 7. THE COST FOR OBTAINING AND MAINTAINING POWER FOR THE CONTRACTOR'S STAGING AREA SHALL BE INCIDENTAL TO THE CONTRACTOR'S EXISTING STAGING AREA. THIS INCLUDES POWER FOR THE CONTRACTOR AND ENGINEERS FIELD OFFICE. THE CONTRACTOR SHALL COORDINATE POWER NEEDS WITH UTILITY COMPANY OR USE GENERATOR.
- 8. CONTRACTOR'S STAGING AREA #2 AND STAGING AREA #4 SHALL ONLY BE USED AS ALLOWED BY
- 9. ALL CONTRACTOR'S STAGING AREAS SHALL BE MAINTAINED THROUGHOUT THE PROJECT. ALL CONTRACTOR'S STAGING AREAS SHALL BE COMPLETELY REMOVED AT THE END OF VOLUME 3. THE STONE SHALL BE STOCKPILED IN STAGING AREA #1 LIMITS OR USED FOR REPAIR ON PERIMETER ROADS. THE STAGING AREAS SHALL BE GRADED TO DRAIN AND VEGETATED COMPLETELY FOR FINAL CLOSE OUT.
- 10. LOCATION OF THE CONCRETE WASH OUT AREA TO BE LOCATED AT STAGING AREA 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND DETAILING CONFIGURATION OF CONCRETE 🗸 🗥 WASH IN ORDER TO MEET THE NEEDS OF THE PROJECT.

### **LEGEND**

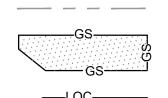


CONTRACTOR'S STAGING AREA



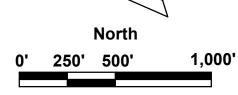
PROJECT LIMITS

HAUL ROUTE



GLIDE SLOPE CRITICAL AREA

AIRPORT PROPERTY LINE



LOCALIZER CRITICAL AREA

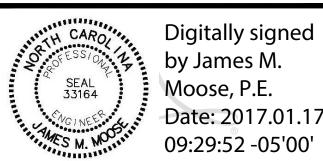
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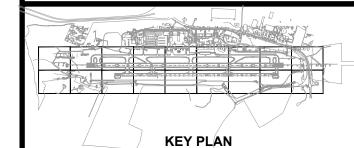




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**ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA** 



**BID PACKAGE 4 - PAVING** LIGHTING AND NAVAIDS - VOLUME 1 -**GENERAL, PHASING AND SAFETY PLANS** 

**VOLUME 3 - PROJECT** LAYOUT, HAUL ROUTES **AND STAGING AREAS** 

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**AS NOTED** SCALE: **REVISIONS:** 

NO. DATE BY DESCRIPTION **/**↑ | 01-16-17 | W.L.J. | ADDENDUM NO. 3

**DESIGNED BY:** J.M.M. **DRAWN BY:** W.L.J.

CHECKED BY: J.M.M.

**APPROVED BY:** J.M.M. DATE: **DECEMBER 2016** 

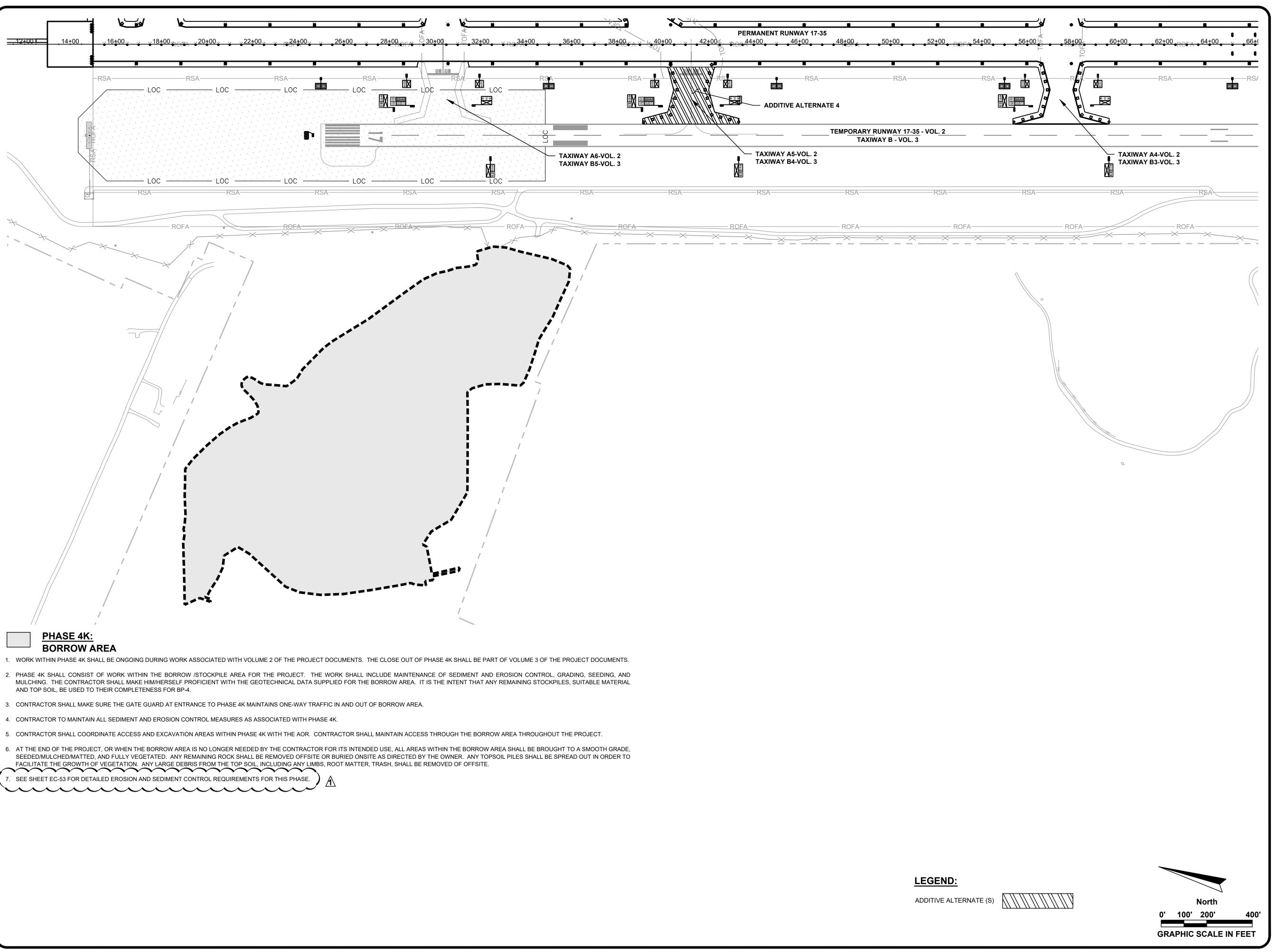
2014.157.01

**STATE LICENSE #** N.C. C-2450

**SHEET NUMBER** 

PROJECT NO.

**BID DOCUMENTS** 





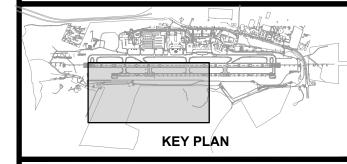


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Digitally signed by James M. Moose, P.E. Date: 2017.01.17 09:32:32 -05'00'

# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING,** LIGHTING AND NAVAIDS - VOLUME 1 -**GENERAL, PHASING AND SAFETY PLANS** 

PHASE 4K

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J.M.M.

N.C. C-2450

2014.157.01

**DESIGNED BY: DRAWN BY: CHECKED BY:** 

STATE LICENSE #

PROJECT NO.

**APPROVED BY:** 

**DECEMBER 2016** DATE:

**SHEET NUMBER** 

**BID DOCUMENTS** 

### **CONSTRUCTION SEQUENCE - VOLUME 2**

- 1. CONTRACTOR SHALL FOLLOW THE CONSTRUCTION SEQUENCE AS OUTLINED IN THESE PLANS. THE CONTRACTOR SHALL HAVE PRIOR APPROVAL FROM THE AOR AND NCDEQ BEFORE MAKING ANY DEVIATIONS TO CONSTRUCTION SEQUENCE.
- 2. PRIOR TO STARTING ANY WORK INCLUDING GRADING, DRAINAGE, PAVING, EROSION AND SEDIMENT CONTROL INSTALLATION, THE CONTRACTOR SHALL MAKE HIMSELF PROFICIENT IN THE CONSTRUCTION SEQUENCING OF THE
- 3. THE CONTRACTOR AND AOR SHALL HOLD A PRECONSTRUCTION CONFERENCE WITH NCDEQ PRIOR TO STARTING WORK.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE THROUGHOUT THE SITE AND ACROSS PROJECT PHASES. THE POSITIVE DRAINAGE INCLUDES DRAINAGE TO THE APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURE.
- 5. EROSION AND SEDIMENT CONTROL FOR VOLUME 2 IS SEPARATED INTO 3 PHASES. THE PHASES ARE BASED ON THE CONTRACTOR TAKING OVER EXISTING MEASURES AND INSTALLING NEW MEASURES AS WORK PROGRESSES THROUGH THE PHASES BELOW. THE BREAKDOWN OF THE EROSION AND SEDIMENT CONTROL PHASES ARE AS FOLLOWS:
  - PHASE 1: PRE CONSTRUCTION REQUIRES THE CONTRACTOR TAKE OVER OF EXISTING EROSION AND SEDIMENT CONTROL MEASURES AS WELL AS INSTALLATION OF NEW MEASURES.
- PHASE 2: DURING CONSTRUCTION REQUIRES CONTINUED MAINTENANCE OF EXISTING EROSION AND SEDIMENT CONTROL MEASURE AS WELL AS INSTALLATION AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES BASED ON PROGRESSION OF CONSTRUCTION.
- PHASE 3: POST CONSTRUCTION REQUIRES CONTINUED MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES AS WELL AS REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES WITHIN THE RUNWAY AND TAXIWAY SAFETY AREAS. PHASE 3 REQUIRES CONTRACTOR TO GAIN APPROVAL FROM NCDEQ FOR REMOVAL OF MEASURES AS PART OF THE COMMISSIONING AND OPENING OF PERMANENT RUNWAY 17-35.
- 6. THE CONTRACTOR SHALL FOLLOW THE SUBSEQUENT CONSTRUCTION SEQUENCE FOR EACH PHASE OF THE PROJECT:

# (EC-08,EC-09,EC-10,EC-17,EC-18,EC-25,EC-26,EC-27,EC-34,EC-35,EC-43,EC-43,EC-44,EC-51EC-52)

- 1. AT THE START OF PHASE 4A, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL INSTALL SILT FENCE AND COIR LOGS IN AREAS SHOWN ON THE PHASE 1 EROSION AND SEDIMENT CONTROL PLANS.
- 3. CONTRACTOR SHALL MONITOR AND MAINTAIN, AS REQUIRED, SEDIMENT BASIN D, I, AND J AS WELL AS ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT PHASE 4A.
- 4. SEDIMENT BASIN J SHALL REMAIN IN PLACE AS LONG AS POSSIBLE DURING THE CONSTRUCTION OF PHASE 4A. GRADING AND PAVING OPERATIONS CAN BEGIN OUTSIDE THE LIMITS OF SEDIMENT BASIN J. THE CONTRACTOR SHALL COORDINATE ALL WORK AROUND SEDIMENT BASIN J AS PRACTICAL TO COMPLETE THE WORK.
- 5. THE CONTRACTOR SHALL PHASE IN THE DRAINAGE AS ALLOWABLE TO NOT IMPACT SEDIMENT BASIN J. THE DRAINAGE IN PHASE 4A CONNECTS TO SEDIMENT BASIN D, AS DRAINAGE IS CONNECTED, THE CONTRACTOR SHALL MONITOR AND MAINTAIN SEDIMENT BASIN D AS REQUIRED.
- 6. THE PROPOSED DRAINAGE FOR PHASE 4A SHALL BE INSTALLED SUCH THAT SEDIMENT BASIN J OUTFALL SHALL BE MOVED TO THE PROPOSED DRAINAGE (S-14) IN ORDER FOR THE EXISTING DRAINAGE UNDER TAXIWAY A TO BE REMOVED. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND REMOVAL OF DRAINAGE WITH THE CHANGING OF THE OUTFALL LOCATION.
- 7. ALL AREAS IMMEDIATELY UPSTREAM OF SEDIMENT BASIN J, NOT WITHIN THE LIMITS OF CONSTRUCTION, SHALL BE COMPLETELY VEGETATED PRIOR TO THE REMOVAL OF SEDIMENT BASIN J. SEDIMENT BASIN J CANNOT BE REMOVED UNTIL APPROVED BY NCDEQ. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL REQUIREMENTS TO GET APPROVAL FOR THE REMOVAL OF SEDIMENT BASIN J.
- 8. ONCE APPROVED FOR REMOVAL, SEDIMENT BASIN J SHALL HAVE THE SKIMMER, RISER, AND OUTFALL PIPE REMOVED AND FILLED IN PER THE GRADING PLAN. ANY DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO MEET THE REQUIREMENTS TO REMOVAL SEDIMENT BASIN J SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 9. SEDIMENT BASIN I SHALL REMAIN THROUGHOUT CONSTRUCTION OPERATIONS DURING THE PHASE 1 AND2 OF THE EROSION AND SEDIMENT CONTROL FLOW. ALL AREAS IMMEDIATELY UPSTREAM OF SEDIMENT BASIN I. WITHIN THE BASIN DRAINAGE AREA, SHALL BE COMPLETELY VEGETATED PRIOR TO THE REMOVAL OF SEDIMENT BASIN I. SEDIMENT BASIN I CANNOT BE REMOVED UNTIL APPROVED BY NCDEQ. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL REQUIREMENTS TO GET APPROVAL FOR THE REMOVAL OF SEDIMENT BASIN I.
- 10. ONCE APPROVED FOR REMOVAL, SEDIMENT BASIN I SHALL HAVE THE SKIMMER, RISER, AND OUTFALL PIPE REMOVED AND FILLED IN PER THE PHASE 3 EROSION AND SEDIMENT CONTROL PLANS. ANY DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO MEET THE REQUIREMENTS TO REMOVAL SEDIMENT BASIN I SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 11. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.
- 12. ANY SILT FENCE, COIR MATTING, OR BLOCK AND GRAVEL INLET PROTECTION REMAINING WITHIN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA SHALL BE REMOVED PRIOR TO THE COMMISSIONING. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK TO ENSURE THOSE ITEMS ARE ABLE TO BE REMOVED PRIOR TO THE RUNWAY COMMISSIONING. ANY DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO MEET THE REQUIREMENTS TO REMOVE SEDIMENT BASIN J SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 13. SEDIMENT BASIN D SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROGRAM AND REMAIN IN PLACE THROUGHOUT WORK ASSOCIATED WITH VOLUME 2.

# PHASE 4B (EC-08,EC-09,EC-17,EC-25,EC-26,EC-34,EC-42,EC-43,EC-51)

- 1. AT THE START OF PHASE 4B, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL INSTALL SILT FENCE AND COIR LOGS IN AREAS SHOWN ON THE PHASE 1 EROSION AND SEDIMENT CONTROL PLANS.
- 3. CONTRACTOR SHALL MONITOR AND MAINTAIN, AS REQUIRED, SEDIMENT BASIN D, I, AND J AS WELL AS ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT PHASE 4B.

- 4. SEDIMENT BASIN J SHALL REMAIN IN PLACE AS LONG AS POSSIBLE DURING THE CONSTRUCTION OF PHASE 4B. SEE PHASE 4A REQUIREMENTS FOR SEDIMENT BASIN J AND ASSOCIATED DRAINAGE.
- 5. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.
- 6. ANY SILT FENCE, COIR MATTING, OR BLOCK AND GRAVEL INLET PROTECTION REMAINING WITHIN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA SHALL BE REMOVED PRIOR TO THE COMMISSIONING. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK TO ENSURE THOSE ITEMS ARE ABLE TO BE REMOVED PRIOR TO THE RUNWAY COMMISSIONING. ANY DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO MEET THE REQUIREMENTS TO REMOVE SEDIMENT BASIN J SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

# 1\(\frac{1}{2}\) PHASE 4C (EC-05,EC-06,EC-07.EC-08,EC-14,EC-15,EC-16,EC-17,EC-22,EC-23,EC-24,EC-25,EC-31,EC-32,EC-34,EC-39,EC-40, EC-41,EC-42,EC-48,EC-49,EC-50,EC-51)

- 1. AT THE START OF PHASE 4C, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. CONTRACTOR SHALL MONITOR AND MAINTAIN, AS REQUIRED, SEDIMENT BASIN K AND L AS WELL AS ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT PHASE 4C.
- 3. THE SEDIMENT BASIN K OUTFALL SHALL BE MOVED TO THE EXISTING DRAINAGE IMMEDIATELY SOUTH OF THE BASIN IN ORDER FOR THE EXISTING DRAINAGE UNDER TAXIWAY A AND P TO BE REMOVED. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND REMOVAL OF DRAINAGE WITH THE CHANGING OF THE OUTFALL LOCATION.
- 4. SEDIMENT BASIN K AND L SHALL REMAIN THROUGHOUT CONSTRUCTION OPERATIONS DURING THE PHASE 1 AND 2 OF THE EROSION AND SEDIMENT CONTROL PLANS. GRADING AND PAVING OPERATIONS CAN BEGIN OUTSIDE THE LIMITS OF SEDIMENT BASIN K AND L. THE CONTRACTOR SHALL COORDINATE ALL WORK AROUND SEDIMENT BASIN K AND L AS PRACTICAL TO COMPLETE THE WORK.
- 5. ALL AREAS IMMEDIATELY UPSTREAM OF SEDIMENT BASIN K AND L, WITHIN EACH BASIN DRAINAGE AREA, SHALL BE COMPLETELY VEGETATED PRIOR TO THE REMOVAL OF EACH SEDIMENT BASIN. SEDIMENT BASIN K AND L CANNOT BE REMOVED UNTIL APPROVED BY NCDEQ. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL REQUIREMENTS TO GET APPROVAL FOR THE REMOVAL OF SEDIMENT BASIN K AND L.
- 6. ONCE APPROVED FOR REMOVAL, SEDIMENT BASIN K AND L SHALL HAVE THE SKIMMER, RISER, AND OUTFALL PIPES REMOVED AND FILLED IN PER THE PHASE 3 EROSION AND SEDIMENT CONTROL PLAN. ANY PROPOSED DRAINAGE WITHIN THE BASINS SHALL BE INSTALLED AND CONNECTED TO THE EXISTING SYSTEM AT THIS TIME. ANY DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO MEET THE REQUIREMENTS TO REMOVAL SEDIMENT BASIN K AND L SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 7. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.
- 8. ANY SILT FENCE, COIR MATTING, OR BLOCK AND GRAVEL INLET PROTECTION REMAINING WITHIN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA SHALL BE REMOVED PRIOR TO THE COMMISSIONING. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK TO ENSURE THOSE ITEMS ARE ABLE TO BE REMOVED PRIOR TO THE RUNWAY COMMISSIONING.



- 1. AT THE START OF PHASE 4D, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. CONTRACTOR SHALL MONITOR AND MAINTAIN, AS REQUIRED, SEDIMENT BASIN L AS WELL AS ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT PHASE 4D.
- 3. CONTRACTOR SHALL BEING GRADING AND PAVING OPERATIONS.
- 4. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.
- 5. ANY SILT FENCE, COIR MATTING, OR BLOCK AND GRAVEL INLET PROTECTION REMAINING WITHIN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA SHALL BE REMOVED PRIOR TO THE COMMISSIONING. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK TO ENSURE THOSE ITEMS ARE ABLE TO BE REMOVED PRIOR TO THE RUNWAY COMMISSIONING.

# PHASE 4E C-04,EC-05,EC-21,EC-22,EC-38,EC-39

- 1. AT THE START OF PHASE 4E, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL BEGIN GRADING AND PAVING OPERATIONS.
- 3. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.

# PHASE 4F

- EC-02,EC-03,EC-04,EC-11,EC-12,EC-13,EC-19,EC-20,EC-21,EC-28,EC-29,EC-30,EC-36,EC-37,EC-38)

  1. AT THE START OF PHASE 4F, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. CONTRACTOR SHALL MONITOR AND MAINTAIN, AS REQUIRED, SEDIMENT BASIN M, N, O, Q AND SKIMMER BASIN P AS WELL AS ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT PHASE 4F.
- 3. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TEMPORARY DIVERSION DITCH AND SILT FENCE ALONG THE WESTERN SIDE OF THE RUNWAY AS LONG AS POSSIBLE DURING CONSTRUCTION.

- 4. SKIMMER BASIN P SHALL REMAIN THROUGHOUT CONSTRUCTION OPERATIONS DURING THE PHASE 1 AND 2 OF THE EROSION AND SEDIMENT CONTROL PLAN. ALL AREAS IMMEDIATELY UPSTREAM OF SKIMMER BASIN P. WITHIN THE BASIN DRAINAGE AREA, SHALL BE COMPLETELY VEGETATED PRIOR TO THE REMOVAL OF SKIMMER BASIN P. SEDIMENT BASIN P. CANNOT BE REMOVED UNTIL APPROVED BY NCDEQ. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL REQUIREMENTS TO GET APPROVAL FOR THE REMOVAL OF SKIMMER BASIN P.
- 5. ONCE APPROVED FOR REMOVAL, SKIMMER BASIN P SHALL HAVE THE SKIMMER AND OUTFALL PIPE REMOVED AND FILLED IN PER THE PHASE 3 EROSION AND SEDIMENT CONTROL PLANS. THE RIP RAP DITCH ALONG THE WESTERN EDGE OF SKIMMER BASIN P SHALL BE INSTALLED PER THE PHASE 3 EROSION AND SEDIMENT CONTROL PLANS. ANY DELAYS CAUSED BY THE CONTRACTOR'S FAILURE TO MEET THE REQUIREMENTS TO REMOVAL SKIMMER BASIN P SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 6. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY.THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.
- 7. ANY SILT FENCE, COIR MATTING, OR BLOCK AND GRAVEL INLET PROTECTION REMAINING WITHIN THE PERMANENT RUNWAY 17-35 RUNWAY SAFETY AREA SHALL BE REMOVED PRIOR TO THE COMMISSIONING. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK TO ENSURE THOSE ITEMS ARE ABLE TO BE REMOVED PRIOR TO THE RUNWAY COMMISSIONING.

#### PHASE 4G (EC-02,EC-03,EC-04,EC-19,EC-20,EC-21,EC-36,EC-37,EC-38)

- 1. AT THE START OF PHASE 4G, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL BEGIN GRADING AND PAVING OPERATIONS.
- 3. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.

#### PHASE 4H

1. NO SPECIFIC EROSION AND SEDIMENT CONTROL IS REQUIRED FOR PHASE 4H. THE CONTRACTOR SHALL FOLLOW ALL EROSION AND SEDIMENT CONTROL REQUIREMENTS FOR THE PROJECT AND INDIVIDUAL PHASES FOR ANY WORK REQUIRED WITHIN PHASE 4H.

#### PHASE 4I

1. NO SPECIFIC EROSION AND SEDIMENT CONTROL IS REQUIRED FOR PHASE 41. THE CONTRACTOR SHALL FOLLOW ALL EROSION AND SEDIMENT CONTROL REQUIREMENTS FOR THE PROJECT AND INDIVIDUAL PHASES FOR ANY WORK REQUIRED WITHIN PHASE 4I.



- 1. AT THE START OF PHASE 4J, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL INSTALL SILT FENCE AND BLOCK AND GRAVEL INLET PROTECTION IN THE AREAS SHOWN ON THE PLANS.
- 3. ONCE THE SILT FENCE AND BLOCK AND GRAVEL INLET PROTECTION HAS BEEN INSTALLED, THE CONTRACTOR SHALL BEGIN
- 4. AS AREAS ARE COMPLETED, THEY SHALL BE SEEDED, MULCHED, MATTED AND/OR SODDED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.

#### PHASE 4K EC-13,EC-14,EC-30,EC-31,EC-47,EC-48)

- 1. AT THE START OF PHASE 4K, THE CONTRACTOR SHALL ENSURE ALL EXISTING EROSION AND SEDIMENT CONTROL MEASURES ARE WORKING PROPERLY AND MAINTAINED PER THE NCDEQ REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE ANY MAINTENANCE REQUIRED FOR THE MEASURES TO MEET THE PLANS AND SPECIFICATIONS.
- 2. BEGIN GRADING AND HAULING OPERATIONS AS REQUIRED TO MEET THE EMBANKMENT NEEDS OF VOLUME 2. IT IS THE INTENT THAT ANY AVAILABLE STOCK PILED MATERIAL SHALL BE USED TO THE GREATEST EXTENT POSSIBLE PRIOR TO NEEDING TO EXCAVATE MATERIALS FROM IN SITU GROUND. ONCE STOCK PILED MATERIAL HAS BEEN EXHAUSTED, EXCAVATION SHALL BEGIN.
- 3. THE CONTRACTOR SHALL BRING PROPOSED AREAS OF EXCAVATION TO THE PROPOSED GRADES. THE CONTRACTOR SHALL NOT EXCAVATE LOWER THAN THE PROPOSED GRADES WITHOUT PRIOR APPROVAL OF THE AOR.
- 4. ONCE AREAS OF THE BORROW AREA ARE COMPLETED, THEY SHALL BE SEEDED AND MULCHED ACCORDINGLY. THE CONTRACTOR SHALL MAKE THE VEGETATION OF THE SITE A PRIORITY.



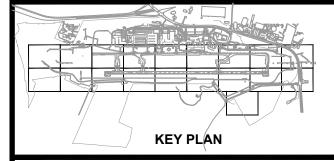


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# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING** LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

> **EROSION AND** SEDIMENT **SEQUENCE NOTES**

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J.M.M. **DESIGNED BY: DRAWN BY:** 

CHECKED BY: **APPROVED BY:** 

DATE: **DECEMBER 2016** 

J.M.M.

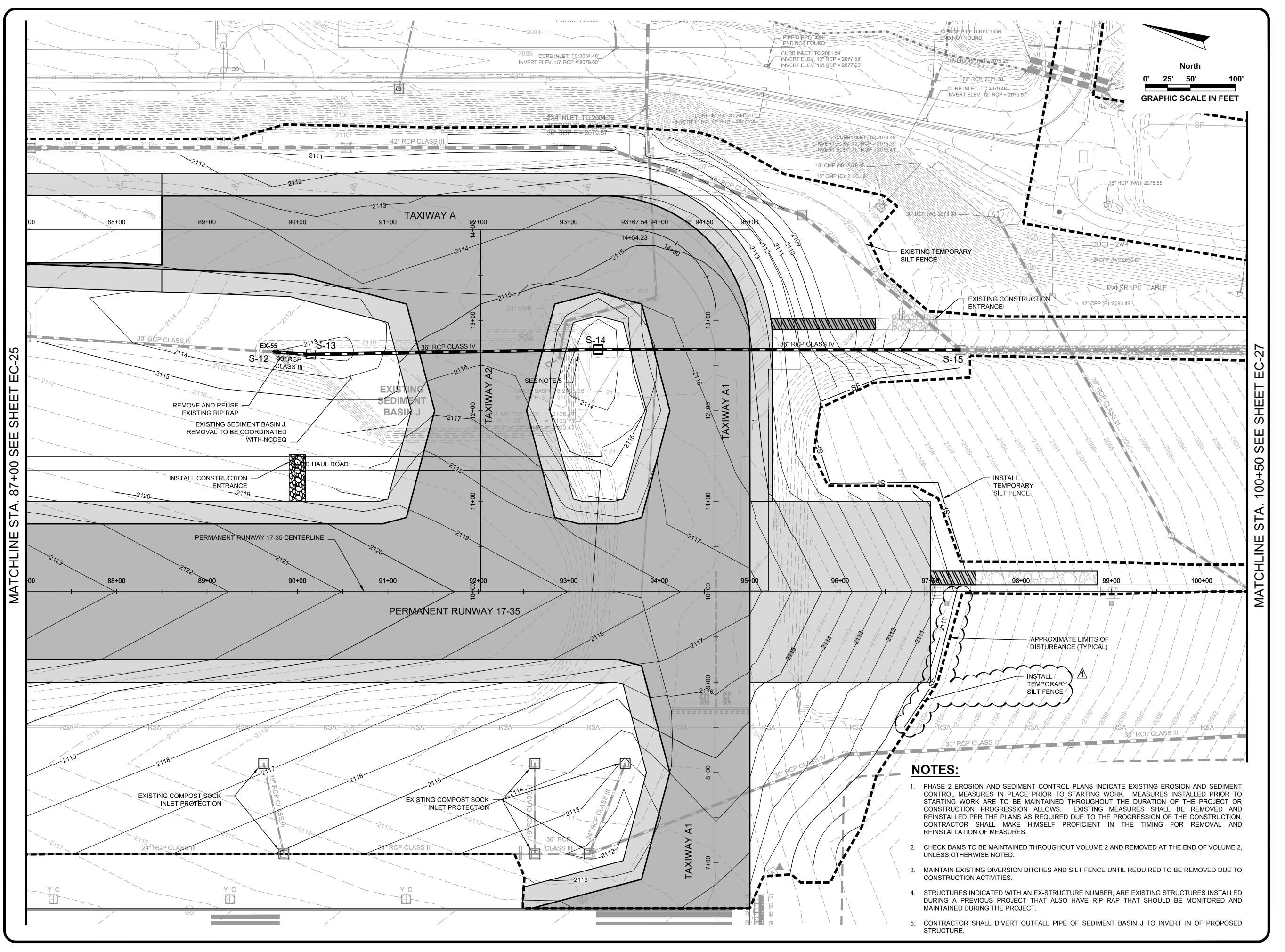
J.M.M.

N.C. C-2450

2014.157.01

**STATE LICENSE #** PROJECT NO.

SHEET NUMBER





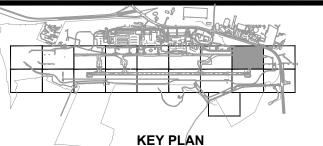


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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY

**17-35 CONSTRUCTION** 

EROSION AND
SEDIMENT CONTROL
PLAN PHASE 2

(SHEET 8 OF 17)

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J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # N.C. C-2450

STATE LICENSE # PROJECT NO.

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**SHEET NUMBER** 

EC-26
BID DOCUMENTS

### SITE WORK, GRADING AND DRAINAGE NOTES

- 1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR HAVING VISITED THE SITE AND HAVING FAMILIARIZED HIMSELF WITH THE EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID.
- 2. THE CONTRACTOR SHALL UTILIZE A NORTH CAROLINA LICENSED SURVEYOR FOR CONSTRUCTION RELATED STAKE-OUT REQUIREMENTS.
- 3. THE ENTIRE AREA WITHIN THE LIMITS OF GRADING SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO REMOVE ALL VEGETABLE MATTER, MUCK, RUBBISH, AND OTHER UNSUITABLE MATERIAL.
- 4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL DISTURBED AREAS AND **DEWATER AS NECESSARY**
- 5. ALL DISTURBED AREAS, INCLUDING THE CONTRACTORS STAGING AREA, HAUL ROUTES. GRADING LIMITS, ETC., SHALL BE RESTORED TO A SMOOTH LINE AND GRADE WITH POSITIVE DRAINAGE. THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. THERE WILL BE NO MEASUREMENT FOR PAYMENT OF SEEDING AND MULCHING REQUIRED FOR AREAS OUTSIDE LIMITS OF DISTURBANCE DISTURBED BY THE CONTRACTOR.
- 6. THE CONTRACTOR WILL BE REQUIRED TO TRANSPORT AND STORE ALL EQUIPMENT AND MATERIALS IN A MANNER WHICH WILL NOT DAMAGE ANY EXISTING PAVEMENT. BUILDINGS. SIGNS, LIGHTS, ETC. ANY DAMAGE WILL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER. THE CONTRACTOR SHALL KEEP ACCESS ROUTES CLEAN AND FREE OF LOOSE DEBRIS FROM CONSTRUCTION MATERIALS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DAILY CLEARING ALL DEBRIS FROM PAVEMENTS TRAVERSED BY CONSTRUCTION EQUIPMENT.

# **EROSION AND SEDIMENT CONTROL NOTES**

- 1. THE CONTRACTOR SHALL PROVIDE SILT FENCE AND/OR CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION.
- 2. EXCEPT AS PROVIDED BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER A CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 3. CONTRACTOR'S TEMPORARY EROSION CONTROL TEMPORARY DRAINS, SILT FENCING, AND DRAINAGE DITCHES, ETC., NOT SHOWN ON THE PLANS, OR NOTED HEREIN, SHALL BE INSTALLED BY THE CONTRACTOR TO INTERCEPT OR DIVERT SURFACE WATER RUNOFF WHICH MAY AFFECT THE WORK. THESE DRAINS AND DITCHES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE CONTRACT. UPON COMPLETION, THE CONTRACTOR SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION
- 4. SPECIFICATIONS ARE PROVIDED AS OUTLINE REQUIREMENTS FOR THE CONTRACTOR TO APPLY WATER, CHEMICALS, VEGETATION OR OTHER MATERIALS TO PREVENT THE OCCURRENCE OF DUST WHICH WILL BE OBJECTIONABLE TO THE OPERATIONS/USERS OF THE AIRPORT AS OUTLINED IN THE PROJECT SPECIAL PROVISIONS, NO SEPARATE PAYMENT WILL BE MADE. CONTRACTOR SHALL ALSO BE OBLIGATED TO DISCONTINUE OPERATIONS WHICH VIOLATE EXISTING LAWS AND REGULATIONS.
- 5. CONTRACTOR SHALL LIMIT AREAS OF DISTURBANCE AS MUCH AS POSSIBLE DURING THE COURSE OF THE PROJECT, AND STABILIZE AREAS AS WORK IS COMPLETED. NO SEPARATE MEASUREMENT WILL BE MADE FOR PAYMENT FOR AREAS REQUIRING SEEDING AND MULCHING OUTSIDE OF THE LIMITS OF CONSTRUCTION, THIS WORK SHALL BE PAID AT THE CONTRACTORS EXPENSE.
- 6. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY BY THE CONTRACTOR, NO SEPARATE PAYMENT WILL BE MADE.
- 7. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED UNLESS OTHERWISE ORDERED BY THE ENGINEER.
- 8. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, OR AS DIRECTED BY ENGINEER OR AOR.
- 9. REMOVAL OF A SEDIMENT AND EROSION CONTROL MEASURE SHALL BE AS DIRECTED BY NCDEQ AND THE ENGINEER. NO MEASURE SHALL BE REMOVED UNTIL DIRECTED TO THE CONTRACTOR IN

# **MATTING NOTES**

- 1. ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS SHALL BE SEEDED PER THE PLANS AND
- 2. ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS SHALL BE MULCHED PER THE PLANS AND SPECIFICATIONS EXCEPT THE AREAS THAT SHALL BE MATTED.
- 3. THE FOLLOWING AREAS SHALL BE MATTED:
  - A. ALL DEFINED DITCHES AS INDICATED IN THE PLANS AND DETAILS;
  - B. ALL BERMS AND SIDE SLOPES OF SEDIMENT BASINS;
  - C. ANY SLOPE EQUAL TO OR GREATER THAN A 3:1 SLOPE;
  - D. ANY BERM ABOVE A SLOPE EQUAL TO OR GREATER THAN A 3:1 SLOPE;
- E. ANY AREA REQUIRED BY THE OWNER OR AOR. 4. MATTING SHALL BE CURLEX II OR APPROVED EQUAL

# TEMPORARY SEEDING SCHEDULE LATE WINTER / **EARLY SPRING MIXTURE**

SEEDING MIXTURE SPECIES RATE (LB/ACRE) RYE (GRAIN) 120 ANNUAL LESPEDEZA (KOBE IN 50 PIEDMONT AND

COASTAL PLAIN, KOREAN IN MOUNTAINS)

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND

SEEDING DATES:

MOUNTAINS ABOVE 2,500 FEET: FEB 15 - MAY 15 MOUNTAINS BELOW 2,500 FEET: FEB 1 - MAY 1 PIEDMONT: JAN 1 - MAY 1 COASTAL PLAIN: DEC. 1 - APR. 1

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

# **TEMPORARY SEEDING SCHEDULE - SUMMER MIXTURE**

SEEDING MIXTURE SPECIES RATE (LB/ACRE) LESPEDEZA 40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LBS/ACRE.

SEEDING DATES:

**MOUNTAINS** MAY 15 - AUG. 15 PIEDMONT: MAY 1 - AUG. 1 COASTAL PLAIN: APR. 15 - AUG. 1

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

#### **TEMPORARY SEEDING SCHEDULE - FALL MIXTURE**

RATE (LB/ACRE) RYE (GRAIN) SEEDING DATES: **MOUNTAINS** AUG. 15 - DEC. 15 PEIDMONT: AUG. 15 - DEC. 30 **COASTAL PLAIN:** AUG. 15 - DEC. 30

SOIL AMENDMENTS FOLLOW RECOMMENDATIONS OF SOIL TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LBS/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LBS/ACRE KOREAN (MOUNTAINS) LESPEDEZA OR KOBE (PIEDMONT AND COASTAL PLAIN) IN LATE FEBRUARY OR EARLY MARCH.

#### PERMANENT SEEDING SCHEDULE - MIXTURE

RATE (LB/ACRE) SEEDING MIXTURE SPECIES TALL FESCUE 140 HARD FESCUE 30 ANNUAL RYE KENTUCKY BLUEGRASS

**NURSE PLANTS** 

BETWEEN MAY 11 AND SEPT. 30, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 11 OR AFTER SEPT. 30, ADD 40 LB/ACRE RYE (GRAIN). IT MAY BE BENEFICIAL TO PLANT THE GRASSES IN LATE SUMMER.

JUL. 15-AUG.

SEEDING DATES

BELOW 2500 FT: AUG. 15-SEP. 1 JUL. 25-SEP. 15 MAR. 1-APR. 1 MAR. 1-MAY 10

ABOVE 2500 FT: JUL. 25-AUG. 15 30 MAR. 20-APR. 20 MAR. 5-MAY 15

SOIL AMENDMENTS

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 75LBS/1,000 SQ. FT. GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 5-10-10 FERTILIZER.

APPLY 70-90 LB/1000 SQ. FT. GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR MULCH BY TACKING WITH ASPHALT, ROVING OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.

#### MAINTENANCE

MOW NO MORE THAN ONCE A YEAR. REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.

#### **MAINTENANCE PLAN**

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EACH RAINFALL EVENT AND/OR NO LESS THAN ONCE EVERY WEEK.
- 2. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO ENSURE CONTINUED FUNCTION OF ALL PRACTICES AS DESIGNED.
- 3. ALL SEEDED AREAS SHALL BE RE-SEEDED, FERTILIZED, AND MULCHED AS NECESSARY TO ESTABLISH SUITABLE GROUND COVER, ACCORDING TO THE SEEDING AND MULCHING SPECIFICATIONS.
- STORAGE VOLUME HAS BEEN USED.

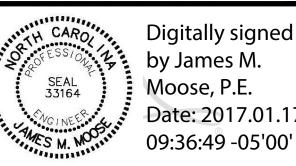
4. SEDIMENT SHALL BE REMOVED FROM ALL TRAPS AND/OR BASINS ONCE ONE HALF OF THE

- 5. THE ROCK WEIRS SHALL BE CLEANED AND/OR REPLACED WITH CLEAN ROCK ONCE SEDIMENT BUILD UP PREVENTS PROPER DRAINAGE FROM THE TRAP.
- 6. CONTRACTOR TO PERFORM ROUTINE REVIEW OF THE SILT FENCES TO ENSURE PROPER FUNCTION, FENCES TO BE CLEANED ONCE SEDIMENT DEPTH REACHES 6".
- 7. ADDITIONAL MAINTENANCE, AS REQUIRED BY NCDEQ AND THE ENGINEER, SHALL BE COMPLETED AS DIRECTED.

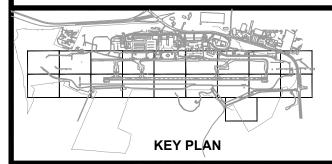


REGIONAL AIRPORT

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# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING** LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY **17-35 CONSTRUCTION** 

> **EROSION AND** SEDIMENT **CONTROL NOTES** (SHEET 2 OF 2)

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J.M.M. **DESIGNED BY:** W.L.J. **DRAWN BY:** CHECKED BY: J.M.M.

**APPROVED BY:** J.M.M.

**STATE LICENSE #** 

DATE:

PROJECT NO. 2014.157.01

**DECEMBER 2016** 

N.C. C-2450

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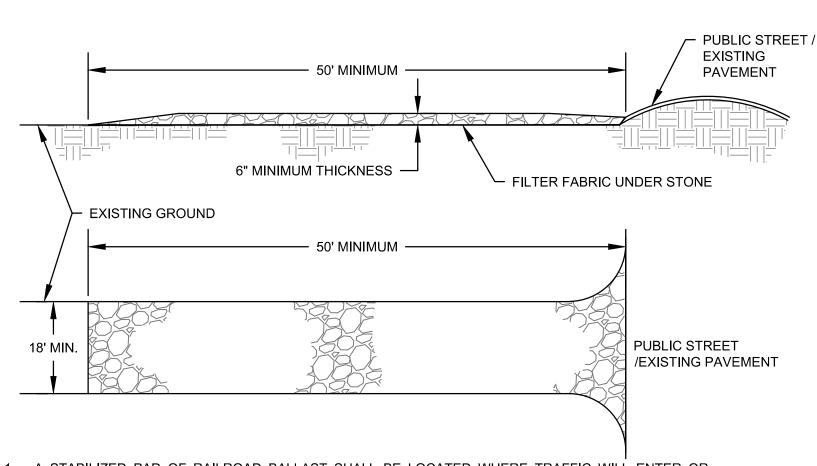
**EC-55 BID DOCUMENTS** 

#### NOTES:

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE ON THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCH BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF THE BLOCK AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2x4 WOOD STUDS THROUGH BLOCK OPENINGS.

N.T.S.

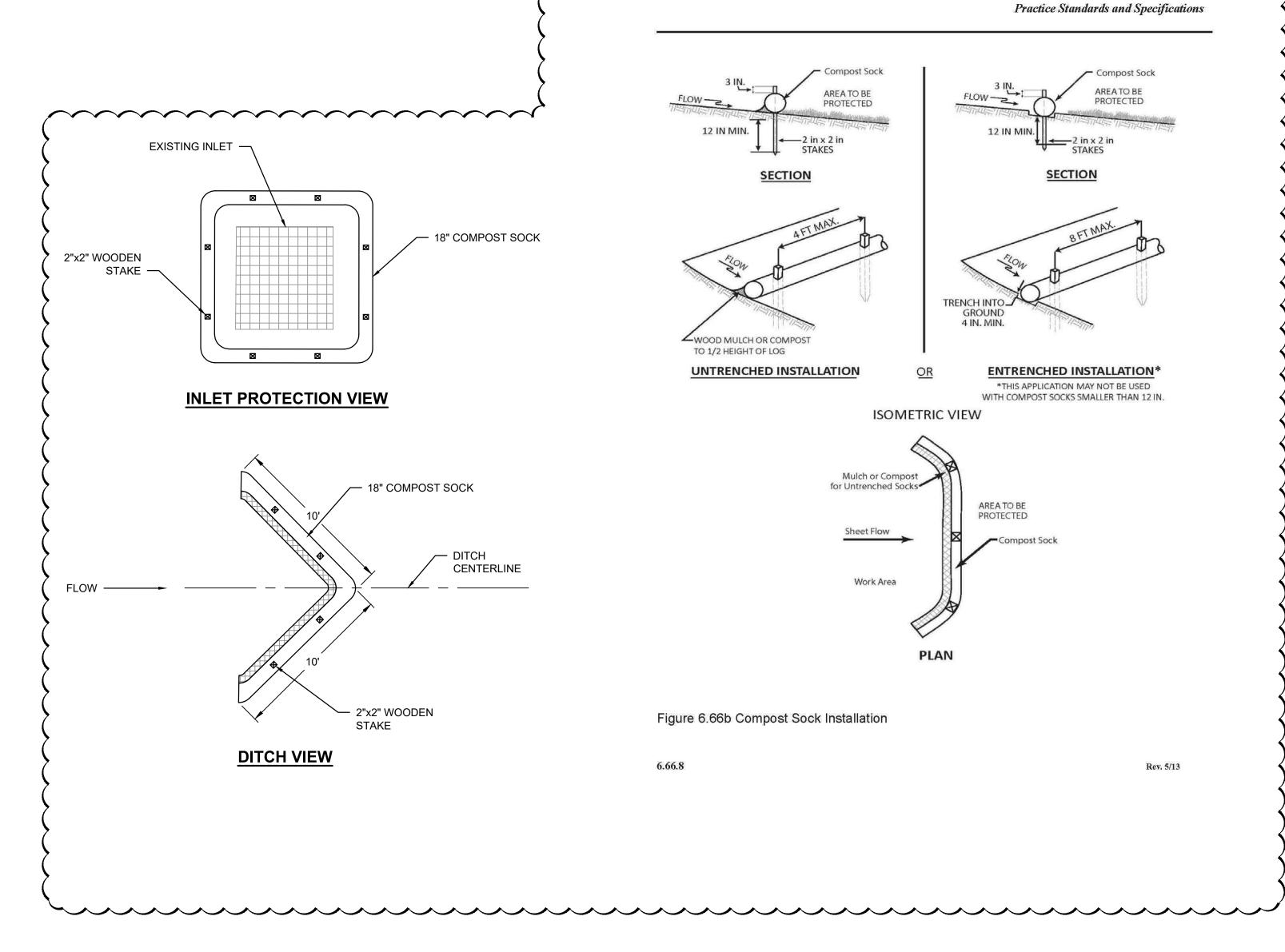
- 2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENING OVER ALL BLOCK OPENING TO HOLD GRAVEL IN PLACE.
- 3. USE CLEAN GRAVEL, 3/4-TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.



- 1. A STABILIZED PAD OF RAILROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE A CONSTRUCTION SITE ON TO A PUBLIC STREET.
- 2. STONE TO BE 2" 3" STONE.
- 3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT. STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 4. ALL SEDIMENT SPILLED, DROPPED WASHED OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
- 5. WHEN NECESSARY, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
- 6. FILTER FABRIC SHALL BE MIRAFI 500 OR EQUAL. FABRIC IS INCIDENTAL TO CONSTRUCTION ENTRANCE.

# STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.



#### NOTES:

- 1. COMPOST SOCKS SHALL MEET NCDEQ REQUIREMENT FROM CHAPTER 6.66 OF THE NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- 2. COMPOST SOCKS SHALL BE USED AS INLET PROTECTION AND IN DITCHES. THE CONTRACTOR SHALL INSPECT EACH COMPOST SOCK AFTER EACH RAIN EVENT AND PERFORM MAINTENANCE AS REQUIRED.
- 3. IN AREAS WHERE NEW DRAINAGE STRUCTURES ARE TO BE INSTALLED ADJACENT TO EXISTING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO GRADE AWAY FROM THE EXISTING DRAINAGE STRUCTURES THAT HAVE THE COMPOST SOCK AS INLET PROTECTION IN ORDER TO MINIMIZE THE STORMWATER RUNOFF REACHING THE COMPOST SOCK INLET PROTECTION.
- 4. COMPOST SOCKS SHALL BE 18" IN DIAMETER AND INSTALLED PER THE NCDEQ REQUIREMENTS.
- 5. IN AREAS WHERE NEW DRAINAGE STRUCTURES ARE TO BE INSTALLED ADJACENT TO EXISTING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL MAKE EVERY EFFORT TO GRADE AWAY FROM THE EXISTING DRAINAGE STRUCTURES THAT HAVE THE COMPOST SOCK AS INLET PROTECTION IN ORDER TO MINIMIZE THE STORMWATER RUNOFF REACHING THE COMPOST SOCK INLET PROTECTION.
- 6. CONTRACTOR MAKE HIMSELF AWARE OF ANY POTENTIAL WEATHER AND RAIN EVENTS WHILE THE COMPOST SOCKS ARE IN USE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE INLETS WITH THE COMPOST SOCKS INCLUDING TEMPORARY GRADING AWAY FROM THE INLETS AS ALLOWED BY SITE CONDITIONS. THE CONTRACTOR SHALL PREPLAN FOR RAIN EVENTS IN ORDER TO ENSURE THE COMPOST SOCKS ARE MAINTAINED BEFORE, DURING AND AFTER A RAIN EVENT.
- 7. ADDITIONAL COMPOST SOCKS MAY BE REQUIRED TO ADDITIONALLY PROTECT WORK BEING COMPLETED BETWEEN PHASED WORK AND WORK BEING COMPLETED AT NIGHT VERSUS DURING THE DAY.

### COMPOST SOCK DETAIL

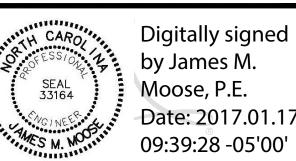
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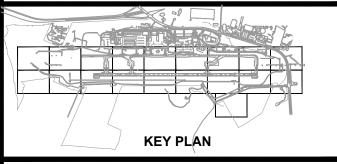


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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

EROSION AND
SEDIMENT
CONTROL DETAILS
(SHEET 1 OF 4)

ATTENT

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**AS NOTED** 

J.M.M.

2014.157.01

REVISIONS:

NO. DATE BY DESCRIPTION

12-22-16 W.L.J. ADDENDUM NO. 2

DESIGNED BY:

PROJECT NO.

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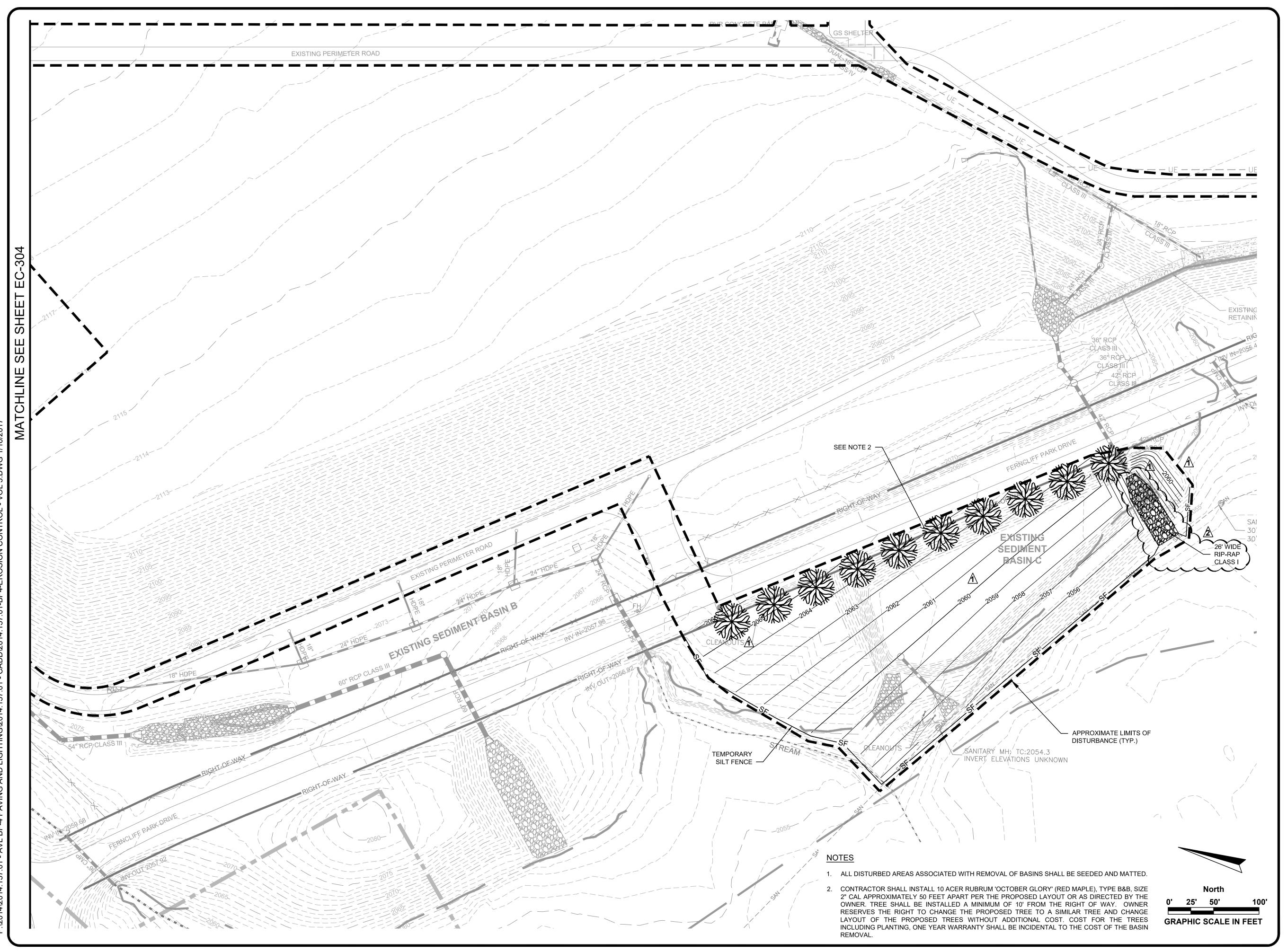
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CHECKED BY: J.M.M.
APPROVED BY: J.M.M.

DATE: DECEMBER 2016

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EC-56
BID DOCUMENTS





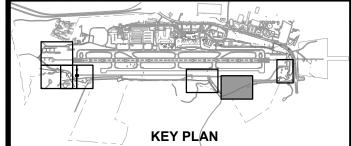


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# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING, AND NAVAIDS - VOLUME 3 -TAXIWAY B CONVERSION AND NAVAIDS

EROSION AND
SEDIMENT
CONTROL PLAN
(SHEET 4 OF 7)

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<u>2</u>	01-16-17	W.L.J.	ADDENDUM NO. 3				

DESIGNED BY:

DRAWN BY:

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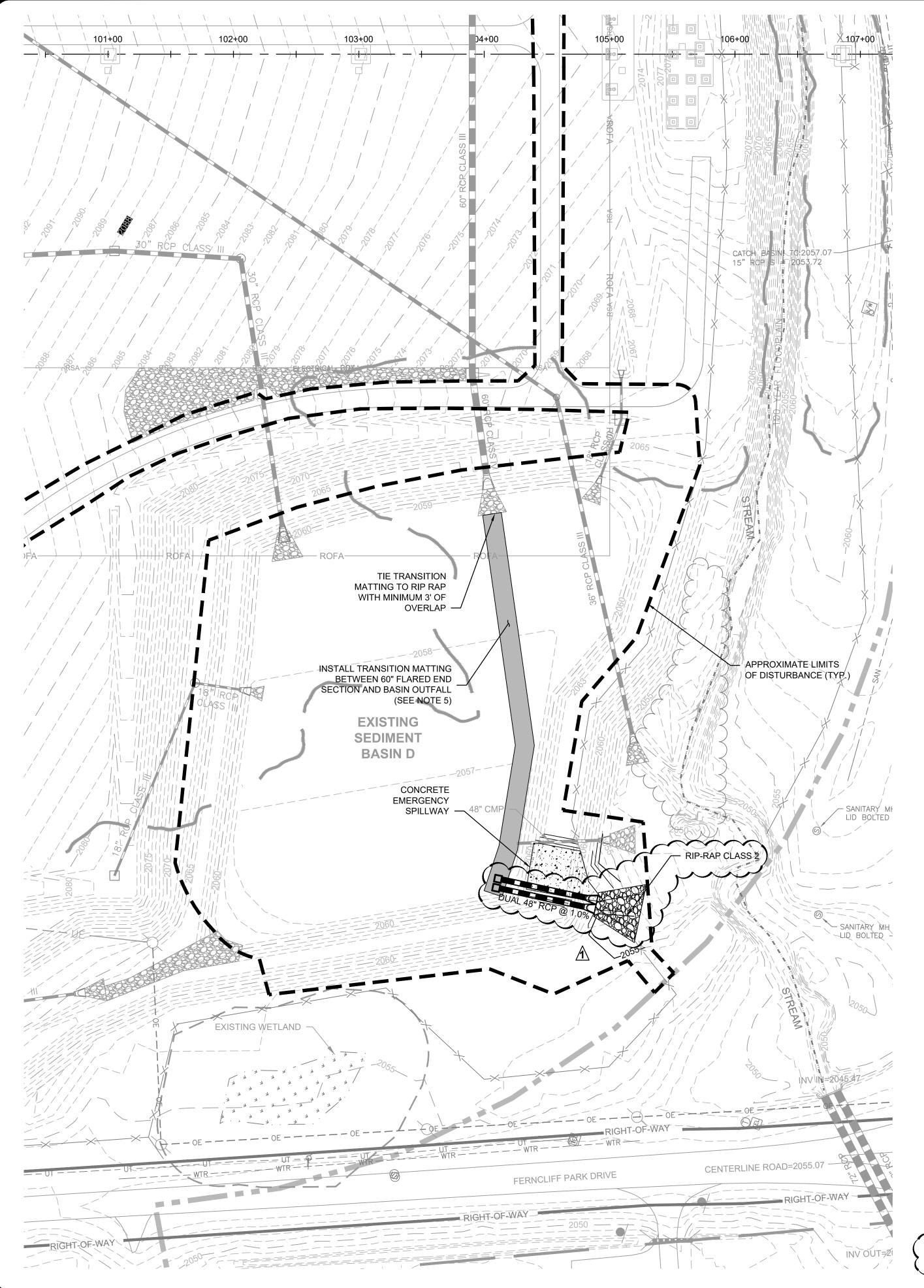
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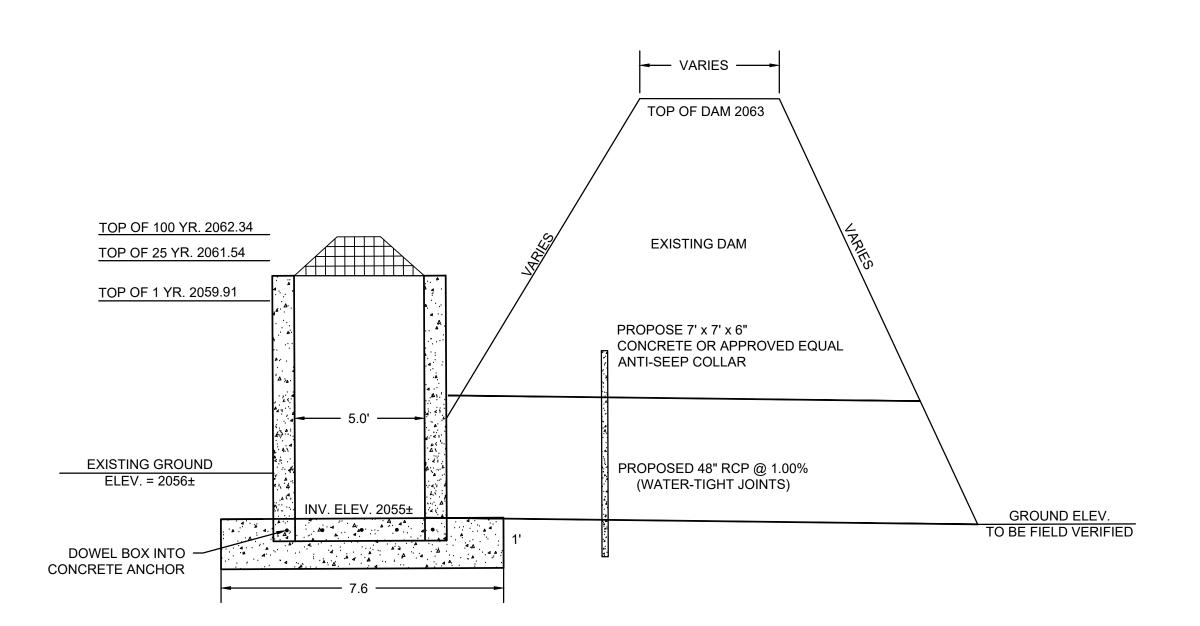
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 2014.157.01

**SHEET NUMBER** 

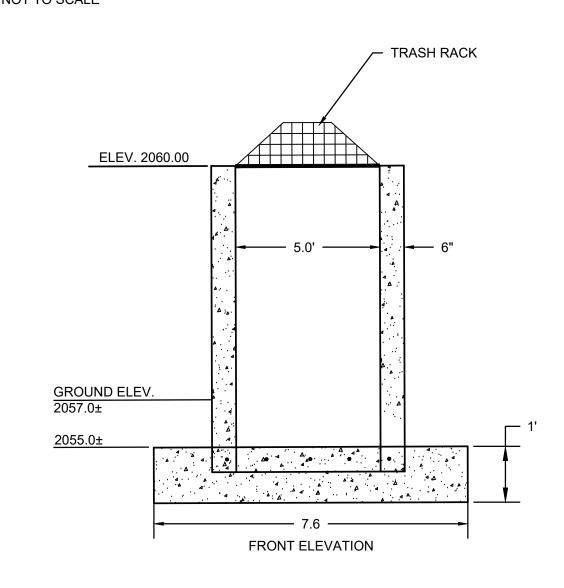
EC-305
BID DOCUMENTS





# SECTION THROUGH POND OUTLET

NOT TO SCALE



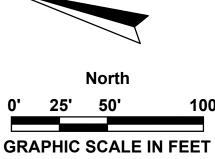
# 5'X 5' PRECAST DETENTION BOX DETAIL

NOT TO SCALE

#### **NOTES**

- 1. ONCE APPROVAL HAS BEEN RECEIVED TO CONVERT SEDIMENT BASIN D TO A DETENTION BASIN, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THIS PLAN. ALL WORK AND MATERIALS ASSOCIATED WITH THE ITEMS BELOW SHALL BE INCLUDED WITHIN THE LUMP SUM UNIT PRICE FOR THE CONVERSION OF THE BASIN.
- 2. CONTRACTOR SHALL REMOVE ALL BAFFLES.
- 3. CONTRACTOR SHALL REMOVE THE EXISTING RISER AND SKIMMER AND INSTALL THE PROPOSED OUTFALL PIPES AND STRUCTURES.
- 4. CONTRACTOR SHALL SPRAY ALL RIP RAP, TO REMAIN IN PLACE, WITH AN APPROVED HERBICIDE TO REMOVE ALL VEGETATION FROM WITHIN THE RIP RAP.
- 5. SHOREMAX OR APPROVED EQUAL TO BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS. INSTALLATION AND MATERIALS SHALL MEET REQUIREMENTS OF THE MANUFACTURER.
- 6. CONTRACTOR SHALL REMOVE EXISTING RIP RAP SPILL WAY AND REPLACE WITH CONCRETE SPILL WAY PER SPECIFICATIONS. THE CONCRETE FOR SPILL WAY SHALL BE INSTALLED ALL THE WAY TO THE CONCRETE MOW STRIP FOR THE WILDLIFE FENCE.
- . AREA OUTSIDE OF WILDLIFE FENCE SHALL BE RIP RAPPED USING STOCKPILED RIP RAP FROM THE WILDLIFE FENCE MOW STRIP TO A MINIMUM OF 10 FEET BEYOND THE FENCE.
- 8. THE LAYOUT AND POSITION OF THE RIP RAP OUTSIDE THE WILDLIFE FENCE SHALL BE FIELD LOCATED AND APPROVED BY THE OWNER PRIOR TO INSTALLATION. THERE SHALL BE ENOUGH ROOM FOR THE OWNER TO ACCESS THE AREA WITH MOWING EQUIPMENT.
- 9. ALL WORK ASSOCIATED WITH THE CONVERSION OF SEDIMENT BASIN B, INCLUDING STRUCTURE REMOVAL, STRUCTURE AND PIPE INSTALLATION, HERBICIDE, CONCRETE SPILLWAY, AND EROSION REPAIR, AND MOWING, SHALL BE INCIDENTAL TO THE COST OF THE CONVERSION. TRANSITION MATTING AND REUSED RIP RAP SHALL BE PAID FOR AS A SEPARATE UNIT PRICE.

10. CONTRACTOR SHALL FIELD LOCATE FINAL STRUCTURES AND PIPES, INCLUDING THE SPILLWAY, PRIOR TO STARTING CONVERSION. THE OWNER RESERVES THE RIGHT TO MAKE CHANGES BASED ON ACTUAL FIELD CONDITIONS.







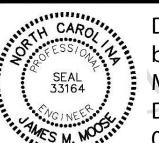
AVCON, INC.
ENGINEERS & PLANNERS

MALLARD CREEK III, SUITE 152

8604 CLIFF CAMERON DRIVE • CHARLOTTE N.C. 28269

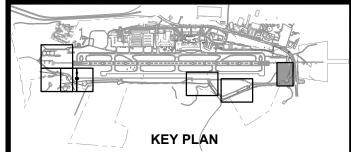
OFFICE: (704) 954-9008

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Digitally signed by James M. Moose, P.E. Date: 2017.01.17 09:40:32 -05'00'

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING, AND NAVAIDS - VOLUME 3 -TAXIWAY B CONVERSION AND NAVAIDS

EROSION AND
SEDIMENT
CONTROL PLAN
(SHEET 5 OF 7)

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SCALE:							
REVISIONS:							
NO.	DATE	BY	DESCRIPTION				
À	01-16-17	W.L.J.	ADDENDUM NO. 3				

DESIGNED BY: J.M.M.

DRAWN BY: A.M.T.

CHECKED BY: J.M.M.

APPROVED BY:

STATE LICENSE #

DATE: DECEMBER 2016

J.M.M.

N.C. C-2450

PROJECT NO. 2014.157.01

SHEET NUMBER

EC-306
BID DOCUMENTS

### SITE WORK, GRADING AND DRAINAGE NOTES

- 1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR HAVING VISITED THE SITE AND HAVING FAMILIARIZED HIMSELF WITH THE EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID.
- 2. THE CONTRACTOR SHALL UTILIZE A NORTH CAROLINA LICENSED SURVEYOR FOR CONSTRUCTION RELATED STAKE-OUT REQUIREMENTS.
- 3. THE ENTIRE AREA WITHIN THE LIMITS OF GRADING SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO REMOVE ALL VEGETABLE MATTER, MUCK, RUBBISH, AND OTHER UNSUITABLE MATERIAL.
- 4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL DISTURBED AREAS AND **DEWATER AS NECESSARY**
- 5. ALL DISTURBED AREAS, INCLUDING THE CONTRACTORS STAGING AREA, HAUL ROUTES, GRADING LIMITS. ETC., SHALL BE RESTORED TO A SMOOTH LINE AND GRADE WITH POSITIVE DRAINAGE. THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. THERE WILL BE NO MEASUREMENT FOR PAYMENT OF SEEDING AND MULCHING REQUIRED FOR AREAS OUTSIDE LIMITS OF DISTURBANCE DISTURBED BY THE CONTRACTOR.
- 6. THE CONTRACTOR WILL BE REQUIRED TO TRANSPORT AND STORE ALL EQUIPMENT AND MATERIALS IN A MANNER WHICH WILL NOT DAMAGE ANY EXISTING PAVEMENT, BUILDINGS. SIGNS, LIGHTS, ETC. ANY DAMAGE WILL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER. THE CONTRACTOR SHALL KEEP ACCESS ROUTES CLEAN AND FREE OF LOOSE DEBRIS FROM CONSTRUCTION MATERIALS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DAILY CLEARING ALL DEBRIS FROM PAVEMENTS TRAVERSED BY CONSTRUCTION

### **EROSION AND SEDIMENT CONTROL NOTES**

- 1. THE CONTRACTOR SHALL PROVIDE SILT FENCE AND/OR CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION.
- 2. EXCEPT AS PROVIDED BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER A CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 3. CONTRACTOR'S TEMPORARY EROSION CONTROL TEMPORARY DRAINS, SILT FENCING, AND DRAINAGE DITCHES, ETC., NOT SHOWN ON THE PLANS, OR NOTED HEREIN, SHALL BE INSTALLED BY THE CONTRACTOR TO INTERCEPT OR DIVERT SURFACE WATER RUNOFF WHICH MAY AFFECT THE WORK. THESE DRAINS AND DITCHES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE CONTRACT. UPON COMPLETION, THE CONTRACTOR SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION.
- 4. SPECIFICATIONS ARE PROVIDED AS OUTLINE REQUIREMENTS FOR THE CONTRACTOR TO APPLY WATER, CHEMICALS, VEGETATION OR OTHER MATERIALS TO PREVENT THE OCCURRENCE OF DUST WHICH WILL BE OBJECTIONABLE TO THE OPERATIONS/USERS OF THE AIRPORT AS OUTLINED IN THE PROJECT SPECIAL PROVISIONS, NO SEPARATE PAYMENT WILL BE MADE. CONTRACTOR SHALL ALSO BE OBLIGATED TO DISCONTINUE OPERATIONS WHICH VIOLATE EXISTING LAWS AND REGULATIONS.
- 5. CONTRACTOR SHALL LIMIT AREAS OF DISTURBANCE AS MUCH AS POSSIBLE DURING THE COURSE OF THE PROJECT, AND STABILIZE AREAS AS WORK IS COMPLETED. NO SEPARATE MEASUREMENT WILL BE MADE FOR PAYMENT FOR AREAS REQUIRING SEEDING AND MULCHING OUTSIDE OF THE LIMITS OF CONSTRUCTION, THIS WORK SHALL BE PAID AT THE CONTRACTORS EXPENSE.
- 6. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY BY THE CONTRACTOR, NO SEPARATE PAYMENT WILL BE MADE.
- 7. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED UNLESS OTHERWISE ORDERED BY THE ENGINEER.
- 8. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, OR AS DIRECTED BY ENGINEER OR AOR.
- 9. REMOVAL OF A SEDIMENT AND EROSION CONTROL MEASURE SHALL BE AS DIRECTED BY NCDEQ AND THE ENGINEER. NO MEASURE SHALL BE REMOVED UNTIL DIRECTED TO THE CONTRACTOR IN WRITING.

# **MATTING NOTES**

- 1. ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS SHALL BE SEEDED PER THE PLANS AND
- 2. ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS SHALL BE MULCHED PER THE PLANS AND SPECIFICATIONS EXCEPT THE AREAS THAT SHALL BE MATTED.
- 3. THE FOLLOWING AREAS SHALL BE MATTED:
  - A. ALL DEFINED DITCHES AS INDICATED IN THE PLANS AND DETAILS;
  - B. ALL BERMS AND SIDE SLOPES OF SEDIMENT BASINS;
  - C. ANY SLOPE EQUAL TO OR GREATER THAN A 3:1 SLOPE;
  - D. ANY BERM ABOVE A SLOPE EQUAL TO OR GREATER THAN A 3:1 SLOPE;
  - E. ANY AREA REQUIRED BY THE OWNER OR AOR.
- 4. MATTING SHALL BE CURLEX II OR APPROVED EQUAL

# TEMPORARY SEEDING SCHEDULE LATE WINTER / **EARLY SPRING MIXTURE**

SEEDING MIXTURE SPECIES RATE (LB/ACRE) RYE (GRAIN) ANNUAL LESPEDEZA (KOBE IN 50 PIEDMONT AND

COASTAL PLAIN, KOREAN IN MOUNTAINS) OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND

**SEEDING DATES:** 

MOUNTAINS ABOVE 2,500 FEET: FEB 15 - MAY 15 MOUNTAINS BELOW 2,500 FEET: FEB 1 - MAY 1 PIEDMONT: JAN 1 - MAY 1 COASTAL PLAIN: DEC. 1 - APR. 1

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

# **TEMPORARY SEEDING SCHEDULE - SUMMER MIXTURE**

SEEDING MIXTURE SPECIES RATE (LB/ACRE) LESPEDEZA 40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LBS/ACRE.

**SEEDING DATES: MOUNTAINS** 

MAY 15 - AUG. 15 PIEDMONT: MAY 1 - AUG. 1 COASTAL PLAIN: APR. 15 - AUG. 1

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED. REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

# **TEMPORARY SEEDING SCHEDULE - FALL MIXTURE**

RATE (LB/ACRE) SEEDING MIXTURE SPECIES RYE (GRAIN) SEEDING DATES: AUG. 15 - DEC. 15 MOUNTAINS: PEIDMONT: AUG. 15 - DEC. 30

SOIL AMENDMENTS

COASTAL PLAIN:

FOLLOW RECOMMENDATIONS OF SOIL TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

AUG. 15 - DEC. 30

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

**MAINTENANCE** 

REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LBS/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LBS/ACRE KOREAN (MOUNTAINS) LESPEDEZA OR KOBE (PIEDMONT AND COASTAL PLAIN) IN LATE FEBRUARY OR EARLY MARCH.

# PERMANENT SEEDING SCHEDULE - MIXTURE

SEEDING MIXTURE SPECIES RATE (LB/ACRE) TALL FESCUE 140 HARD FESCUE 30 ANNUAL RYE KENTUCKY BLUEGRASS

NURSE PLANTS

BETWEEN MAY 11 AND SEPT. 30, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 11 OR AFTER SEPT. 30, ADD 40 LB/ACRE RYE (GRAIN). IT MAY BE BENEFICIAL TO PLANT THE GRASSES IN LATE SUMMER.

SEEDING DATES

AUG. 15-SEP. 1 BELOW 2500 FT: JUL. 25-SEP. 15 MAR. 1-APR. 1 MAR. 1-MAY 10 ABOVE 2500 FT: JUL. 25-AUG. 15 JUL. 15-AUG.

SOIL AMENDMENTS

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 75LBS/1,000 SQ. FT. GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 5-10-10 FERTILIZER.

APPLY 70-90 LB/1000 SQ. FT. GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR MULCH BY TACKING WITH ASPHALT, ROVING OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.

30 MAR. 20-APR. 20 MAR. 5-MAY 15

MOW NO MORE THAN ONCE A YEAR. REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.

# **MAINTENANCE PLAN**

COMPLETED AS DIRECTED.

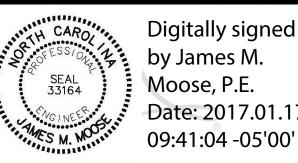
- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EACH RAINFALL EVENT AND/OR NO LESS THAN ONCE EVERY WEEK.
- 2. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO ENSURE CONTINUED FUNCTION OF ALL PRACTICES AS DESIGNED.
- 3. ALL SEEDED AREAS SHALL BE RE-SEEDED, FERTILIZED, AND MULCHED AS NECESSARY TO ESTABLISH SUITABLE GROUND COVER, ACCORDING TO THE SEEDING AND MULCHING SPECIFICATIONS.
- 4. SEDIMENT SHALL BE REMOVED FROM ALL TRAPS AND/OR BASINS ONCE ONE HALF OF THE STORAGE VOLUME HAS BEEN USED.
- 5. THE ROCK WEIRS SHALL BE CLEANED AND/OR REPLACED WITH CLEAN ROCK ONCE SEDIMENT BUILD UP PREVENTS PROPER DRAINAGE FROM THE TRAP.
- 6. CONTRACTOR TO PERFORM ROUTINE REVIEW OF THE SILT FENCES TO ENSURE PROPER FUNCTION. FENCES TO BE CLEANED ONCE SEDIMENT DEPTH REACHES 6".

7. ADDITIONAL MAINTENANCE, AS REQUIRED BY NCDEQ AND THE ENGINEER, SHALL BE

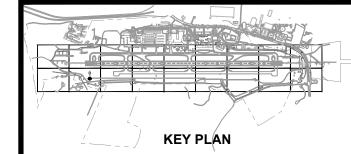




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# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING.** LIGHTING, AND NAVAIDS - VOLUME 3 -**TAXIWAY B CONVERSION** 

AND NAVAIDS

**EROSION AND** SEDIMENT **CONTROL NOTES** (SHEET 2 OF 2)

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**SCALE: AS NOTED** 

**REVISIONS:** NO. DATE BY DESCRIPTION /1\ | 01-16-17 | W.L.J.| ADDENDUM NO. 3

J.M.M. **DESIGNED BY: DRAWN BY:** CHECKED BY:

**APPROVED BY:** J.M.M.

**DECEMBER 2016** DATE:

PROJECT NO. 2014.157.01

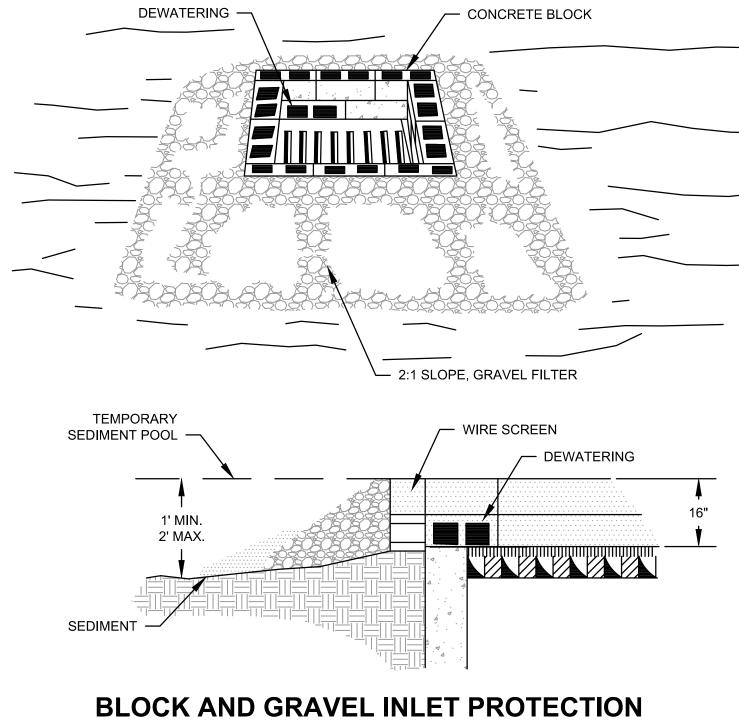
**STATE LICENSE #** 

EC-311

**BID DOCUMENTS** 

SHEET NUMBER

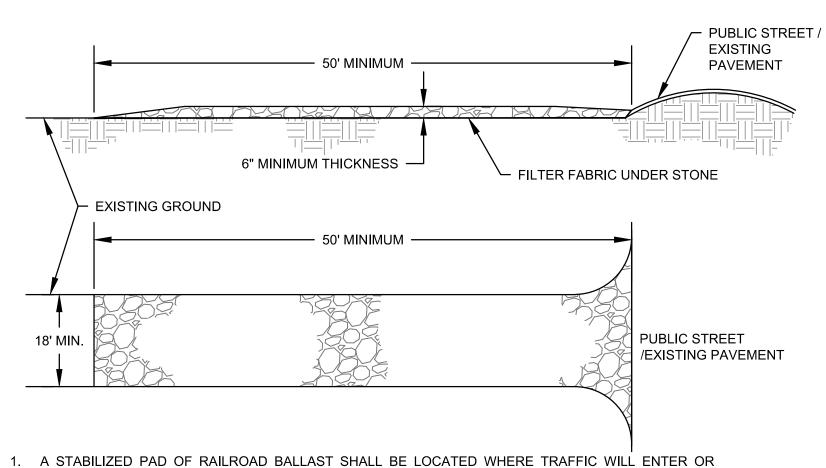
N.C. C-2450



NTO

#### NOTES:

- 1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE ON THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCH BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF THE BLOCK AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2x4 WOOD STUDS THROUGH BLOCK OPENINGS.
- 2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENING OVER ALL BLOCK OPENING TO HOLD GRAVEL IN PLACE.
- 3. USE CLEAN GRAVEL, 3/4-TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.



- LEAVE A CONSTRUCTION SITE ON TO A PUBLIC STREET.
- 2. STONE TO BE 2" 3" STONE.
- 3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT. STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 4. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
- 5. WHEN NECESSARY, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
- 6. FILTER FABRIC SHALL BE MIRAFI 500 OR EQUAL. FABRIC IS INCIDENTAL TO CONSTRUCTION ENTRANCE

# STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.

# **BASIN REMOVAL / REUSE CHART**

BASIN	VOLUME 2	VOLUME 3
Α	MAINTAIN	REGRADE AND REMOVE
В	MAINTAIN	REGRADE AND REMOVE
С	MAINTAIN	DETENTION
D	MAINTAIN	DETENTION
E	MAINTAIN	REGRADE AND REMOVE
F	MAINTAIN	REGRADE AND REMOVE
G	MAINTAIN	REGRADE AND REMOVE
Н	MAINTAIN	REGRADE AND REMOVE
I	REMOVE	
J	REMOVE	
К	REMOVE	
L	REMOVE	
M	MAINTAIN	DETENTION
N	MAINTAIN	DETENTION
0	MAINTAIN	REGRADE AND REMOVE
Р	MAINTAIN	REGRADE AND REMOVE
Q	MAINTAIN	REGRADE AND REMOVE

# **RIPRAP CHART**

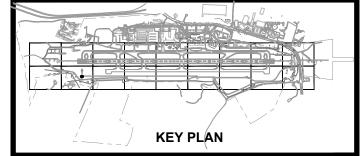
EX-64 EXISTING FLARED END SECTION 42 1 26 22  BASIN A EXISTING SEDIMENT BASIN 48 2 35 35  BASIN C EXISTING SEDIMENT BASIN 36 B 18 20  BASIN D EXISTING SEDIMENT BASIN 48 2 35 36  BASIN D DETENTION BASIN 48 2 35 36  BASIN D DETENTION BASIN 48 2 35 36  BASIN D DETENTION BASIN 48 2 35 36  BASIN E EXISTING SEDIMENT BASIN 18 2 35 36  BASIN F EXISTING SKIMMER BASIN 6 A 9 8  BASIN G EXISTING SKIMMER BASIN 6 A 9 6  BASIN H EXISTING SEDIMENT BASIN 18 B 18 15	W (FT)	La (FT)	RIPRAP DEPTH (D) (IN)	RIPRAP CLASS	PIPE SIZE (IN)	OUTLET DESCRIPTION	STR. NO.
BASIN C         EXISTING SEDIMENT BASIN         36         B         18         20           BASIN D         EXISTING SEDIMENT BASIN         48         2         35         36           BASIN D         **         30         B         18         16           BASIN D         DETENTION BASIN         48         2         35         36           BASIN E         EXISTING SEDIMENT BASIN         18         2         35         36           BASIN F         EXISTING SKIMMER BASIN         6         A         9         8           BASIN G         EXISTING SKIMMER BASIN         6         A         9         6	26.0	22	26	1	42	EXISTING FLARED END SECTION	EX-64
BASIN D         EXISTING SEDIMENT BASIN         48         2         35         36           BASIN D         **         30         B         18         16           BASIN D         DETENTION BASIN         48         2         35         36           BASIN E         EXISTING SEDIMENT BASIN         18         2         35         25           BASIN F         EXISTING SKIMMER BASIN         6         A         9         8           BASIN G         EXISTING SKIMMER BASIN         6         A         9         6	39.0	35	35	2	48	EXISTING SEDIMENT BASIN	BASIN A
BASIN D         **         30         B         18         16           BASIN D         DETENTION BASIN         48         2         35         36           BASIN D         DETENTION BASIN         48         2         35         36           BASIN E         EXISTING SEDIMENT BASIN         18         2         35         25           BASIN F         EXISTING SKIMMER BASIN         6         A         9         8           BASIN G         EXISTING SKIMMER BASIN         6         A         9         6	23.0	20	18	В	36	EXISTING SEDIMENT BASIN	BASIN C
BASIN D         DETENTION BASIN         48         2         35         36           BASIN D         DETENTION BASIN         48         2         35         36           BASIN E         EXISTING SEDIMENT BASIN         18         2         35         25           BASIN F         EXISTING SKIMMER BASIN         6         A         9         8           BASIN G         EXISTING SKIMMER BASIN         6         A         9         6	40.0	36	35	2	48	EXISTING SEDIMENT BASIN	BASIN D
BASIN D         DETENTION BASIN         48         2         35         36           BASIN E         EXISTING SEDIMENT BASIN         18         2         35         25           BASIN F         EXISTING SKIMMER BASIN         6         A         9         8           BASIN G         EXISTING SKIMMER BASIN         6         A         9         6	18.5	16	18	B	30	**	BASIN D
BASIN E         EXISTING SEDIMENT BASIN         18         2         35         25           BASIN F         EXISTING SKIMMER BASIN         6         A         9         8           BASIN G         EXISTING SKIMMER BASIN         6         A         9         6	40.0	36	35	2	48	DETENTION BASIN	BASIN D
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	8.5	8	9	А	6	EXISTING SKIMMER BASIN	BASIN F
BASIN H EXISTING SEDIMENT BASIN 18 B 18 15	6.5	6	9	А	6	EXISTING SKIMMER BASIN	BASIN G
	16.5	15	18	В	18	EXISTING SEDIMENT BASIN	BASIN H
BASIN M EXISTING SEDIMENT BASIN 24 B 18 13	15.0	13	18	В	24	EXISTING SEDIMENT BASIN	BASIN M
BASIN N EXISTING SEDIMENT BASIN 30 2 30 25	7.5	25	30	2	30	EXISTING SEDIMENT BASIN	BASIN N
BASIN O EXISTING SEDIMENT BASIN 24 B 18 16	18.0	16	18	В	24	EXISTING SEDIMENT BASIN	BASIN O
BASIN Q EXISTING SKIMMER BASIN 0 0 0 0	0.0	0	0	0	0	EXISTING SKIMMER BASIN	BASIN Q





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ASHEVILLE
REGIONAL AIRPORT
ASHEVILLE
NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING, AND NAVAIDS - VOLUME 3 -TAXIWAY B CONVERSION AND NAVAIDS

EROSION AND
SEDIMENT
CONTROL DETAILS
(SHEET 1 OF 6)

ATTENTIO

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SCALE: AS NOTED

NO. DATE BY DESCRIPTION

101-16-17 W.L.J. ADDENDUM NO. 3

DESIGNED BY:

PROJECT NO.

DRAWN BY: W.L.J.
CHECKED BY: J.M.M.

J.M.M.

N.C. C-2450

2014.157.01

APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE #

SHEET NUMBER

EC-312
BID DOCUMENTS

# ADDENDUM NO. 4 TO PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR

#### PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 – PAVING, LIGHTING, AND NAVAIDS

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE, NORTH CAROLINA

TO: ALL PROSPECTIVE BIDDERS

DATE: JANUARY 23, 2017

This Addendum No. 4 forms a part of the Contract Documents and modifies the original Issued for Bid contract documents, plan drawings and specifications dated December 2016 as noted and included herein. <u>Bidder must acknowledge receipt of this ADDENDUM in the space provided on the Bid Form.</u> Failure to do so may subject the Bidder to disgualification.

#### **GENERAL**

- 1. The deadline for bids remains Friday, January 27, 2017 at 2:00 PM Eastern Standard Time.
- 2. Bidders may utilize the attached .xls spreadsheet in completing Proposal Form 3 Bid Form. Please ensure each bid item is completely filled out with unit prices both in words and numerical form, and total amount per item in numerical form. Proposal Form 3 may be completed within Excel, via typewriter, or by hand. <a href="If completing within Excel, please">If completing within Excel, please</a> ensure the bid form matches the enclosed PDF exactly. Proposal Form 3 shall be signed by hand.

#### MODIFICATIONS TO CONTRACT PLANS AND SPECIFICATIONS

#### **SPECIFICATIONS**

- 1. Addendum No. 4 modifies the Bid Proposal Form 3. Remove Bid Proposal Form 3: Bid Form, Page P-4 through P-76 and replace with the enclosed Proposal Form 3: Bid Form, Page P-4 through P-76. Electronic spreadsheet is also included for bidders' use.
- 2. Revise General Provisions Section 80-08, revise third paragraph, first sentence, to read: "Liquidated damages will be assessed in the amount of \$2,000 per calendar day for failure to reach critical milestone dates associated with the construction of NAVAIDs, critical areas, and paving."
- 3. Modify Specification P-102 Safety and Security, Part 10, last paragraph to indicate Item P-102-3 Barricade is paid per each (EA), not lump sum (LS).
- 4. Specification L-153 "Installation of Airport Pavement Sensor/Weather Information Systems" Replace with revised L-153 attached. Specification L-153 is reissued with this Addendum.

#### **PLANS**

- 1. G-07, Add text "(GSCA Crossing Procedures)" to end of Haul Rote 3 notes.
- SP-22 through SP-34, Signage to be installed as part of Volume 3 to be removed from Volume 2 phasing sheets as part of released for construction documents. Signage to be installed as part of Volume 3 to be added to Volume 3 phasing sheets as part of released for construction documents.
- 3. SP-24, Taxiway and Runway Closure Phase 4C Table, revise Taxiway A at Taxiway A3 to read as follows: "Closure for hatched areas shall be per note 19"
- 4. Remove and Replace C-49
- 5. Remove and Replace C-57
- 6. Remove and Replace EC-26
- 7. Remove and Replace EC-43
- Revise Dowel and Tie-Bar Notes, Note 2, Last Sentence to read as follows: "Contractor shall allow a minimum of 3 days cure time with 3000 PSI minimum flexural strength prior to drilling newly placed concrete.
- 9. C-304, Note for Skimmer Basin F reads as follows: "Remove Skimmer and Outfall Pipe". Note to be moved for full viewing as part of released for construction documents.
- 10. Sheet E-311 "Runway Pavement Sensor Layout Plan" Change Note 1 to read as follows:

"THE RUNWAY PAVEMENT SENSOR SYSTEM SHALL BE A VAISALA RWS200 SYSTEM WITH THE DRS511 PAVEMENT SENSOR OR THE FP2000 PAVEMENT SENSOR OR APPROVED EQUAL. COORDINATE THE SENSOR SELECTION WITH THE AOR AND VAISALA REPRESENTATIVE."

Sheet E-311 is not reissued with this Addendum.

11. Sheet E-312 "Runway Pavement Sensor and Conduit Installation" - Replace with revised E-312 attached. Sheet E-312 is reissued with this Addendum.

#### **END OF ADDENDUM NO. 4**

BIDDER:	Date:

- 1. Price: Includes all labor, materials, and equipment, etc. required to complete project.
- 2. In submitting this bid, I certify:
  - a. Items bid are in exact accordance with specifications, unless noted in bid.
  - b. Prices in this bid have been arrived at independently, without consultation or agreement with any competitor for purpose of restricting competition.
- 3. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal, which includes initials on each bid form sheet, shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Airport: Asheville Regional Airport

Project: Bid Package 4

	Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
VOLUME 2 BASE BID - ASPHALT RUNWAY WITH QUARTZ HIRL								
	MOBILIZATION							
GP-105-2.1	atdollars	LS	1	\$	\$			
	andcents							
	REMOVAL OF DRAINAGE STRUCTURES (SIZE AND							
S-140-4.1	MATERIAL VARIES)	EA	14	\$	¢			
3-140-4.1	atdollars	EA	14	Φ	Φ			
	andcents							
	REMOVAL OF DRAINAGE PIPES (SIZE AND		1,683	\$				
S-140-4.2	MATERIAL VARIES)	LF			\$			
0	atdollars				<b>—</b>			
	andcents							
	REMOVAL OF EXISTING CONCRETE LINED DITCH			\$				
S-140-4.3	atdollars	LF	200		\$			
	andcents							
	AIRFIELD PAVEMENT REMOVAL							
P-101-5.1	atdollars	SY	67,100	\$	\$			
	andcents		07,100	<b>-</b>	·			
	HAUL ROAD PAVEMENT REMOVAL							
P-101-5.2	atdollars	SY	12,600	\$	\$			
01 0.2	andcents	3.	12,000	<b>*</b>	<b>*</b>			

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated							
Item No.	Item Description and Unit Price	e in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item	
P-101-5.3	PAVEMENT MILLING (4.75") atand	dollars cents	SY	1,800	\$	\$	
P-101-5.4	PAVEMENT MILLING (2") atand	dollars cents	SY	4,200	\$	\$	
P-101-5.5	CRACK REPAIR atand		LF	1,000	\$	\$	
P-102-1	SAFETY AND SECURITY atand	dollars cents	LS	1	\$	\$	
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars cents	EA	265	\$	\$	
P-102-3	BARRICADE at and	dollars cents	EA	45	\$	\$	
P-102-4	TAXIWAY CROSSING 1 at and	dollars cents	LS	1	\$	\$	
P-102-5	TAXIWAY CROSSING 2 at and	dollars cents	LS	1	\$	\$	
P-102-6	TAXIWAY CROSSING 3 at and	dollars cents	LS	1	\$	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item		
P-102-7	TAXIWAY CROSSING 4  atdollars andcents	LS	1	\$	\$		
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdollars andcents	LS	1	\$	\$		
P-152-4.1	EMBANKMENT IN PLACE  atdollars andcents	CY	134,400	\$	\$		
P-152-4.2	UNSUITABLE EXCAVATION  atdollars andcents	CY	5,400	\$	\$		
P-152-4.3	SLOPE REPAIR  atdollars andcents	SY	14,500	\$	\$		
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$		
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$		
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION at dollars and cents	EA	46	\$	\$		
P-156-5.1-3	COMPOST SOCK INLET PROTECTION atdollars andcents	EA	16	\$	\$		

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK  atdollars andcents	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE atdollars andcents	LF	18,900	\$	\$
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE at dollars and cents	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars  andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH at	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP  atdollars andcents	LS	1	\$	\$
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M" atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	75,800	\$	\$
NCDOT 520-1	AGGREGATE BASE COURSE atdollars andcents	CY	400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-401-8.1-1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) atdollars andcents	TN	26,400	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	38,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	64,200	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	86,600	\$	\$
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	63,300	\$	\$
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT atdollars andcents	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	13,000	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	639	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY at	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE)  atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,900	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES at	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	377	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT at	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24" X24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM  MODIFICATIONS:  atdollars  andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH				
	BURIED DUCT			•	•
L-110-1	atdollars	LF	5,885	\$	\$
	and cents				
-	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				_
	BURIED DUCT				
L-110-2	atdollars	LF	26,300	\$	\$
	andcents				
	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-3	BURIED DUCT atdollars	LF	880	\$	\$
	and cents				
	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
	DUDIED DUOT				
L-110-4	atdollars	LF	900	\$	\$
	and cents				
	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				<del>-</del>
	BUDGE BUGE	LF	1,600		
L-110-5	atdollars			\$	\$
	and cents				
-	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
	BURIED DUCT				
L-110-6	atdollars	LF	400	\$	\$
	and cents				
	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-7	DUCT atdollars	LF	1,500	\$	\$
	andcents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-8	DUCT	LF	44,385	\$	\$
	atdollars		•		· <del></del>
-	andcents				
	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
L-110-9	DUCT	LF	1,340	\$	\$
•	atdollars		.,	*	<del></del>
	andcents				

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-10	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at dollars and cents	LF	1,115	\$	\$
L-110-11	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	230	\$	\$
L-110-12	10 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at	LF	75	\$	\$
L-110-13	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	180	\$	\$
L-110-14	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT at	LF	600	\$	\$
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	\$
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) at	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW ASPHALT PAVEMENT (N) at	EA	80	\$	\$
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW ASPHALT PAVEMENT (N) atdollars andcents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) at	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE atdollars andcents	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) atdollars andcents	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$
L-125-44	L-867D JUNCTION CAN atdollars andcents	EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN atdollars andcents	EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	24	\$	\$
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM/WEATHER INFORMATION SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE at	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$

	Dollars	
	Cents	
Total Volume 2 Base Bid - Asphalt Ru	unway with Quartz HIRL Amount: \$	
Sum of Taxes Included in Base Bid - A	sphalt Runway with Quartz HIRL: \$	

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated					
Item No.	Item Description and Unit Price	in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL									
	MODILIZATION				<u> </u>				
GP-105-2.1	MOBILIZATION at	dollars	LS	1	\$	\$			
GF-103-2.1	and		LO	'	Ψ	Ψ			
	REMOVAL OF DRAINAGE STRUCTUR								
	MATERIAL VARIES)	KES (SIZE AIND							
S-140-4.1	at	dollars	EA	14	\$	\$			
	and	_cents							
	REMOVAL OF DRAINAGE PIPES (SIZ	E AND							
S-140-4.2	MATERIAL VARIES) at		LF	1,683	\$	\$			
<b>5</b>	at			.,000	<b>-</b>	<b>—</b>			
	and	_cents							
	REMOVAL OF EXISTING CONCRETE								
S-140-4.3	at		LF	200	\$	\$			
	and	_cents							
	AIRFIELD PAVEMENT REMOVAL								
P-101-5.1	at	dollars	SY	67,100	\$	\$			
	and	_cents							
	HAUL ROAD PAVEMENT REMOVAL								
P-101-5.2	at	dollars	SY	12,600	\$	\$			
	and	_cents		,	·	<del></del>			
	DAY/ENGENT MULTING (4 75%)								
P-101-5.3	PAVEMENT MILLING (4.75")	dollars	SY	1,800	\$	\$			
F-101-3.3	atand	dollars cents	31	1,800	Ψ	Ψ			
	PAVEMENT MILLING (2")								
P-101-5.4	at		SY	4,200	\$	\$			
	and	_cents							
	CRACK REPAIR								
P-101-5.5	at	dollars	LF	1,000	\$	\$			
	and	_cents							

Airport: Project: Asheville Regional Airport Bid Package 4

				Estimated		
Item No.	Item Description and Unit Price i	in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-102-1	SAFETY AND SECURITY at and	dollars _cents	LS	1	\$	\$
P-102-2	MAINTAIN EXISTING BARRICADE atand	dollars _cents	EA	265	\$	\$
P-102-3	BARRICADE atand	dollars _cents	EA	45	\$	\$
P-102-4	TAXIWAY CROSSING 1 atand	dollars _cents	LS	1	\$	\$
P-102-5	TAXIWAY CROSSING 2 atand	dollars cents	LS	1	\$	\$
P-102-6	TAXIWAY CROSSING 3 atand	dollars _cents	LS	1	\$	\$
P-102-7	TAXIWAY CROSSING 4 atand	dollars _cents	LS	1	\$	\$
P-104-5.1	PROJECT SURVEY AND STAKEOUT atand	dollars _cents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atand	dollars _cents	CY	129,200	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atand	dollars _cents	CY	5,200	\$	\$

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-152-4.3	SLOPE REPAIR  atdollars  andcents	SY	14,500	\$	\$
P-152-4.4	DITCH REPAIR  atdollars andcents	LF	8,200	\$	\$
P-156-5.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	19	\$	\$
P-156-5.1-2	MAINTAIN EXISTING BLOCK AND GRAVEL INLET PROTECTION at	EA	46	\$	\$
P-156-5.1-3	COMPOST SOCK INLET PROTECTION atdollars andcents	EA	16	\$	\$
P-156-5.1-4	MAINTAIN COMPOST SOCK INLET PROTECTION atdollars andcents	EA	14	\$	\$
P-156-5.1-5	COMPOST SOCK at	LF	60	\$	\$
P-156-5.1-6	MAINTAIN EXISTING COMPOST SOCK atdollars andcents	LF	160	\$	\$
P-156-5.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,200	\$	\$
P-156-5.1-8	MAINTAIN EXISTING TEMPORARY SILT FENCE at	LF	18,900	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-9	MAINTAIN EXISTING SPECIAL SEDIMENT CONTROL FENCE at	LF	1,600	\$	\$
P-156-5.1-10	EXCELSIOR MATTING  atdollars andcents	SY	30,400	\$	\$
P-156-5.1-11	MAINTAIN EXISTING CONSTRUCTION ENTRANCE atdollars andcents	EA	1	\$	\$
P-156-5.1-12	CONSTRUCTION ENTRANCE atdollars andcents	EA	4	\$	\$
P-156-5.1-13	TEMPORARY DIVERSION DITCH atdollars andcents	LF	500	\$	\$
P-156-5.1-14	MAINTAIN EXISTING TEMPORARY DIVERSION DITCH atdollars and cents	LF	3,500	\$	\$
P-156-5.1-15	MAINTAIN EXISTING ROCK CHECK DAMS atdollars andcents	EA	10	\$	\$
P-156-5.1-16	REMOVE EXISTING ROCK CHECK DAMS atdollars andcents	EA	13	\$	\$
P-156-5.1-17	MAINTAIN EXISTING RIP RAP, CLASS A atdollars andcents	CY	47	\$	\$
P-156-5.1-18	RIP RAP, CLASS B atdollars andcents	CY	100	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-19	MAINTAIN EXISTING RIP RAP, CLASS B atdollars andcents	CY	1,380	\$	\$
P-156-5.1-21	MAINTAIN EXISTING RIP RAP, CLASS 1 atdollars andcents	CY	590	\$	\$
P-156-5.1-23	MAINTAIN EXISTING RIP RAP, CLASS 2 atdollars andcents	CY	1,350	\$	\$
P-156-5.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	280	\$	\$
P-156-5.1-25	GROUT EXISTING RIP RAP atdollars andcents	LS	1	\$	\$
P-156-5.1-27	MAINTAIN EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-5.1-29	REMOVE EXISTING SEDIMENT BASIN "B" atdollars andcents	LS	1	\$	\$
P-156-5.1-30	MAINTAIN EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-5.1-32	MAINTAIN EXISTING SEDIMENT BASIN "D" atdollars andcents	LS	1	\$	\$
P-156-5.1-34	MAINTAIN EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-36	MAINTAIN EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-5.1-38	MAINTAIN EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-5.1-40	MAINTAIN EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$
P-156-5.1-42	MAINTAIN EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-43	REMOVE EXISTING SEDIMENT BASIN "I" atdollars andcents	LS	1	\$	\$
P-156-5.1-44	MAINTAIN EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-45	REMOVE EXISTING SEDIMENT BASIN "J" atdollars andcents	LS	1	\$	\$
P-156-5.1-46	MAINTAIN EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-47	REMOVE EXISTING SEDIMENT BASIN "K" atdollars andcents	LS	1	\$	\$
P-156-5.1-48	MAINTAIN EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-5.1-49	REMOVE EXISTING SEDIMENT BASIN "L" atdollars andcents	LS	1	\$	\$
P-156-5.1-50	MAINTAIN EXISTING SEDIMENT BASIN "M"  atdollars andcents	LS	1	\$	\$
P-156-5.1-52	MAINTAIN EXISTING SEDIMENT BASIN "N" atdollars andcents	LS	1	\$	\$
P-156-5.1-54	MAINTAIN EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-5.1-56	MAINTAIN EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-57	REMOVE EXISTING SKIMMER BASIN "P" atdollars andcents	LS	1	\$	\$
P-156-5.1-58	MAINTAIN EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	СҮ	33,500	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
NCDOT 520-1	AGGREGATE BASE COURSE atdollars andcents	СҮ	400	\$	\$
P-304-8.1	CEMENT TREATED BASE COURSE (8") atdollars andcents	SY	137,000	\$	\$
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP)  atdollars andcents	TN	9,500	\$	\$
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	21,600	\$	\$
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	20,800	\$	\$
P-501.1	PORTLAND CEMENT CONCRETE (15") atdollars andcents	SY	133,000	\$	\$
P-501.2	PORTLAND CEMENT CONCRETE (15") - REINFORCED atdollars and cents	SY	333	\$	\$
P-602-5.1	BITUMINOUS PRIME COAT atdollars andcents	GAL	43,400	\$	\$
P-603-5.1	BITUMINOUS TACK COAT  atdollars andcents	GAL	20,900	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-609-5.1	DOUBLE BITUMINOUS SURFACE TREATMENT atdollars andcents	SY	1,800	\$	\$
P-620-5.1	TEMPORARY AIRFIELD MARKING (WHITE), W/O REFLECTIVE MEDIA atdollars andcents	SF	124,400	\$	\$
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	40,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,800	\$	\$
P-620-5.4	PERMANENT AIRFIELD MARKING (WHITE), W/ REFLECTIVE MEDIA atdollars and cents	SF	124,400	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	48,000	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA atdollars andcents	SF	6,000	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	34,500	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	2,500	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-621-5.1	PAVEMENT GROOVING atdollars andcents	SY	122,700	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	105	\$	\$
D-701-5.1-2	24" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	391	\$	\$
D-701-5.1-3	18" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	200	\$	\$
D-701-5.1-4	24" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	100	\$	\$
D-701-5.1-5	30" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	40	\$	\$
D-701-5.1-6	30" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	381	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	385	\$	\$
D-701-5.1-8	36" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	717	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		T
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III at	LF	639	\$	\$
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN atdollars andcents	EA	4	\$	\$
D-751-5.1-2	ADJUST EXISTING DROP INLET atdollars andcents	EA	1	\$	\$
D-751-5.1-3	ADJUST EXISTING DROP INLET - AIRCRAFT RATED atdollars andcents	EA	7	\$	\$
D-751-5.1-4	ADJUST EXISTING MANHOLE - AIRCRAFT RATED atdollars andcents	EA	4	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	9	\$	\$
D-751-5.1-6	DROP INLET - DOUBLE GRATE - AIRCRAFT RATED - INSTALLATION ONLY at	EA	1	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	2	\$	\$
D-751-5.1-8	PIPE COLLAR (HDPE) atdollars andcents	EA	5	\$	\$

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			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-9	ADJUST CONCRETE STRUCTURE atdollars andcents	EA	1	\$	\$
D-752-5.1	24" FLARED END SECTION atdollars andcents	EA	1	\$	\$
M-103.4.1	RUNWAY CLOSURE MARKERS (VINYL) atdollars andcents	EA	1	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	78	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	12,200	\$	\$
T-905-5.1	TOPSOILING atdollars andcents	CY	20,000	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	78	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	377	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

-			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	5	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	156,865	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	94,843	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	2,102	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-109-1	AIRFIELD LIGHTING CONTROL SYSTEM MODIFICATIONS: atdollars andcents	LS	1	\$	\$
L-109-2	AIRFIELD ELECTRICAL VAULT MODIFICATIONS atdollars andcents	LS	1	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT atdollars andcents	LF	5,885	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	26,300	\$	\$

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			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT  EARTHBURIED DUCT  atdollars  andcents	LF	880	\$	\$
L-110-4	4 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	900	\$	\$
L-110-5	6 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	1,600	\$	\$
L-110-6	10 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	400	\$	\$
L-110-7	1 WAY 1" SCHEDULE 40 PVC CONCRETE ENCASED CONDUIT at	LF	1,500	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at	LF	44,385	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,340	\$	\$
L-110-10	4 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,115	\$	\$
L-110-11	6 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at dollars and cents	LF	230	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-12	10 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	75	\$	\$
L-110-13	1 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	180	\$	\$
L-110-14	2 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT at	LF	600	\$	\$
L-110-15	4 WAY 2" SCHEDULE 40 PVC DIRECTIONAL BORED DUCT atdollars andcents	LF	250	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	400	\$	\$
L-111-1	ARC FLASH STUDY FOR AIRFIELD ELECTRICAL VAULT atdollars andcents	LS	1	\$	\$
L-111-2	PHOTOMETRIC TESTING OF RUNWAY AND TAXIWAY LIGHTING AND SIGNAGE atdollars andcents	LS	1	\$	\$
L-125-1	L-850A(L) RUNWAY CENTERLINE LIGHT- CLEAR/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	79	\$	\$
L-125-2	L-850A(L) RUNWAY CENTERLINE LIGHT- RED/CLEAR, LED - IN NEW PCC PAVEMENT (N) atdollars andcents	EA	80	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-3	L-850B(L) TOUCHDOWN ZONE LIGHT, LED - IN NEW PCC PAVEMENT (N) atdollars and cents	EA	180	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) at	EA	3	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	3	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE at	EA	19	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	14	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	32	\$	\$
L-125-12	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 4 MODULE atdollars andcents	EA	1	\$	\$
L-125-14	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 1 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	7	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

\ <u></u>			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN at	EA	3	\$	\$
L-125-18	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 4, RDR SIGN at	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 at	EA	8	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	3	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	3	\$	\$
L-125-27	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT (NE) at	EA	7	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	200	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	199	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	3	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED at	EA	4	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	33	\$	\$
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	41	\$	\$
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) at	EA	16	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	122	\$	\$
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) atdollars andcents	EA	90	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	6	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	3	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-44	L-867D JUNCTION CAN at	rs EA	8	\$	\$
L-125-45	L-867E JUNCTION CAN at	rs EA	1	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollar andcents	rs EA	24	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-47	JUNCTION CAN PLAZA - FOUR "D" CAN atdollars andcents	EA	10	\$	\$
L-125-48	JUNCTION CAN PLAZA - SIX "D" CAN atdollars andcents	EA	4	\$	\$
L-125-49	JUNCTION CAN PLAZA - TEN "D" CAN atdollars andcents	EA	2	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	5	\$	\$
L-125-51	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V at	EA	2	\$	\$
L-125-52	10 KW L-829 CONSTANT CURRENT REGULATOR- 3 STEP - 480V atdollars andcents	EA	1	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$
L-125-54	15 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V atdollars andcents	EA	2	\$	\$
L-153-1	PAVEMENT SURFACE MONITORING SYSTEM/WEATHER INFORMATION SYSTEM atdollars andcents	LS	1	\$	\$
L-154-1	24 FIBER SINGLE-MODE OSP FIBER OPTIC CABLE - INSTALLED COMPLETE atdollars andcents	LF	3,500	\$	\$
N-1001-1	RELOCATE RUNWAY 35 GLIDE SLOPE FACILITY WITH RVR atdollars andcents	LS	1	\$	\$
N-1002-1	INSTALL RUNWAY 17 GLIDE SLOPE FACILITY WITH RVR AND ALS atdollars andcents	LS	1	\$	\$
N-1003-1	INSTALL NEW FAA OWNED RUNWAY 35 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$
N-1003-2	INSTALL RELOCATED FAA OWNED RUNWAY 17 PAPI SYSTEM, L-880, 4 BOX atdollars andcents	LS	1	\$	\$

TOTAL AMOUNT	T OF VOLUME 2 BASE BID - CONCRETE RUNWAY WITH QUARTZ HIRL (IN WORDS)
	Dollars
	Cents
	Total Volume 2 Base Bid - Concrete Runway with Quartz HIRL Amount: \$
	Sum of Taxes Included in Base Bid - Concrete Runway with Quartz HIRL: \$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated					
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
VOLUME 2 ADD/DEDUCT ALTERNATE 1 - LED HIRL								
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	(3)	\$	\$			
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	(3)	\$	\$			
L-125-6	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR, LED (N) atdollars andcents	EA	3	\$	\$			
L-125-7	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	3	\$	\$			
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	(33)	\$	\$			
L-125-35	L-862 RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	(41)	\$	\$			
L-125-36	L-862E RUNWAY THRESHOLD LIGHT - GREEN/RED, QUARTZ (N) atdollars andcents	EA	(16)	\$	\$			
L-125-37	L-862(L) RUNWAY EDGE LIGHT - CLEAR/CLEAR, LED (N) atdollars andcents	EA	33	\$	\$			

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	41	\$	\$
L-125-39	L-862E(L) RUNWAY THRESHOLD LIGHT - GREEN/RED, LED (N) atdollars andcents	EA	16	\$	\$
L-125-53	7.5 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	2	\$	\$
L-125-55	20 KW L-829 CONSTANT CURRENT REGULATOR- 5 STEP - 480V at	EA	(2)	\$	\$
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE/DEDUCT ALTERNATE 1	- LED HIR	L (IN WORDS	)	
			 _Dollars		
			Cents		
	Total Bid Schedule Amount - Addit	ive/Deduct	Alternate 1: 9	\$	
	Sum of Taxes I	ncluded in	Alternate 1: 9	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item					
VOLUME 2 ADDITIVE ALTERNATE 2 - TAXIWAY A SHOULDERS										
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	1,000	\$	\$					
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	7	\$	\$					
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	2,340	\$	\$					
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	5,200	\$	\$					
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) atdollars andcents	TN	5,370	\$	\$					
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	9,300	\$	\$					
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$					
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	11,600	\$	\$					
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA atdollars andcents	SF	17,400	\$	\$					

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		T
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	SEEDING				
T-901-5.1	atdollars	AC	5	\$	\$
	andcents				
	SODDING				
T-904-5.1	atdollars	SY	5,000	\$	\$
	andcents				
	MULCHING				
T-908-5.1	atdollars	AC	5	\$	\$
	andcents				
	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH				
L-110-2	BURIED DUCT atdollars	LF	(11,400)	\$	\$
	and cents				
	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED				
1 440 0	DUCT		11,400	\$	\$
L-110-8	atdollars	LF		\$	
	andcents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-29	EDGE LIGHT - IN ASPHALT SHOULDER (N) at dollars	EA	146	\$	\$
	atdollars and cents				
	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY				
L-125-30	EDGE LIGHT - IN TURF (T)	EA	(146)	\$	\$
L-125-30	atdollars	EA	(140)	Φ	Φ
	and cents				

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated							
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item		
	VOLUME	2 ADDITIVE A	ALTERNATE 3 -	TAXIWAY B2			
P-102	TAXIWAY CROSSING 3 at	LS	1	\$	\$		
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	100	\$	\$		
P-209-5.1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	1,900	\$	\$		
P-401-8.1.1	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITHOUT RAP) atdollars andcents	TN	600	\$	\$		
P-401-8.1.2	BITUMINOUS ASPHALT PAVEMENT (SURFACE WITH RAP) at	TN	1,000	\$	\$		
P-403-8.1	BITUMINOUS ASPHALT PAVEMENT (BASE) atdollars andcents	TN	1,500	\$	\$		
P-602-5.1	BITUMINOUS PRIME COAT  atdollars andcents	GAL	2,200	\$	\$		
P-603-5.1	BITUMINOUS TACK COAT atdollars andcents	GAL	1,500	\$	\$		

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.2	TEMPORARY AIRFIELD MARKING (YELLOW), W/O REFLECTIVE MEDIA atdollars and cents	SF	4,000	\$	\$
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,890	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	25	\$	\$
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED CONDUIT atdollars andcents	EA	100	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT at	LF	625	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at	LF	1,300	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT at dollars and cents	LF	210	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED at	LF	275	\$	\$
L-125-4	L-850C RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	1	\$	\$
L-125-7	L-850C(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	1	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	2	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	1	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	3	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	2	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	(5)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	1	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	6	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$
L-125-34	L-862 RUNWAY EDGE LIGHT - CLEAR/CLEAR, QUARTZ (N) atdollars andcents	EA	1	\$	\$
L-125-38	L-862(L) RUNWAY EDGE LIGHT - CLEAR/YELLOW, LED (N) atdollars andcents	EA	(1)	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated					
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item			
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	1	\$	\$			
L-125-41	L-867B/D LIGHT BASE FOR L-862 / L-862E LIGHT FIXTURE (N) at	EA	(1)	\$	\$			
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$			
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$			
L-125-56	L-867B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	3	\$	\$			
L-125-57	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	1	\$	\$			
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$			
TOTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXIW	AY B2 (IN	WORDS)					
			Dollars					
			_Cents	•				
				\$				
Sum of Taxes Included in Alternate 3: \$								

Airport: Project: Asheville Regional Airport Bid Package 4

Item No.	Item Description and Unit Price	oo in Words	Unit	Estimated Quantity	Unit Price in Numbers	Total Amount Per Item
item No.	item Description and Onit Fit			· · · · ·		Total Amount Fer item
		VOLUME 2	2 ADDITIVE A	LTERNATE 4 -	TAXIWAY B4	
	TAXIWAY CROSSING 2					
P-102	at	dollars	LS	1	\$	\$
	and	cents				
	EMBANKMENT IN PLACE					
P-152-4.1	at		CY	100	\$	\$
	and	cents				
	CRUSHED AGGREGATE BASE CO	URSE				
P-209-5.1	at		CY	1,900	\$	\$
	and					
	BITUMINOUS ASPHALT PAVEMEN	T (SURFACE				_
P-401-8.1.1	WITHOUT RAP)		TN	600	\$	\$
1 401 0.1.1	at	dollars	I IN		Ψ	Ψ
	andBITUMINOUS ASPHALT PAVEMEN	cents				
	\/\ITH PAD\	•				
P-401-8.1.2	at	dollars	TN	1,000	\$	\$
	and	cents				
	BITUMINOUS ASPHALT PAVEMEN	T (BASE)				
P-403-8.1	at		TN	1,500	\$	\$
	and	cents				
	BITUMINOUS PRIME COAT					
P-602-5.1	at	dollars	GAL	2,200	\$	\$
	and	cents	- · · · -	_,	·	<del></del>
-	DITUMINOUS TACK COAT					
P-603-5.1	BITUMINOUS TACK COAT at	dollare	GAL	1,500	\$	\$
F <b>-</b> 003-3. I	aıand		GAL	1,500	Ψ	φ
	TEMPORARY AIRFIELD MARKING REFLECTIVE MEDIA	(TELLOVV), VV/O				
P-620-5.2	at	dollars	SF	4,000	\$	\$
	and	cents				
-						

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.3	TEMPORARY AIRFIELD MARKING (RED), W/O REFLECTIVE MEDIA atdollars andcents	SF	1,200	\$	\$
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	5,500	\$	\$
T-904-5.1	SODDING atdollars andcents	SY	340	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES at	LS	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars and cents	LF	3,000	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	2,475	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	45	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108	GROUND DISSIPATION PLATE25"x24" X24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	2	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	100	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	630	\$	\$
L-110-3	2 WAY 2" SCHEDULE 40 PVC DIRECT EARTHBURIED DUCT atdollars andcents	LF	60	\$	\$
L-110-8	1 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	1,300	\$	\$
L-110-9	2 WAY 2" SCHEDULE 40 PVC CONCRETE ENCASED DUCT atdollars andcents	LF	210	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	275	\$	\$
L-125-5	L-850C RUNWAY EDGE LIGHT - CLEAR/YELLOW, QUARTZ (N) atdollars andcents	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	1	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE at	EA	1	\$	\$
L-125-15	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 2 MODULE SIGN atdollars andcents	EA	3	\$	\$
L-125-16	L-858(L) SIGN - CONSTRUCT SIGN PAD FOR FUTURE, SIZE 3 - 3 MODULE SIGN atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 at	EA	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

Estimated					
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	4	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	2	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	4	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	(7)	\$	\$
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	2	\$	\$
L-125-28	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN ASPHALT SHOULDER (N) atdollars andcents	EA	18	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) atdollars andcents	EA	7	\$	\$
L-125-33	L-862 RUNWAY EDGE LIGHT, STAKE MOUNTED atdollars andcents	EA	(2)	\$	\$
L-125-42	L-868B LIGHT BASE FOR L-850C LIGHT FIXTURE (N) atdollars andcents	EA	2	\$	\$
L-125-43	L-867B JUNCTION CAN atdollars andcents	EA	2	\$	\$
L-125-57	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	2	\$	\$
L-125-46	JUNCTION CAN PLAZA - TWO "D" CAN atdollars andcents	EA	2	\$	\$
OTAL AMOU	NT OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXIWA	AY B4 (IN	WORDS) Dollars		
	Total Did Cabe dula Amazoni	د المالية الم	Cents	n.	
				\$	
	Sum of Taxes I	ncluded in	Alternate 4: 3	\$	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
	VOLUME 3 I	BASE BID - TAXIW	AY B CONVE	RSION AND NAVAIDS	
GP-105-2.1	MOBILIZATION dellars	LS	1	\$	\$
GF-105-2.1	atdollars and cents	LS	1	Φ	Φ
	REMOVAL OF DRAINAGE STRUCTURES (SIZE AI	ND			
S-140-4.1	MATERIAL VARIES) atdollars	EA	3	\$	\$
	andcents				
	REMOVAL OF DRAINAGE PIPES (SIZE AND				
0.440.4.0	MATERIAL VARIES		22	\$	Φ.
S-140-4.2	atdollars	LF	33	\$	\$
	andcents				
	REMOVAL OF EXISTING FENCE				
S-140-4.4	atdollars	LF	800	\$	\$
	andcents				
	REMOVAL OF EXISTING PERIMETER ROAD				
S-140-4.5	atdollars	SY	5,900	\$	\$
0 1 10 110	andcents	•	3,000	<b>4</b>	<b>-</b>
	REMOVAL OF DIRECTIONAL SIGN				_
S-140-4.6	atdollars and cents	EA	3	\$	\$
	andcents				
	HAUL ROAD PAVEMENT REMOVAL				
P-101-5.2	atdollars	SY	550	\$	\$
	andcents				
-	SAFETY AND SECURITY				
P-102-1	atdollars	LS	1	\$	\$
	andcents			· <del></del>	·

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-104-5.1	PROJECT SURVEY AND STAKEOUT atdollars andcents	LS	1	\$	\$
P-152-4.1	EMBANKMENT IN PLACE atdollars andcents	CY	45,700	\$	\$
P-152-4.2	UNSUITABLE EXCAVATION atdollars andcents	CY	1,800	\$	\$
P-152-4.5	BORROW AREA GRADING, CLEAN UP, AND CLOSE OUT atdollars andcents	LS	1	\$	\$
P-156-4.1-1	BLOCK AND GRAVEL INLET PROTECTION atdollars andcents	EA	6	\$	\$
P-156-4.1-7	TEMPORARY SILT FENCE atdollars andcents	LF	1,100	\$	\$
P-156-4.1-10	EXCELSIOR MATTING  atdollars  andcents	SY	9,200	\$	\$
P-156-4.1-20	RIP RAP, CLASS 1 atdollars andcents	CY	130	\$	\$
P-156-4.1-22	RIP RAP, CLASS 2 atdollars andcents	CY	75	\$	\$

Asheville Regional Airport Bid Package 4 Airport: Project:

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-24	REMOVE AND REUSE EXISTING RIP RAP atdollars andcents	CY	210	\$	\$
P-156-4.1-26	SHOREMAX PROTECTION MAT atdollars andcents	SF	4,700	\$	\$
P-156-4.1-28	REMOVE EXISTING SEDIMENT BASIN "A" atdollars andcents	LS	1	\$	\$
P-156-4.1-31	REMOVE EXISTING SEDIMENT BASIN "C" atdollars andcents	LS	1	\$	\$
P-156-4.1-33	CONVERT EXISTING SEDIMENT BASIN "D" TO DETENTION BASIN at	LS	1	\$	\$
P-156-4.1-35	REMOVE EXISTING SEDIMENT BASIN "E" atdollars andcents	LS	1	\$	\$
P-156-4.1-37	REMOVE EXISTING SKIMMER BASIN "F" atdollars andcents	LS	1	\$	\$
P-156-4.1-39	REMOVE EXISTING SKIMMER BASIN "G" atdollars andcents	LS	1	\$	\$
P-156-4.1-41	REMOVE EXISTING SEDIMENT BASIN "H" atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-156-4.1-51	CONVERT EXISTING SEDIMENT BASIN "M" TO DETENTION BASIN atdollars andcents	LS	1	\$	\$
P-156-4.1-53	CONVERT EXISTING SEDIMENT BASIN "N" TO DETENTION BASIN atdollars andcents	LS	1	\$	\$
P-156-4.1-55	REMOVE EXISTING SEDIMENT BASIN "O" atdollars andcents	LS	1	\$	\$
P-156-4.1-59	REMOVE EXISTING SEDIMENT BASIN "Q" atdollars andcents	LS	1	\$	\$
NCDOT 520-1	CRUSHED AGGREGATE BASE COURSE atdollars andcents	CY	510	\$	\$
NCDOT 520-2	PERIMETER ROAD REPAIRS atdollars andcents	SY	1,800	\$	\$
NCDOT 600	PRIME COAT atdollars andcents	GAL	130	\$	\$
NCDOT 610	BITUMINOUS ASPHALT PAVEMENT (9.5C) atdollars andcents	TN	240	\$	\$
P-608-8.1	ASPHALT SURFACE TREATMENT atdollars andcents	SY	93,600	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
P-620-5.5	PERMANENT AIRFIELD MARKING (YELLOW), W/ REFLECTIVE MEDIA atdollars andcents	SF	23,200	\$	\$
P-620-5.6	PERMANENT AIRFIELD MARKING (RED), W/ REFLECTIVE MEDIA at	SF	3,300	\$	\$
P-620-5.7	PERMANENT AIRFIELD MARKING (BLACK), W/O REFLECTIVE MEDIA at	SF	8,300	\$	\$
P-620-5.8	MARKING REMOVAL atdollars andcents	SF	157,400	\$	\$
D-701-5.1-1	18" HIGH DENSITY POLYETHYLENE (HDPE) atdollars andcents	LF	52	\$	\$
D-701-5.1-7	36" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	64	\$	\$
D-701-5.1-9	42" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	140	\$	\$
D-701-5.1-10	48" REINFORCED CONCRETE PIPE, CLASS IV atdollars andcents	LF	140	\$	\$
D-701-5.1-11	54" REINFORCED CONCRETE PIPE, CLASS III atdollars andcents	LF	697	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
D-751-5.1-1	30" NYLOPLAST DRAIN BASIN at	EA	1	\$	\$
D-751-5.1-5	DROP INLET - DOUBLE GRATE - NCDOT RATED atdollars andcents	EA	5	\$	\$
D-751-5.1-7	PIPE COLLAR (CONCRETE) atdollars andcents	EA	1	\$	\$
D-754-5.1	CONCRETE LINED DITCH atdollars andcents	LF	565	\$	\$
F-160-5.1	20' DOUBLE SWING GATE atdollars andcents	EA	3	\$	\$
F-160-5.2	WILDLIFE FENCE atdollars andcents	LF	769	\$	\$
T-901-5.1	SEEDING atdollars andcents	AC	80	\$	\$
T-908-5.1	MULCHING atdollars andcents	AC	80	\$	\$
L-104-1	TEMPORARY POWER & TEMPORARY AIRFIELD LIGHTING/SIGNAGE/NAVIGATIONAL FACILITIES atdollars andcents	LS	1	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-105-1	REMOVAL OF AIRFIELD ELECTRICAL atdollars andcents	LS	1	\$	\$
L-105-2	REMOVAL OF TAXIWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	79	\$	\$
L-105-3	REMOVAL OF RUNWAY EDGE LIGHT, ELEVATED / INPAVEMENT atdollars andcents	EA	105	\$	\$
L-107-1	L-806(L) WIND CONE, SIZE 1, STYLE 1A, NEW COMPLETE atdollars andcents	EA	1	\$	\$
L-107-2	RELOCATE L-806 (L) LED WINDCONE atdollars andcents	EA	1	\$	\$
L-108-1	1/C L-824-TYPE C UNSHIELDED #8 AWG 5 KV STRANDED COPPER CABLE, INSTALLED IN DUCT OR CONDUIT atdollars andcents	LF	16,100	\$	\$
L-108-2	1/C #6 AWG SOLID COPPER COUNTERPOISE WIRE, INSTALLED OVER DUCT OR CONDUIT atdollars andcents	LF	10,500	\$	\$
L-108-3	0.75" DIAMETER BY 10.00' LONG COPPER CLAD STEEL SECTIONAL GROUND ROD atdollars andcents	EA	200	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-108-4	GROUND DISSIPATION PLATE25"x24"x24" WITH PINKERED EDGE, INCLUDING 8 FOOT SECTION OF COUTERPOISE WIRE at	EA	4	\$	\$
L-110-1	1 WAY 1" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	65	\$	\$
L-110-2	1 WAY 2" SCHEDULE 40 PVC DIRECT EARTH BURIED DUCT atdollars andcents	LF	8,426	\$	\$
L-110-16	1 WAY 4" SPLIT DUCT CONCRETE ENCASED atdollars andcents	LF	200	\$	\$
L-125-8	L-853 ELEVATED RETROREFLECTIVE MARKER atdollars andcents	EA	10	\$	\$
L-125-9	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 1 MODULE atdollars andcents	EA	2	\$	\$
L-125-10	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 2 MODULE atdollars andcents	EA	2	\$	\$
L-125-11	L-858(L) SIGN – SINGLE/DOUBLE FACE, LED, SIZE 3 - 3 MODULE atdollars andcents	EA	12	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-13	L-858C SIGN - SINGLE FACE, NON-LIGHTED, TAXIWAY END MARKER atdollars andcents	EA	1	\$	\$
L-125-17	L-858(L) SIGN - EXTEND EXISTING 2 MODULE SIGN PAD TO INSTALL A NEW 3 MODULE SIGN, SIZE 3 atdollars andcents	EA	2	\$	\$
L-125-19	L-858B(L) RELOCATE RUNWAY DISTANCE REMAINING SIGN, LED, SIZE 4 atdollars andcents	EA	7	\$	\$
L-125-20	L-858(L) RELOCATE GUIDANCE SIGN, SIZE 3 atdollars andcents	EA	7	\$	\$
L-125-21	L-858 NEW SIGN PANEL atdollars andcents	EA	4	\$	\$
L-125-22	L-858 EXCHANGE AND/OR INSTALL SIGN PANEL atdollars andcents	EA	7	\$	\$
L-125-23	NON-LIGHTED BOUNDARY SIGN atdollars andcents	EA	2	\$	\$
L-125-24	L-860HR(L) OMNIDIRECTIONAL, GREEN, LED ELEVATED HELIPORT LIGHT - IN TURF (T) atdollars andcents	EA	14	\$	\$
L-125-25	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (A) atdollars andcents	EA	22	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-26	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (NE) atdollars andcents	EA	19	\$	\$
L-125-30	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	49	\$	\$
L-125-31	L-861T(L) OMNIDIRECTIONAL, RED, LED, TAXIWAY EDGE LIGHT - IN TURF (T) atdollars andcents	EA	5	\$	\$
L-125-32	L-861T(L) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT - ON EXISTING L-868 LIGHT BASE (68) at	EA	60	\$	\$
L-125-40	FIELD LIGHTNING ARRESTOR ASSEMBLY atdollars andcents	EA	2	\$	\$

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
L-125-56	L-867B LIGHT BASE 1/2" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	5	\$	\$
L-125-57	L-868B LIGHT BASE 3/4" THICK GALVANIZED STEEL COVER (NE) atdollars andcents	EA	6	\$	\$
L-125-50	EXISTING AIRCRAFT RATED ELECTRICAL  MANHOLE ELEVATION ADJUSTMENT  atdollars  andcents	EA	1	\$	\$
N-1005-1	FAA ALLOWANCE at FIFTY THOUSAND DOLLARS and ZERO cents	AL	1	<u>\$50,000.00</u>	\$50,000.00

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
		SI	UMMARY		
TOTAL AMOUNT	OF VOLUME 2 BASE BID - ASPHALT RUNWAY	WITH QUAF	RTZ HIRL (IN V	VORDS)	
-			 Dollars		
_			Cents	•	
	Total Amount Volume 2 Base Bid - Asphalt R	•			
Sum of Ta	axes Included in Volume 2 Base Bid - Asphalt R	unway with	Quartz HIRL: 3	\$	
<b>TOTAL AMOUNT</b>	OF VOLUME 2 BASE BID - CONCRETE RUNWA	Y WITH QU/	ARTZ HIRL (IN	I WORDS)	
_					
_			Dollars		
_			Cents		
	Total Amount Volume 2 Base Bid - Concrete R	unway with	Quartz HIRL: \$	\$	
Sum of Tax	es Included in Volume 2 Base Bid - Concrete R				
		_			
TOTAL AMOUNT	OF VOLUME 2 ADD/DEDUCT ALTERNATE 1 - L	ED HIRL (IN	WORDS)		
		`	,		
-			Dollars		
_			Cents		
_	-	Total Alterna	te 1 Amount:	\$	
			n Alternate 1: S		
	Cam or rand			<b>-</b>	

Airport: Project: Asheville Regional Airport Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 2 - TAXI	WAY A SHO	ULDERS (IN W	/ORDS)	
			Dollars		
			Cents	_	
				<b></b>	
	Sum of Taxe	s Included in	n Alternate 2: S	<b></b>	
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 3 - TAXI	WAY B2 (IN	WORDS)		
			<u> </u>		
			Dollars		
	<u> </u>	T A	Cents	<b>.</b>	
				<u> </u>	
	Sum of Taxe	s included in	n Alternate 3: S	<b>.</b>	
TOTAL AMOUNT	FOR VOLUME 2 ADDITIVE ALTERNATE 4 TAVI	DAY DA (INI	MODDC)		
TOTAL AMOUNT	T OF VOLUME 2 ADDITIVE ALTERNATE 4 - TAXI	WAY B4 (IIV	WORDS)		
			 Dollars		
			Cents		
		Total Alterna		\$	
			n Alternate 4: S		

Airport: Project: **Asheville Regional Airport** 

Bid Package 4

			Estimated		
Item No.	Item Description and Unit Price in Words	Unit	Quantity	Unit Price in Numbers	Total Amount Per Item
TOTAL AMOUN	T OF VOLUME 3 BASE BID - TAXIWAY B CONVER	SION AND	NAVAIDS (IN \	WORDS)	
			Dollars		
	Total Did Valuma 2 Daga Did Taviway D Co	nyaralan a	Cents	Φ	
Sum of Tax	Total Bid Volume 3 Base Bid - Taxiway B Co kes Included in Volume 3 Base Bid - Taxiway B Co				
	Name of E	idder (Type	d or Printed):		
	Signature of Bidder (S	ame as Pro	posal Form):		
			Title:		
Addendum: The Bidder certifies	s that he has acknowledged the addendum(s) to the contra	ct indicated b	elow:		
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:			
Addendum No.:		Dated:		_	
		END OF E	SID SCHEDUL	E	

# ITEM L-153 INSTALLATION OF AIRPORT PAVEMENT SENSOR/WEATHER INFORMATION SYSTEMS

#### **PART 1 - DESCRIPTION**

#### 1.1 GENERAL

This item shall consist of airport pavement sensor/weather information systems furnished and installed in accordance with this specification, any referenced specifications, and the applicable Federal Aviation Administration Advisory Circulars. The systems shall be installed at the location and in accordance with the dimensions, layout, design, and details shown in the plans. This item shall include furnishing and installing all mounting assemblies, instruments, enclosures, equipment, concrete work, cable connections, testing of the installation and all incidentals and appurtenances necessary to place the systems in operation as completed units to the satisfaction of the Engineer.

The Pavement Sensor/Weather Information (PSWI) system shall be specifically designed for monitoring and displaying pavement surface conditions, pavement temperature, freeze point temperature, chemical percent concentration, liquid layer thickness, subsurface temperature, video images, and atmospheric conditions from the location(s) as shown in the contract plans. Passive in-pavement sensors shall be installed at the PSWI site(s) to monitor runway surface status conditions including; dry, wet, frost, chemical wet, snow, and black ice.

Atmospheric/meteorological conditions monitored by each PSWI RPU may include any of the following; air temperature, relative humidity, dew point, precipitation classification, visibility, barometric pressure, solar radiation, snow depth or wind/speed direction.

The information from the PWIS station shall be collected and transferred to the airports network server via an existing fiber optic connection. Data shall be archived in a database there, and formatted for display on the PWIS equipment supplier website. User access shall be accomplished via web browser access, on the Internet at the PWIS equipment supplier website, via password protected access. Each user shall be issued unique login credentials by the PWIS equipment supplier. The installed system shall include all hardware, software, and licenses

Cable and ground rods shall be paid for under the applicable pay item in L-108. 2 Schedule 40 PVC shall be paid for under the applicable pay item in L-110. The L-867B base cans shall be paid for under the applicable pay item in L-125.

System supplier is responsible for coordinating installation requirements with the Contractor. Shop drawings shall show any deviation made necessary during the installation.

All PSWI system equipment furnished for this project shall be state of the art and in current manufacture at the time of purchase. The contractor shall install the PSWI equipment per the project plan sheets and by the guidelines in the equipment supplier installation manuals.

The basis of design for the PSWI equipment has been generated using the RWS200 RPU from Vaisala, Inc. of Louisville, Colorado, or approved equal. The contractor may contact Leon Shneider at 339-293-2264 for system information.

# 1.2 REFERENCED MATERIALS

Additional details pertaining to specific systems covered in this section are contained in the Federal Aviation Administration (FAA) Advisory Circulars (AC's), latest edition, listed below:

150/5200-18B	Airport Safety Self-Inspection
150/5210-5B	Painting, Marking and Lighting of Vehicles Used on an Airport
150/5220-13B	Runway Surface Condition Sensor Specification Guide
150/5340-4C	Installation Details for Runway Centerline and Touchdown Zone Lighting System
150/5340-21	Airport Miscellaneous Lighting Visual Aids
150/5340-26	Maintenance of Airport Visual Aid Facilities
150/5340-28	Low visibility Taxiway Lighting Systems
150/5345-3D	Specification for L-821 Panels for Remote Control of Airport Lighting
150/5345-53B	Airport Lighting Equipment Certification Program
150/5370-2D	Operational Safety on Airports During Construction
150/5370-10A	Standards for Specifying Construction of Airports Chgs. 1 thru 12

The Contractor is responsible for obtaining and using the latest edition of the referenced FAA Advisory Circulars. This is not all inclusive but is offered as a convenience to the Contractor.

# 1.3 SUBMITTALS

Shop drawings of each airport pavement sensor/weather information systems component, indicating FAA approval, if required, shall be submitted to the Engineer for review and be REVIEWED prior to ordering any materials for this item. This submittal shall include the proposed method of installation for all airport pavement sensor/weather information systems components. The submittal shall include data on all component parts of the item or system, and shall include the manufacturers list of recommended spare parts for one years use. The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the Contract Documents. The Contractor's submittals shall be in accordance with Item L-106.

Only basic equipment and associated subsystems have been shown on the contract drawings. Basic wiring between equipment/subsystems has been shown. It is the Contractors responsibility to submit for approval, the complete system configuration and layout showing all equipment and associated subsystems, wiring, conduit, wireways and locations along with other required information as specified herein.

Submit customized wiring diagrams and installation instructions. Wiring diagrams shall show color coding of connections and mounting dimensions of equipment. A complete equipment list shall be supplied with the submittal.

# 1.4 QUALIFICATIONS

The Engineer reserves the right to reject any and all equipment, materials or procedures which, in the Engineer's opinion, does not meet the system design and the standards and codes specified herein.

The type of equipment and system proposed by the manufacturer shall have been operational at other airports for at least a period of five (5) years, and then submitted for approval by the Owner and the Engineer whose decision shall be binding. The manufacturer shall be responsible for the entire interface system between the sensor/weather information instruments, remote processing units and the data display unit on the third floor of the terminal building. The manufacturer shall also be responsible for the interface between the Owner's existing computer network and the airport pavement sensor/weather information system.

The design of the equipment shall be in accordance with the most current engineering practices. The entire system shall be designed to minimize complexity. The equipment design and installation shall permit accessibility for use, maintenance, and servicing. All components and assemblies shall be free of protrusions, sharp edges, cracks, and the potential for electrical shock and other hazards which might cause injury to personnel or equipment. Maximum use shall be made of solid-state electronic devices and standard commercially available equipment such as display units/printers. The system shall be constructed so that no internal part will be exposed during normal operations. System components shall be built to withstand the climatic conditions at airports, i.e., rain, snow, frost, ice, sleet, temperature variations, hail, lightning, sand, dust, and high winds. They also must be built to withstand the strains, jars, and vibrations of aircraft landing, taxiing, and takeoff traffic.

The system shall continuously sample, in real time, runway surface conditions. In addition, it must be nondestructive to pavement, nondegrading to the environment, and nonhazardous to personnel. When activated, the system shall continuously transmit data, with a time lag no greater than 3 minutes, to a remote processing unit. The data or information transmitted shall be displayed in a clear, concise and easily understandable digital format. The system shall measure and display information about the following conditions on the runway surface:

- **a.** Runway surface temperature, i.e., actual temperature of pavement at the sampling site, in degrees C (Celsius) or F (Fahrenheit);
- **b.** Presence or absence of moisture e.g., dry pavement--no perceptible moisture, or wet pavement--perceptible moisture on surface;
- **c.** Pre-ice conditions--advance alert of incipient ice formation prior to actual formation on the pavement, providing time to react depending on the air/pavement temperature drop rate and aeronautical operational needs;
- d. Actual ice--visible or other (black ice, frost) detectable on pavement; and
- **e.** Ambient air temperature--at ground level in the vicinity of the runway.

The in-pavement sensor head shall be capable of transmitting the above data, in a stable mode, to display unit over a cable network installed in conduit. Equipment shall operate using power sources available on the airport and shall be protected against lightning. The system shall function with minimal servicing or adjustment.

This item describes the minimum acceptable characteristics and parameters required in the proposed airport pavement sensor/weather information systems (PSWI). The actual system design, all interfaces and installation of the system shall be the responsibility of the Contractor. The use of a particular technology is at the discretion of the supplier/manufacturer provided the chosen technology has a proven record of reliable service and the system provides the function, performance, operational characteristics and required parameters of the proposed PSWI system. The Owner and Engineer will investigate the references supplied by the supplier/manufacturer. The Owner and Engineer reserve the right to make the sole determination if a proposed technology has a proven record of reliable service and meets the design intent of the Contract Documents.

#### 1.5 SPARE PARTS

The Manufacturer/Contractor by submitting a bid assures the Owner that it will sell to the Owner or any of the Owner's designated representatives any and all parts for materials furnished under this contract at the lowest price the Contractor's or its Subcontractors, or Suppliers furnish them to any second party. This pricing requirement shall apply for five (5) years from the date of substantial completion of the contract. In furnishing parts at this price the Contractor shall provide the parts within one (1) week of an approved purchase agreement. The Owner shall have the right to verify that the prices the Owner pays for the parts are the lowest and if they are determined not to be, then the Owner shall receive a payment from the Manufacturer/Contractor in the amount of one and one-half (1.5) times the difference. This Contractor is responsible to coordinate and obtain this agreement, in writing, from the manufacturer.

#### **PART 2 - MATERIALS**

#### 2.1 GENERAL

- a. Airport lighting equipment and materials covered by FAA specifications shall have prior approval of the Federal Aviation Administration, Airports Service, Washington, D.C. 20591, and shall be listed in Advisory Circular 150/5345-53, latest edition, Airport Lighting Equipment Certification Program. All items that are FAA/Engineering Test Laboratories approved at the time of bidding, which othePSWIe meet the project specifications are acceptable.
- b. All other equipment and materials covered by other referenced specifications shall be subject to acceptance through the manufacturer's certification of compliance with the applicable specifications. The Contractor shall submit the manufacturer's certificates of compliance with the applicable specifications to the Engineer for approval before the equipment and material are ordered.
- c. Manufacturer's certifications shall not relieve the Contractor of his responsibility to provide materials in accordance with these specifications and acceptable to the Engineer. Materials supplied and/or installed that do not materially comply with these specifications shall be removed, when directed by the Engineer and replaced with materials which do comply with these specifications, at the sole cost of the Contractor.
- **d.** Lists of the equipment and materials required for a particular system are contained in the applicable Advisory Circulars as shown and described in the Contract Documents.

# 2.2 GUARANTEES

a. Except as modified below, all equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of twelve (12) months or the manufacturer's standard guarantee period which ever is greater, from final acceptance by the Owner. The defective materials and/or equipment shall be replaced with no additional cost to the Owner.

#### **PART 3 - EQUIPMENT**

#### 3.1 DESCRIPTION

The Contractor shall be required to furnish and install an airport pavement sensor/weather information systems (PSWI) that is specifically designed for monitoring and displaying pavement surface conditions, freeze point, subsurface, and atmospheric temperatures and conditions from multiple locations as shown in the contract documents. Pavement surface conditions shall include dry, wet, frost, snow, slush and ice and the percentage of deicing chemical present. Atmospheric condition options shall include air temperature, relative humidity, precipitation, dew point, visibility and wind/speed direction. The system shall include all hardware, software, and licenses to operate as follows:

Pavement surface sensors shall measure pavement surface temperature, chemical concentration, and pavement surface condition inputs and communicate the signals to the Remote Processing Unit (RPU).

Atmospheric sensors shall measure their respective weather parameters and communicate the signals from each to the RPU.

Each RPU shall process the output from the sensor(s) and/or atmospherics, store the data temporarily, and send the data to a Network Server (NS) by a fiber optic network to a network server. Data exchanges shall utilize TCP/IP network protocols.

The Network Server (NS) shall store the data in a database for access by User Interface (UI) software.

The UI software shall display the sensor data in a Windows-based map data display format. The UI software shall operate on a IBM compatible personal computer and function under the Windows 10 operating system.

A 24 hour pavement specific weather forecast shall be provided by the Contractor for display on the UI as advanced ice/snow control planning information for selected RPU locations.

The PSWI shall allow for complete interoperability and connectivity between PSWI systems of like model and which use TCP/IP.

## 3.2 EQUIPMENT

All PSWI equipment furnished on this project shall be state of the art and in current manufacture at the time of purchase. The instruments and data processing equipment to be supplied are as follows:

#### 3.3 SURFACE SENSOR

The pavement sensor supplied shall be a passive, solid state design and installed at locations as shown in the project plans. It shall be installed in the runway/taxiway pavement in a rectangular sawed cavity, approximately 20 feet off runway or taxiway centerline. The sensor head shall be installed with an epoxy material provided with the sensor that will bond with the pavement surface and sensor head to provide a waterproof installation. The top of the sensor shall be installed 1 mm and 3 mm below the pavement surface surrounding it. This allows for sufficient moisture accumulation to accurately determine anti-icing solution concentrations on the pavement. However, the sensor should not be installed so low that it excessively starts to collect water from around its vicinity. The sensor shall be installed horizontally level with the surrounding pavement surface. The sensor head shall be of a potted design, constructed of materials that have similar thermal characteristics as commonly used pavement materials. The sensor supplied shall not contain any cavities or sealed compartments, and shall not be constructed with screws in the lid to eliminate chance of FOD. Sensor shall be designed to wear out at the same speed as the pavement it is installed into. This is mandatory to avoid damage to the sensor due to hit by a snow plow or broom. Sensor shall have a wearing tolerance at least 35mm in order to provide long sensor replacement interval.

The pavement sensor shall be supplied from the manufacturer with either 50m, 100m, 150m or other customized length of pre-attached cable. The attached cable shall be waterproofed and sealed as an integral part of the sensor assembly. Climatic conditions, ice control chemicals or aircraft/vehicle impacts shall not affect the sensor. The sensor shall be rated with an operating temperature range of -60° F to 176° F. The sensor shall be capable of operating properly with extended cable lengths of up to 5,000 feet, via a spliced direct burial telephone type extension cable. The sensor temperature-sensing element shall have an accuracy of  $\pm 0.36^{\circ}$  F over the range of -22° F to 176° F, with an accuracy of  $\pm 0.9^{\circ}$  F from  $-40^{\circ}$  F to  $-22^{\circ}$  F, and an accuracy of  $\pm 1.8^{\circ}$  F from  $-60^{\circ}$  F to  $-40^{\circ}$  F. The pavement sensor supplied shall use fiber optic technology, conductivity measurement along with atmospheric data from air temperature/relative humidity and precipitation sensors to determine the following statuses for display in the UI:

- Dry pavement condition absence of moisture on the surface sensor
- Wet pavement continuous film of water above 0°C (32° F)
- Chemically wet pavement continuous film of water and ice mixture at or below 0°C (32°F) with enough chemical to keep the moisture from freezing
- Snow moisture as snow crystals on pavement at or below 0°C (32°F) with insufficient chemical to keep the moisture from freezing
- Frost moisture as frost crystals on pavement at or below 0°C (32°F) with insufficient chemical to keep the moisture from freezing, not formed by precipitation
- Black Ice moisture as ice crystals on pavement at or below 0°C (32°F) with insufficient chemical to keep the moisture from freezing.

The pavement sensor shall also measure the following parameters for display in the UI:

- Pavement surface temperature at the sensor head
- Pavement temperature at -6 cm below surface of sensor head to provide latent heat values
- Amount of de-icing chemical present
- Black ice frequency

Thickness of water, ice and snow layers

Sky condition of clear or cloudy.

The sensor shall also provide information for determining when sufficient liquid is present on the pavement surface and determine the following:

- Freeze point temperature of the moisture/ice-control-chemical solution present on the surface of the pavement sensor for commonly used ice-control-chemicals.
- Depth of the moisture/ice-control-chemical-solution present on the surface of the pavement sensor from a depth 0.1 to 0.5 inches.

The sensor supplied shall work with the RPU software and the atmospheric sensors to determine the above information. Additionally, the sensor shall detect the freeze point and chemical concentration of the following chemicals:

- Potassium Acetate
- Sodium Formate
- Calcium Magnesium Acetate
- Sodium Acetate
- Sodium Chloride
- Magnesium Chloride
- Calcium Chloride

The system RPU software shall support determination of freeze point and chemical concentration of one type of anti-icing chemical at a time. The chemical algorithm will be applied to all pavement sensors connected to that RPU. This setting can be changed via the RPU UI software.

# 3.4 PRECIPITATION OCCURRENCE SENSOR

The contractor shall supply and install a precipitation occurrence sensor (yes/no sensor) approximately 6 feet above ground on the RWIS airport mounting structure at RPU locations as shown on the project plans, and as recommended by the RWIS equipment vendor. The sensor shall sense the onset and cessation of precipitation in the form of rain, snow, sleet, and freezing rain and indicate when precipitation is occurring. The sensor shall provide a yes/no output, but shall not provide any precipitation classification, measurements of intensity or water accumulation.

The precipitation sensor shall utilize a capacitive principle with heated element for detection of precipitation particles. Sensor housing shall be weatherproof. Sensor element shall be positioned at a 30° angle to insure fast drying and snow melt of element by run-off and element heating. Sensor performance shall not be affected by reasonable amounts of dirt and dust due to droplet detection.

#### 3.5 PRESENT WEATHER SENSOR

The Present Weather Sensor supplied as part of the system shall be a versatile instrument which can function as a precipitation classifier, a precipitation rate meter, and a close range visibility sensor.

The sensor shall be able to differentiate between rain, snow, and drizzle; as well as measure actual precipitation rates as water equivalent.

Precipitation rate error shall be less than 10% for the full expected range of 0.1 to 20 in per hr with less than a 5% error within the more normal range of 0.4 to 4.0 in per hr.

Sensor housing should be all-weather and ice-proof with heated optics to prevent ice, dew or frost buildup. Normal operating temperature range should be from -58°F to 122°F. The present weather sensor should be mounted at the same location as the RPU.

#### 3.6 SUBSURFACE TEMPERATURE PROBE

The sub-surface temperature probe shall be installed under the runway near a pavement surface sensor at one or more locations as shown in the project plans. Typically, the sub-surface temperature probe is installed at a depth of 12 to 17 inches below the pavement surface. The sub-surface temperature probe shall measure the temperature of the sub-grade material below the runway pavement surface. The sub-surface probe shall be supplied with 300 feet of cable that is waterproofed and sealed as an integral part of the sensor assembly. Each sub-surface temperature probe shall be capable of operating at extended cable lengths up to 5,000 feet from the RPU by splicing to a direct burial telephone cable.

The subsurface probe temperature-sensing element shall have an accuracy of  $\pm 0.36^{\circ}$  F over the range of -22° F to 176° F, with an accuracy of  $\pm 0.9^{\circ}$  F from -40° F to -22° F, and an accuracy of  $\pm 1.8^{\circ}$  F from -60° F to -40° F.

#### 3.7 AIR TEMPERATURE/RELATIVE HUMIDITY SENSOR

The contractor shall supply and install a combined air temperature/relative humidity sensor approximately 6 feet above ground on the RWIS airport mounting structure as shown on the project plans, and as recommended by the RWIS equipment vendor.

The combined sensor shall have an operational range of 0 to 100% RH, with an operational temperature range of -80°C to +60°C. The sensor shall have response time of 90% in 60 seconds. The instant value for both relative humidity and air temperature reported to RPU shall be the rolling 1 minute average value of the last six observations. The air temperature sensing element shall be of a 4-wire Pt100 RTD Class F 0.1 IEC 60751 design to provide constant and accurate readings. Air temperature measurement shall have an accuracy of  $\pm$  0.2°C at -20°C to  $\pm$ 40 °C.

The relative humidity/air temperature sensor may not measure any other weather measuring parameters or contain a radio transmitter in order to avoid errors caused by heat introduced by these other functionalities. The sensor shall be mounted in a white UV stabilized white thermoplastic solar/wind-radiation shield, and shall not include any moving parts to reduce maintenance.

Sensor shall have integral surge protection which complies with IEC 61000-4-2 and MIL STD 883, method 3015. Sensor design shall also comply with electrical overstress according IEC 61000-4-4 and -5. Sensor shall have ingress protection rating at least IP66. Sensor shall have EMC compliance according EN 61326-1 and EN 55022.

# 3.8 WIND SPEED/DIRECTION SENSOR

The contractor shall supply and install an ultrasonic wind sensor at approximately 8 feet above ground on the RWIS airport mounting structure at RPU locations as shown on the project plans, and as recommended by the RWIS equipment vendor. Sensor design shall incorporate three transducer ultrasonic technologies for simplicity and reliability. The sensor shall be constructed of stainless steel and contain no moving parts for extreme reliability and accuracy, and no ongoing maintenance (no bearings to replace). The sensor shall include an integrated thermostatically controlled heater system with heating elements in both the transducer and housing surfaces. The heaters keep the sensor free of snow/ice at all times. Wind sensor can optionally be supplied with a bird cage assembly to prevent bird landings on sensor.

The sensor shall have a measurement range of 0 to 75 m/s with a wind speed accuracy of 0.1m/s or 2% of reading, whichever is greater. Wind speed starting threshold shall be .01m/s, with a resolution of .01m/s. Sensor operating azimuth shall be 0 to 360° with an accuracy of ±±2°, with a direction resolution of .01°. Sensor temperature operating range shall be -40 to +60°C. The RPU UI shall include a wind rose display, which orients the direction of the nearest runway to the wind sensor. This is useful to visually detect cross winds to the runway at a glance. Wind speed shall be available as 3 second gust in the RPU UI. Wind speed and direction shall be available as 10 minutes average value in the RPU UI, or at a customer configurable time in the UI. From the RPU UI administrator access shall be able to set off-set for the wind sensor direction. The RPU shall automatically calculate true north readings for wind direction based on its GPS readings.

The sensor shall comply with ISO16622; MEASNET wind test standard, with IEC61000-4-2 ... 6; CISPR22 EMC test standard, and with IEC60068-2-1, 2, 6/34, 30, 31, 67, 78; IEC60529; VDA 621-415 environmental test standards. The sensor shall also be IP66 rated.

#### 3.9 REMOTE PROCESSING UNIT (RPU)

The RPU electronics shall be enclosed inside an existing NEMA3R lockable aluminum enclosure that is resistant to damage by weather and vandals. The contractor shall install 110VAC service to the RPU enclosure. Primary power shall be installed to the RPU enclosure and fused for 20 amps, with voltage surge protection. The RPU shall operate in a range of 100-130VAC at 50-60 Hz and shall use not more than approximately 2525 Watts of continuous power.

The RPU hardware and software supplied for the project should meet the following technical specifications. RPU software shall be capable of multi-tasking operations to optimize data acquisition from all connected devices. The RPU shall gather data from all connected sensors and remote pavement sensors, and process, store and transmit this data to the PWIS server upon polled request. Each supplied system RPU shall be capable of collecting data from the following sensors:

- 3 Passive surface sensors that are "hardwired"
- 1 Subsurface sensors that are "hardwired"
- 1 Air temperature/relative humidity sensor
- 1 Heated ultrasonic wind speed/direction sensor
- 1 Weather identifier/visibility sensor or yes/no precipitation sensor1 Barometric pressure sensor

## 1 Solar radiation sensor1 Ultrasonic snow depth sensor

RPU communication with the PWIS equipment supplier data center shall utilize the most current published Federal Standard NTCIP-ESS protocol, with some manufacturer-specific objects. The RWIS equipment supplier data center shall poll all system RPUs via IP fiber optic connection over the Internet, on a ten minute basis. The RPU electronics shall incorporate "watch-dog" circuitry, monitor its own operation, and reset itself if the RPU software enters an indeterminate state. The RPU shall also have the capability to be reset by system maintenance personnel via laptop connection over the Internet.

The RPU shall be based on modern processor technology with at least ARM Cortex A8, and have at least 512MB DDR3 and 2GB of NAND flash memory. The RPU shall have internal communication based on Ethernet buss to ensure more reliable and faster communication than RS232/485. The RPU shall a have built-in GPS for real-time clock synchronization and location definition. The RPU shall contain password protected built-in WLAN hotspot for local maintenance personnel to access RPU web browser via wireless access. The WLAN shall have a user definable time-out for broadcasting to prevent unintentional use of WLAN. The RPU shall be supplied with a combination antenna that supports IP-Cellular, WLAN and GPS communication. The RPU electronics shall withstand temperatures ranging from -40 to +70°C (-40°F to 160°F) and 0-90% RH non-condensing.

The RPU shall contain a centralized bus-bar for sensor grounding, and constructed of copper to ensure proper conductivity. Sensor cables shall be connected to bus-bar with spring loaded clamps for better resistance to vibration. Grounding clamps shall have large pressure surface to ensure proper grounding. Distance from grounding bus-bar to sensor connector shall not exceed 15cm. Different sizes of the grounding clamps shall be available to ensure proper grounding of different sizes of the sensor cables. The RPU shall have in-built replaceable surge arrestors for each sensor connected and shall resist a minimum of 4kV voltage spike peaks.

The RPU shall contain a power save mode in case of lost mains power. The RPU shall contain a built-in battery charger for automatically charging the back-up battery. The RPU battery back-up shall have a minimum 26Ah back-up battery for ensuring continuous measurements in case of power loss. Back-up battery shall be supplied pre-mounted in a dedicated battery holder to avoid unwanted movement and vibration of the battery. Back-up battery shall be sealed, maintenance free type to insure trouble-free operation and to avoid possible leaking problems.

The RPU shall be powered by a built-n power supply designed for harsh conditions of temperatures -40 to +70°C, with an AC range of 85 to 264VAC, and contain built-in surge protection against commercial power transients. The RPU power supply shall be rated at 240W to allow complex sensor configurations and enable proper heating of all connected sensors, under all weather conditions. Power supply stability shall maintain all outputs at ±1%, and allow parallel connection when additional power is required. The RPU AC power supply module shall contain a surge protection level of at least 6kV/3kA, and be field replaceable. The RPU AC supply shall include an additional 110VAC socket for use of power tools and meters. This additional socket shall be protected with a built-in resettable current circuit breaker for safety purposes.

The RPU electronics shall support at least two parallel communication lines out from the station. Standard communications shall be Ethernet based. The built-in IP cell modem shall support modern network types of 2.5G, 3G and 4G, and support dual SIM usage for data transmission purposes. RPU electronics shall also support direct Ethernet connection for either data communications or maintenance purposes.

Each RPU shall be supplied with a built-in software graphical user interface (UI) for maintenance and configuration purposes. RPU software configuration shall be performed by PC computer web browser access connected to either the RPU Ethernet maintenance port, wireless WLAN, or remote access via IP cell modem. WLAN security level shall be at least WPA and WPA2. PC computer web browsers supported by the UI shall be either Internet Explorer, Mozilla Firefox, Google Chrome or Apple Safari. Access to UI shall be divided at least to two user levels, user or administrator levels, and require user authentication. Administrator level shall have access to all system configurations, shall be capable of adding or removing users/administrators to the system. User level access shall only have read access to the system data. The UI supplied shall include configurable graphical widgets for measurements and system functionalities including:

- Communications set-up
- Data Reporting
- Event log
- History report
- Power distribution
- Sensor settings
- Software updates
- Station settings
- Observations
- Metadata for site physics, sensor orientation, sensor identification including serial numbers, calibration times and maintenance activities.

The RPU shall automatically read all connected digital sensor serial numbers and firmware versions, and display them on the UI metadata section. RPU shall also record and display orientation metadata of all connected sensors. Users with administrative access shall be able to record additional metadata information for each sensor describing measurement or sampling location, any maintenance notes, and upload site pictures. All maintenance and calibration procedures shall be done and recorded via the UI, with the last calibration date displayed.

#### 3.10 RPU TO NETWORK SERVER DATA COMMUNICATIONS

The RPU shall communicate with the NS via an ethernet communication interface port on the RPU, using TCP/IP and an existing fiber optic communications line to the existing server.

The method or mode of RPU to NS communication for each RPU site shall be through an established exiting fiber optic communications line .

The NS shall poll each RPU at a time interval specified by the agency to transfer and refresh its data.

#### 3.11 INTERNET WEB PAGE DATA DISPLAY

The vendor shall provide a Server-based Internet Web Page Data Display (IWPDD). The IWPDD shall reside on the Network Server and provide access to PSWI data using a widely available "Internet Browser".

All software, configuration, and administration shall be handled through the Network Server.

#### 3.12 UI DISPLAY FORMAT

The UI shall use map backgrounds to visually position PSWI data with its respective location in the field. The information from the RPU and sensors shall be displayed as numbers and/or characters organized in discrete windows or boxes. The user shall have the option of placing the boxes in the preferred position on the map background. At a minimum, PSWI data shall include pavement status and surface temperature. The display shall depict pavement status conditions using pre-defined colors. Each user shall have the ability to specify a unique data display for his/her personal requirements. The displays shall be selected from the following data items:

#### 3.13 SUMMARY DISPLAY

The UI shall include table of information which presents the following pre-defined data from each RPU and its associated sensors:

- a. RPU Name
- b. Data Age
- c. Air Temperature
- d. Dew Point Temperature
- e. Relative Humidity
- f. Precipitation Type
- g. Precipitation Intensity
- h. Visibility
- i. Wind Speed and Wind Direction
- j. Sensor Name
- k. Sensor Status
- I. Surface Temperature
- m. Freeze Point
- n. Chemical Factor

- o. Chemical Percent
- p. Solution Depth
- q. Ice Percent
- r. Subsurface Temperature

#### 3.14 RPU STATUS DISPLAY

The UI shall include a display which contains conditions from a single RPU in a user's RPU group. This display shall include the following pre-defined data:

- a. RPU Name
- b. Data Age
- c. Air Temperature
- d. Dew Point Temperature
- e. Relative Humidity
- f. Precipitation Type
- g. Precipitation Intensity
- h. Precipitation Rate
- Accumulation
- j. Visibility
- k. Average Wind Speed
- I. Wind Direction
- m. Sensor Name
- n. Sensor Status
- o. Surface Temperature
- p. Freeze Point
- q. Chemical Factor
- r. Chemical Percent
- s. Solution Depth
- t. Ice Percent

# u. Subsurface Temperature

#### 3.15 PAVEMENT DATA DISPLAY

The UI shall include a pavement sensor display which organizes data from a single pavement sensor for display on a map background. The user defined data window shall contain one or more of the following data parameters:

- a. Sensor Status
- b. Surface Temperature
- c. Freeze Point
- d. Chemical Factor
- e. Chemical Percent
- f. Solution Depth
- g. Ice Percent
- h. Sub-surface Temperature

#### 3.16 ATMOSPHERIC DATA DISPLAY

The UI shall include an atmospheric sensor display which organizes data from a single RPU for display on a map background. The user defined data window shall contain one or more of the following data parameters:

- a. Air Temperature
- **b.** Dew Point Temperature
- c. Relative Humidity
- d. Precipitation Type
- e. Precipitation Intensity
- f. Precipitation Rate
- g. Accumulation
- h. Visibility
- i. Average Wind Speed
- j. Wind Gust Speed
- k. Wind Direction
- I. Water Level

#### 3.17 SIGNIFICANT EVENTS DISPLAY

The UI shall display a listing of historical data for a user defined interval in the past. Historical data shall be the pavement and atmospheric conditions that existed when significant changes in one or more of the measured parameters occurred. This display shall include the following predefined data:

- a. Event Time
- b. Surface Status
- c. Surface Temperature
- d. Freeze Point
- e. Chemical Factor
- f. Chemical Percent
- g. Solution Depth
- h. Ice Percent
- i. Air Temperature
- j. Dew Point Temperature
- k. Relative Humidity
- I. Precipitation Type
- m. Precipitation Intensity
- n. Precipitation Rate
- o. Visibility
- p. Average Wind Speed
- q. Wind Direction
- r. Subsurface Temperature

#### 3.18 HISTORY GRAPH

The UI shall display the following historical information in a graphic format:

- a. Surface Temperature
- **b.** Air Temperature
- c. Dew Point Temperature

- d. Freeze Point
- e. Subsurface Temperature
- f. Surface Status
- g. Precipitation Type
- h. Precipitation Intensity

#### PART 4 - SERVICES TO BE PROVIDED BY SUCCESSFUL CONTRACTOR

#### 4.1 SYSTEM COMMISSIONING

After completion of the equipment installation, the Contractor shall perform all final system checks, sensor alignments, software setup, and software configuration to provide a fully operational PSWI. After contractor installation of all PSWI system equipment is complete, the equipment supplier shall provide an on-site field engineer to start-up, test and make the entire system operational. The field engineer will make all final sensor connections to the RPUs, perform final system checks, sensor alignments, software setup and configuration to provide a fully operational PSWI system. This is the point the one year equipment supplier warranty begins.

#### 4.2 WEATHER AND SITE FORECASTING SERVICE

The vendor shall supply a weather forecasting service to supplement system data collection and reporting functions.

The forecasting service shall include two regularly scheduled weather forecasts per day with an additional evening update during snow and ice events. The weather forecast shall be site specific with a 24-hour projection of the following parameters:

- a. Pavement temperature
- **b.** Air temperature
- c. Precipitation start/stop time
- d. Precipitation type
- e. Snow accumulation
- f. Wind speed/direction
- g. Relative humidity
- h. Dew point
- i. Wind chill

The vendor shall have a pavement temperature forecast model capable of forecasting pavement temperatures 24 hours into the future. The model must account for factors affecting the pavement temperature and must be based upon the scientific principle of heat balance at the specific RPU sites.

The vendor shall deliver the following additional forecast services:

- a. Frost forecast
- **b.** 3-5 day outlook
- Snow/Ice storm warning service
- d. Severe weather (thunderstorm) service
- e. Next day outlook

# 4.3 SYSTEM MAINTENANCE AGREEMENT

The contractor shall include a 1 year PSWI Maintenance Agreement as a part of this bid. This maintenance agreement shall go into effect after the warranty period has expired. PSWI maintenance shall be available 5 days a week during standard working hours by a qualified Field Service Engineer trained and certified to maintain PSWI equipment. The Contractor shall provide toll free access to 24-hour software and hardware support as part of the contract.

The Contractor shall provide information describing the software support supplied with the PSWI. Such information shall include, at a minimum, the support mechanism in place from the software vendor and the costs for such support.

A copy of the Contractor's Maintenance Agreement and Software Support Policy shall be included with the bid/proposal.

#### 4.4 TECHNICAL MAINTENANCE TRAINING

The successful vendor shall supply twenty-four (24) hours of technical maintenance training from a factory trained representative. Technical maintenance training shall include but not be limited to: theory of operation, equipment operation, software, trouble shooting techniques, maintenance and alignment of the system.

## 4.5 SYSTEM USER TRAINING

The Contractor shall provide an on-line computer based training tutorial with the PSWI which provides training on the operation of the UI software.

The Contractor shall provide a minimum of eight (8) hours of system training to Asheville Regional Airport personnel at a mutually agreeable time and location. The Contractor shall provide four hours of training on the basic operation of the system and four hours on how to use the system information in agency operations. The training shall be provided by professional trainers with experience in providing PSWI implementation training. The Contractor shall provide training manuals which detail the configuration and operation of the system.

The equipment vendor shall supply a training outline that specifies a detailed lesson plan prior to arrival for training. Training shall include but not be limited to:

- Explanation of system layout and sensors
- Live hands-on demonstration of "cloud based" software interface
- Basics logging on and off
- Runway map with live sensor data
- Weather forecast display
- Temperature projection model display
- · Real-time lightning detection with real-time metar station data display
- · Viewing archive data
- Manipulating alert feature
- · Reports feature
- Interpreting data from system to use operationally

Color printed course handouts shall be provided for all class attendees to support the training session.

The Contractor shall provide an option for an on-going PSWI training program on how to utilize the information provided by the PSWI. The Contractor shall provide with the bid/proposal a description of the training program which shall contain a training agenda, the frequency of training, and the associated costs for such training. Such training shall be conducted by persons having actual field experience in utilizing PSWI for maintenance operations and professional meteorologists.

# PART 5 - CONSTRUCTION METHODS

#### 5.1 INSTALLATION

#### 5.1.1 AIRFIELD EQUIPMENT

All equipment shall be installed as shown on the plans or approved shop drawings and in accordance with the applicable FAA Advisory Circulars and manufacturers' recommendations. Survey instruments shall be used to position all items to insure precise orientation. Tolerances given in the FAA Advisory Circulars, these specifications, and the plans shall not be exceeded. Where no tolerance is given, no deviation is permitted. Items not installed in accordance with the FAA Advisory Circulars, these specifications and plans shall be replaced by and at the expense of the Contractor.

During construction the L-867 transformer bases shall be adjusted and firmly held in place so that machined upper surface of base flange will be level within 2 degrees and not more than 1/4 inch above the surface of pad.

The Contractor shall be responsible for final calibration and adjustments of all equipment.

All concrete used for this item shall be completely consolidated and contain no voids. All exposed concrete shall be finished smooth with a steel trowel and broom finished. All horizontal edges to be chamfered 3/4 inch at 45 degrees.

The finished pavement surface shall be protected from foreign substances which could cause staining, i.e., oil, P-605, etc. The Contractor shall immediately clean all spills and correct/clean any stained surfaces at the Contractor's expense.

Assemble units and connect to the system in accordance with the manufacturer's recommendations and instructions.

The Contractor shall furnish all labor and materials and shall make complete electrical connections in accordance with the information furnished with the project drawings. The Contractor shall supply lightning arrestors as required by the equipment manufacturer.

The Contractor shall furnish and install ground rods, grounding cable, and ground clamps for grounding the frame of the assembly near the base.

Holes are sawed or drilled in the pavement to accommodate the in-pavement sensor at the location of the conduit stub up as shown in the Contract Documents. The sides and bottom of the hole shall be cleaned (sandblasting may be necessary) and flushed with a high velocity air iet or wiped dry to ensure a good bond with the sealing agent.

Correct orientation of the sensor head with respect to aircraft traffic is essential for proper self-cleaning of the conductive probes built into the sensor. Sensor heads shall be flush with the top surface and in the plane of the pavement surface. When filling the drill hole, the installer shall make sure that the bonding agent fills the cavity and does not extrude over the sensor head. The cables shall be anchored in the bottom of the clean kerf cut with wedges or similar devices before the kerf is filled with manufacturers recommended bonding agent.

AC 150/5340-4C, Installation Details for Runway Centerline and Touchdown Zone Lighting Systems and AC 150/5340-28 Low Visibility Taxiway Lighting Systems, provide additional installation recommendations.

Connections from in-pavement sensor heads to the remote field unit and connections from the field unit to the airport power supply shall be made in accordance with manufacturer's instructions and the FAA advisory circulars referenced in paragraph 120-1.2. The connections shall be checked and the complete system aligned during installation. Since any in-pavement component problems are not easily corrected after the sensor units are sealed in the runway/taxiway, a complete check for all sensor functions shall be accomplished prior to sealing and again prior to project completion. All test equipment and adjustments required at a particular site shall be supplied by the system manufacturer. All elements of the sensor electric power supply system, including materials, components, and designs, shall conform to national, State, local, and FAA-accepted practices or codes for the installation of systems with similar electrical power requirements and placements. This requirement covers cable, cable burial, electrical tie-ins, and other equipment necessary for system operation.

An identification tag shall be installed with each unit of equipment as shown in the plans. Stainless steel circuit identification tags identifying each circuit shall be attached to each circuit as shown in the plans.

Provide three feet (3') of slack in each end of each cable in each base can. All connections shall be able to be made above ground.

Painted and galvanized surfaces that are damaged shall be repaired according to the manufacturer's recommendations, to the satisfaction of the Owner and Engineer. Use LPS-1G cold galvanizing compound or approved equal to repair galvanized surfaces. Obtain paint and primer, of same batch number, from the equipment manufacturer to repair painted surfaces.

All threaded portions of frangible couplings, etc., shall be coated with Ideal "Noalox" compound or approved equal before being assembled.

Dewatering necessary to construct Items and related erosion and turbidity control in accordance with Federal, State, and Local requirements is incidental to its respective pay item as a part of L-153. The cost of all excavation regardless of type of material encountered, shall be included in the unit price bid for the L-153 Item.

#### 5.2 TESTING

This section describes the testing and demonstrations furnished by this Contractor. All items furnished and/or installed by this Contractor shall be tested and demonstrated in accordance with these specifications. All equipment and labor required for testing and demonstrations shall be furnished by this Contractor.

- **a.** Fully test the installation by continuous operation for a period of not less than seventy-two (72) hours as a completed unit, prior to acceptance by the Owner.
- **b.** Up to two (2) walk-throughs may be initiated by the Owner or the Engineer during which the Pavement Sensing units would be required to be in operation. Additional walk-throughs may be necessary depending upon the number of discrepancies found on the previous walk-throughs.
- **c.** Test cabling per Item L-108.
- **d.** Demonstrate all features and functions of all systems and instruct the Owner's personnel in the proper and safe operation of the systems.
- **e.** The Contractor shall perform the necessary inspection and tests for some items concurrently with the installation because of subsequent inaccessibility of some components. The AOR shall be notified by the Contractor forty-eight (48) hours in advance of any testing.

There are no approved "repair" procedures for items that have failed testing other than complete replacement. Any other corrective measures shall be approved in writing by the Engineer.

# 5.3 OPERATION AND MAINTENANCE MANUALS

The Contractor shall provide data for all equipment, material and components supplied or furnished under this section in the Operation and Maintenance Manuals. This data shall include cut sheets from the manufacturer and the manufacturer's installation, operation and maintenance manuals, recommended spare parts lists, any required test results, and other data as required by Item L-106. The manuals shall be in accordance with Item L-106. Final payment for any contract amounts shall not be processed without proper submittal of these manuals and review and approval by the Engineer.

# PART 6 - METHOD OF MEASUREMENT

#### 6.1 GENERAL

The items described in this section shall be lump sum.

#### PART 7 - BASIS OF PAYMENT

#### 7.1 GENERAL

Payment will be made at the contract lump sum price for the required airport pavement sensor/weather information system. This price shall include all sensors, instruments, equipment, concrete, rebar, markers, tags, sealants, adhesives, excavation, cable, terminations, backfill, dewatering, etc., necessary for the complete installation of the Item to the satisfaction of the Engineer. This price shall be full compensation for furnishing all materials and for all preparation, assembly and installation of these materials, and for all labor, equipment, tools, supervision, transportation, incidentals, and appurtenances necessary to complete these items in accordance with the Contract Documents and acceptable to the Engineer.

## Payment will be made under:

If any of the following bid items are not included in the bid, the quantity is hereby specified as zero.

# Item L-153-1 Airport Pavement Sensor/Weather Information System

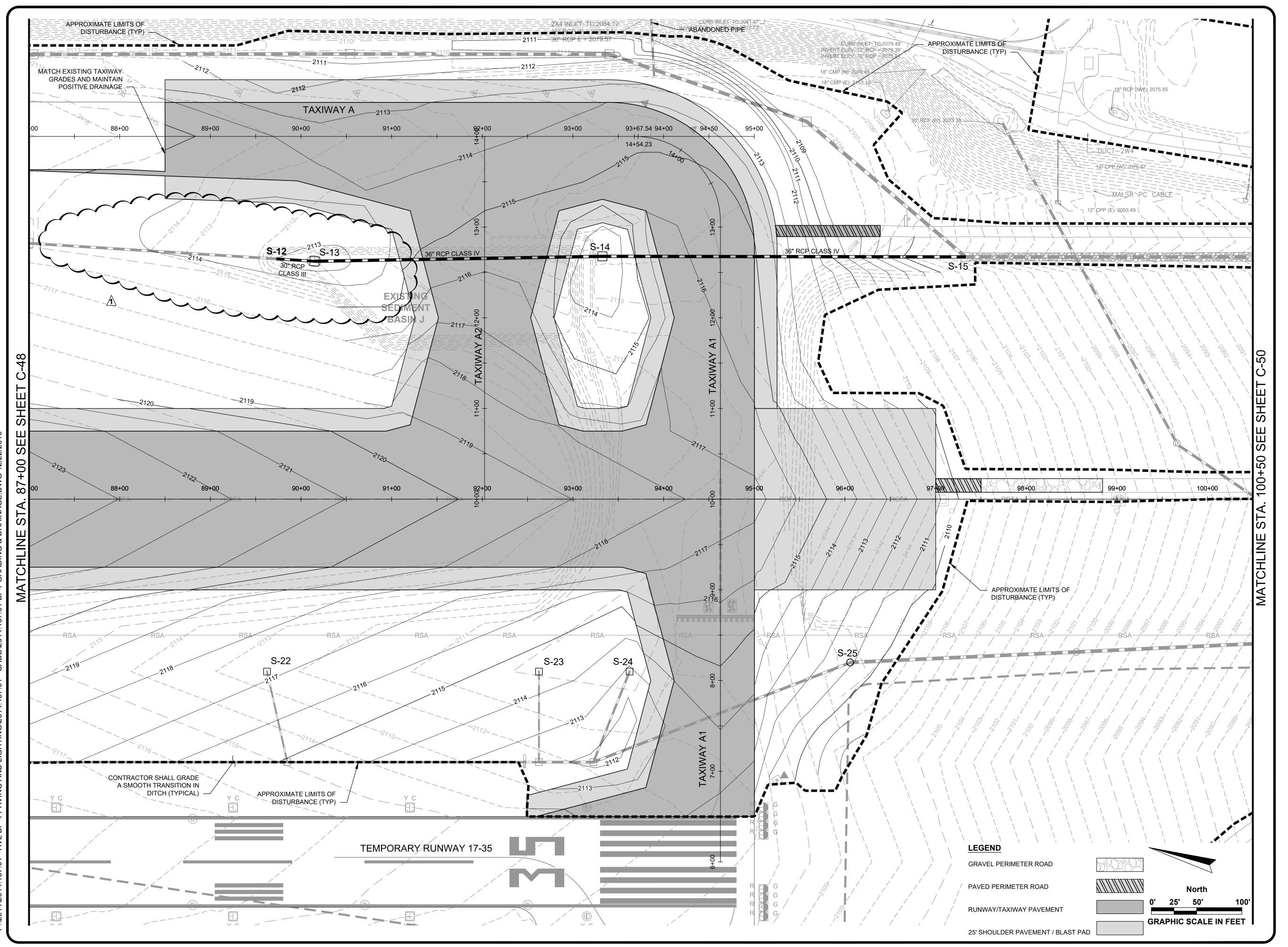
-- Lump Sum (LS)

This item includes all materials, labor, equipment, tools, supervision, transportation and services required to furnish and install the airport pavement sensor/weather information system shown in the Contract Documents as well as the recommendations of the equipment manufacturer. This item also includes all identification, sensors, instruments, equipment, concrete, rebar, cable, terminations, markers, tags, sealants, adhesives, excavation, backfill, dewatering, etc., and all appurtenances necessary for the complete installation of the Item and to provide a fully operational PSWI to the satisfaction of the Engineer. 1W2" duct and L-867D/E base cans are included under other bid items contained in the Contract Documents.

**END OF ITEM L-153** 

FAA/10G NC

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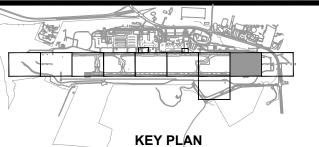


AVCON, INC. ENGINEERS & PLANNERS MALLARD CREEK III, SUITE 152 OFFICE: (704) 954-9008



Digitally signed by James M. Moose, P.E. Date: 2017.01.20 14:55:55 -05'00'

# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING,** LIGHTING AND NAVAIDS - VOLUME 2 -**PERMANENT RUNWAY 17-35 CONSTRUCTION** 

> **GRADING AND DRAINAGE** (SHEET 8 OF 10)

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# **SCALE**:

	REVISIONS:				
NO.	DATE	BY	DESCRIPTION		
1	01-22-17	A.M.T.	ADDENDUM NO. 4		

J.M.M. **DESIGNED BY:** A.M.T. **DRAWN BY: CHECKED BY: APPROVED BY:** J.M.M. **DECEMBER 2016** 

DATE:

PROJECT NO.

STATE LICENSE # N.C. C-2450

2014.157.01

**SHEET NUMBER** 

C-49

BID DOCUMENTS

### **STORM DRAIN NETWORK - PROPOSED**

- S-1 N: 634,288.04 E: 944,742.59
  AIRCRAFT RATED DROP INLET
  INSTALLATION ONLY
  DOUBLE GRATE ELEV. = 2,155.65
  18" INV. OUT = 2,151.40
- S-2 N: 634,484.75 E: 944,778.70 REPLACE EXISTING DROP INLET DOUBLE GRATE ELEV. = 2,154.50 EX. 18" INV. IN = 2,150.00 18" INV. IN = 2,149.40 EX. 30" INV. OUT = 2,149.00
- S-3 N: 634,247.16 E: 944,856.49 PIPE COLLAR EX. 30" INV. IN = 2,147.75 30" INV. OUT = 2,147.75
- S-4 N: 634,010.76 E: 944,933.90 DROP INLET DOUBLE GRATE ELEV. = 2,153.40 30" INV. IN = 2,146.50 36" INV. OUT = 2,146.30
- S-5 N: 633,644.88 E: 945,053.70 EXISTING DROP INLET DOUBLE GRATE ELEV. = 2,150.54 36" INV. IN = 2,144.33 EX. 30" INV. IN = 2,144.33 EX. 36" INV. OUT = 2,143.84
- S-6 N: 632,204.69 E: 945,591.96 ADJUST AIRCRAFT RATED DROP INLET EX. GRATE ELEV. = 2,142.20 PRO. GRATE ELEV. = 2,142.43
- S-7 N: 631,797.08 E: 945,732.03 ADJUST EXISTING INLET EX. GRATE ELEV. = 2,137.28 PRO. GRATE ELEV. = 2,137.40
- S-8 N: 632,126.19 E: 945,551.18 DROP INLET DOUBLE GRATE ELEV. = 2,140.00 EX. 42" INV. IN = 2,134.30 42" INV. OUT = 2,134.10
- S-9 N: 631,744.17 E: 945,676.04 EXISTING DROP INLET DOUBLE GRATE ELEV. = 2,137.10 42" INV. IN = 2,131.58 EX. 42" INV. OUT = 2,131.38
- S-9A N: 631,396.27 E: 946,113.65 DROP INLET DOUBLE GRATE ELEV. = 2,135.00 24" INV. OUT = 2,119.25
- S-9B N: 631,375.96 E: 946,211.57 FLARED END SECTION 24" INV. OUT = 2,118.00
- S-10 N: 630,876.70 E: 945,960.07 DROP INLET DOUBLE GRATE ELEV. = 2,130.40 EX. 42" INV. IN = 2,123.95 42" INV. OUT = 2,123.85
- S-11 N: 630,651.26 E: 946,033.89 EXISTING DROP INLET DOUBLE GRATE ELEV. = 2,128.50 42" INV. IN = 2,121.80 EX. 42" INV. OUT = 2,121.60

- S-12 N: 629,251.10 E: 946,497.63 PIPE COLLAR EX. 30" INV. IN = 2,107.32 30" INV. OUT = 2,107.32
- S-13 N: 629,212.33 E: 946,507.48 DROP INLET DOUBLE GRATE ELEV. = 2,112.00 30" INV. IN = 2,107.02 36" INV. OUT = 2,104.82
- S-14 N: 628,912.14 E: 946,611.47 DROP INLET DOUBLE GRATE ELEV. = 2,113.00 36" INV. IN = 2,099.14 36" INV. OUT = 2,098.10

- S-15 N: 628,531.36 E: 946,735.53 EXISTING DROP INLET DOUBLE GRATE ELEV. = 2,100.50 36" INV. IN = 2,088.12 EX. 42" INV. IN = 2,087.15 EX. 42" INV. OUT = 2,085.95
- S-16 N: 634,189.00 E: 944,417.78
  ADJUST EXISTING AIRCRAFT
  RATED MANHOLE
  EX. RIM ELEV. = 2,154.56
  PRO. RIM ELEV. = 2,154.96
- S-17 N: 633,951.42 E: 944,495.57 ADJUST EXISTING AIRCRAFT RATED MANHOLE EX. RIM ELEV. = 2,152.71 PRO. RIM ELEV. = 2,153.77
- S-18 N: 633,838.79 E: 944,532.46 ADJUST EXISTING AIRCRAFT RATED MANHOLE EX. RIM ELEV. = 2,151.88 PRO. RIM ELEV. = 2,153.00
- S-19 N: 629,745.27 E: 945,787.60 ADJUST EXISTING AIRCRAFT RATED INLET EX. GRATE ELEV. = 2,119.07 PRO. GRATE ELEV. = 2,120.90
- S-20 N: 629,576.03 E: 945,892.47
  ADJUST EXISTING AIRCRAFT
  RATED INLET
  EX. GRATE ELEV. = 2,117.58
  PRO. GRATE ELEV. = 2,120.40
- S-21 N: 629,405.95 E: 945,967.01 ADJUST EXISTING AIRCRAFT RATED INLET EX. GRATE ELEV. = 2,115.98 PRO. GRATE ELEV. = 2,119.55
- S-22 N: 629,120.69 E: 946,061.36 ADJUST EXISTING AIRCRAFT RATED INLET EX. GRATE ELEV. = 2,112.36 PRO. GRATE ELEV. = 2,117.15
- S-23 N: 628,836.88 E: 946,156.95 ADJUST EXISTING AIRCRAFT RATED INLET EX. GRATE ELEV. = 2,109.98 PRO. GRATE ELEV. = 2,114.47

- S-24 N: 628,740.93 E: 946,184.81
  ADJUST EXISTING AIRCRAFT
  RATED INLET
  EX. GRATE ELEV. = 2,109.28
  PRO. GRATE ELEV. = 2,112.90
- S-25 N: 628,512.69 E: 946,271.61 ADJUST EXISTING AIRCRAFT RATED MANHOLE EX. RIM ELEV. = 2,110.32 PRO. RIM ELEV. = 2,111.16
- S-26 N: 629,731.18 E: 944,619.95 HDPE PIPE COLLAR EX.18" INV. IN = 2,070.01 18" INV OUT = 2,070.01
- S-27 N: 629,729.47 E: 944,631.69 HDPE PIPE COLLAR EX. 18" INV. IN = 2,070.07 18" INV. OUT = 2,070.07
- S-28 N: 629,722.95 E: 944,624.12 NYCROPLAST DRAIN BASIN GRATE ELEV. = 2,072.85 18" INV. IN = 2,069.77 18" INV. IN = 2,069.85 24" INV. OUT = 2,068.85
- S-29 N: 629,634.16 E: 944,721.53 HDPE PIPE COLLAR EX. 18" INV. IN = 2,067.90 18" INV. OUT = 2,067.90
- S-30 N: 629,618.29 E: 944,701.62 NYCROPLAST DRAIN BASIN GRATE ELEV. = 2,072.30 24" INV. IN = 2,066.51 18" INV. IN = 2,067.18 24" INV. OUT = 2,066.51
- S-31 N: 629,536.41 E: 944,805.89 HDPE PIPE COLLAR EX. 18" INV. IN = 2,067.90 18" INV. OUT = 2,067.90
- S-32 N: 629,528.85 E: 944,778.90 NYCROPLAST DRAIN BASIN GRATE ELEV. = 2,069.28 24" INV. IN = 2,065.28 18" INV. IN = 2,065.35 24" INV. OUT = 2,064.28
- S-33 N: 629,442.75 E: 944,865.66 HDPE PIPE COLLAR EX. 18" INV. IN = 2,065.93 18" INV. OUT = 2,065.93
- S-34 N: 629,450.71 E: 944,833.78 NYCROPLAST DRAIN BASIN GRATE ELEV.= 2,067.80 24" INV. IN = 2,063.32 18" INV. IN = 2,064.64 24" INV. OUT = 2,062.00
- S-35 N: 629,418.29 E: 944,797.69 DROP INLET GRATE ELEV. = 2,065.00 24" INV. IN = 2,061.28

EX. 54" INV. OUT = 2,057.98

S-1 TO S-2 18" RCP, CLASS III 200 LF @ 1.00%

> S-3 TO S-4 30" RCP, CLASS IV 381 LF @ 0.50%

S-4 TO S-5 36" RCP, CLASS III 385 LF @ 0.51%

S-8 TO S-9 42" RCP, CLASS III 402 LF @ 0.63%

S-9A TO S-9B 24" RCP, CLASS III 100 LF @ 1.25%

S-10 TO S-11 42" RCP, CLASS III 237 LF @ 0.86% S-12 TO S-13 30" RCP, CLASS III 40 LF @ 0.75% S-13 TO S-14 36" RCP, CLASS IV

> 317 LF @ 1.80% S-14 TO S-15 36" RCP, CLASS IV

S-26 TO S-28 18" HDPE 9 LF @ 2.63%

400 LF @ 2.49%

S-27 TO S-28 18" HDPE 10 LF @ 9.20%

S-28 TP S-30 24" HDPE 130 LF @ 1.80%

S-29 TP S-30

18" HDPE 25 LF @ 2.83% S-30 TO S-32 24" HDPE

> 118 LF @ 1.04% S-31 TO S-32 18" HDPE

S-32 TO S-34 24" HDPE 95 LF @ 1.01%

28 LF @ 9.10%

S-33 TO S-34 18" HDPE 33 LF @ 3.93%

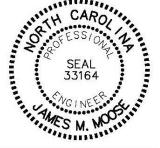
S-34 TO S-35 24" HDPE 48 LF @ 0.63%





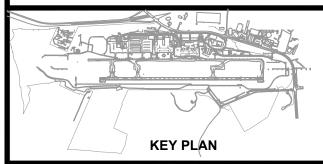


MALLARD CREEK III, SUITE 152 8604 CLIFF CAMERON DRIVE ■CHARLOTTE N.C. 28269



by James M. Moose, P.E. Date: 2017.01.20 14:56:18 -05'00'

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

PROPOSED STORM DRAINAGE SUMMARY

ATTENT

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REVISIONS:

NO. DATE BY DESCRIPTION

101-22-17 A.M.T. ADDENDUM NO. 4

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

J.M.M.

J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # PROJECT NO.

2014.157.01

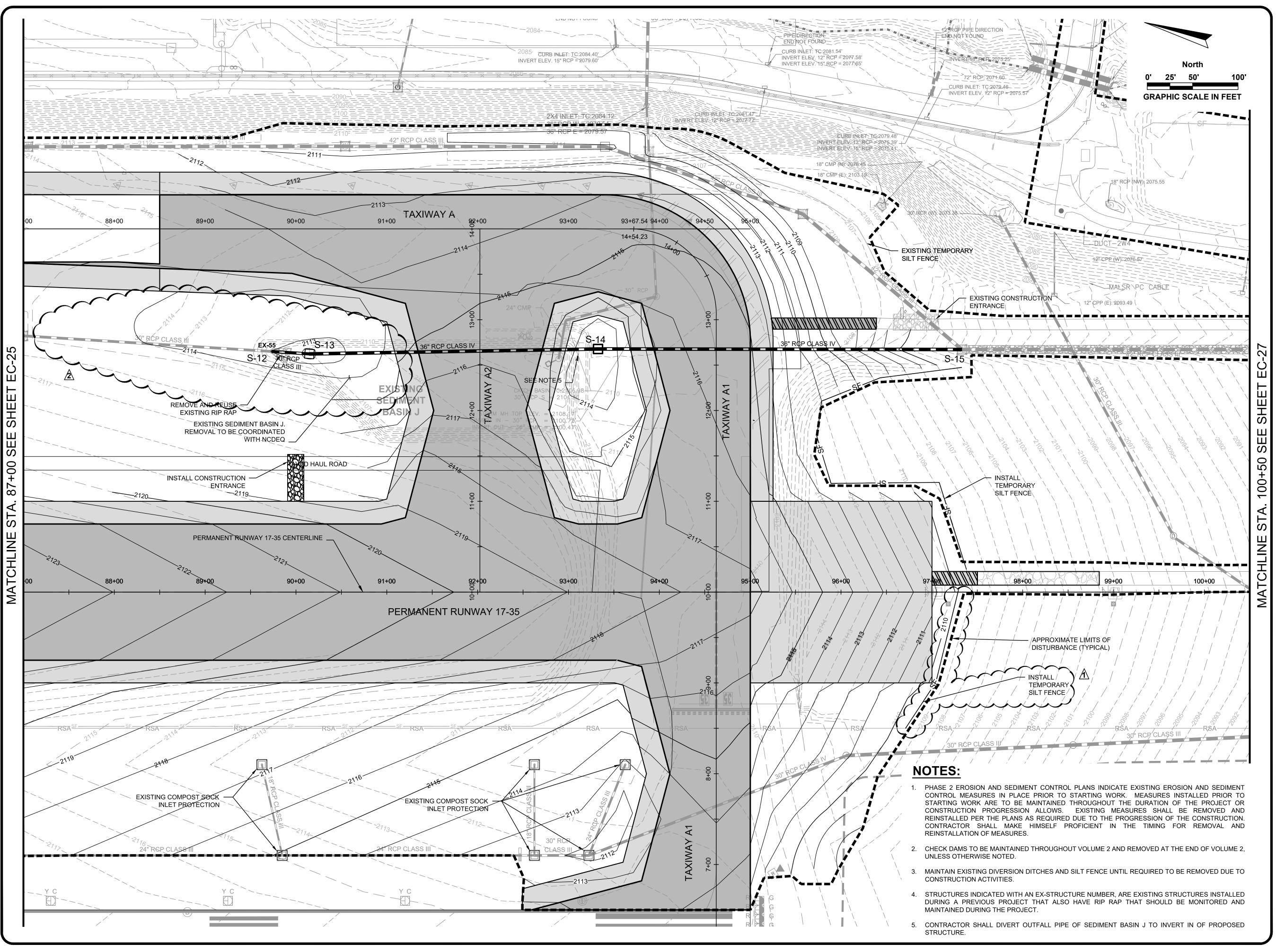
N.C. C-2450

SHEET NUMBER

C-57
BID DOCUMENTS

### **NOTES**

- 1. CONTRACTOR SHALL SURVEY AND FIELD VERIFY ALL EXISTING INVERT ELEVATIONS TO ENSURE PROPER TIE-IN TO EXISTING PIPES PRIOR TO CASTING OF NEW STRUCTURES.
- FOR EXISTING STRUCTURES NOT LISTED, GRATE ELEVATIONS AND INVERTS AVAILABLE UPON REQUEST.







AVCON, INC.
ENGINEERS & PLANNERS

MALLARD CREEK III, SUITE 152

04 CLIFF CAMERON DRIVE ■ CHARLOTTE N.C. 28269

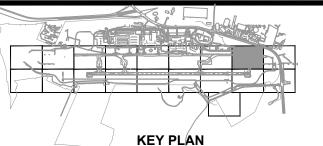
OFFICE: (704) 954-9008

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Digitally signed by James M. Moose, P.E. Date: 2017.01.20 14:56:42 -05'00'

# ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA



BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY

17-35 CONSTRUCTION

EROSION AND
SEDIMENT CONTROL

PLAN PHASE 2 (SHEET 8 OF 17)

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SCALE:						
REVISIONS:						
NO.	DATE	BY	DESCRIPTION			
Â	01-16-17	W.L.J.	ADDENDUM NO. 3			
2	01-22-17	A.M.T.	ADDENDUM NO. 4			
	1	i				

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

DECEMBER 2016

DATE: DECEMBER 2016

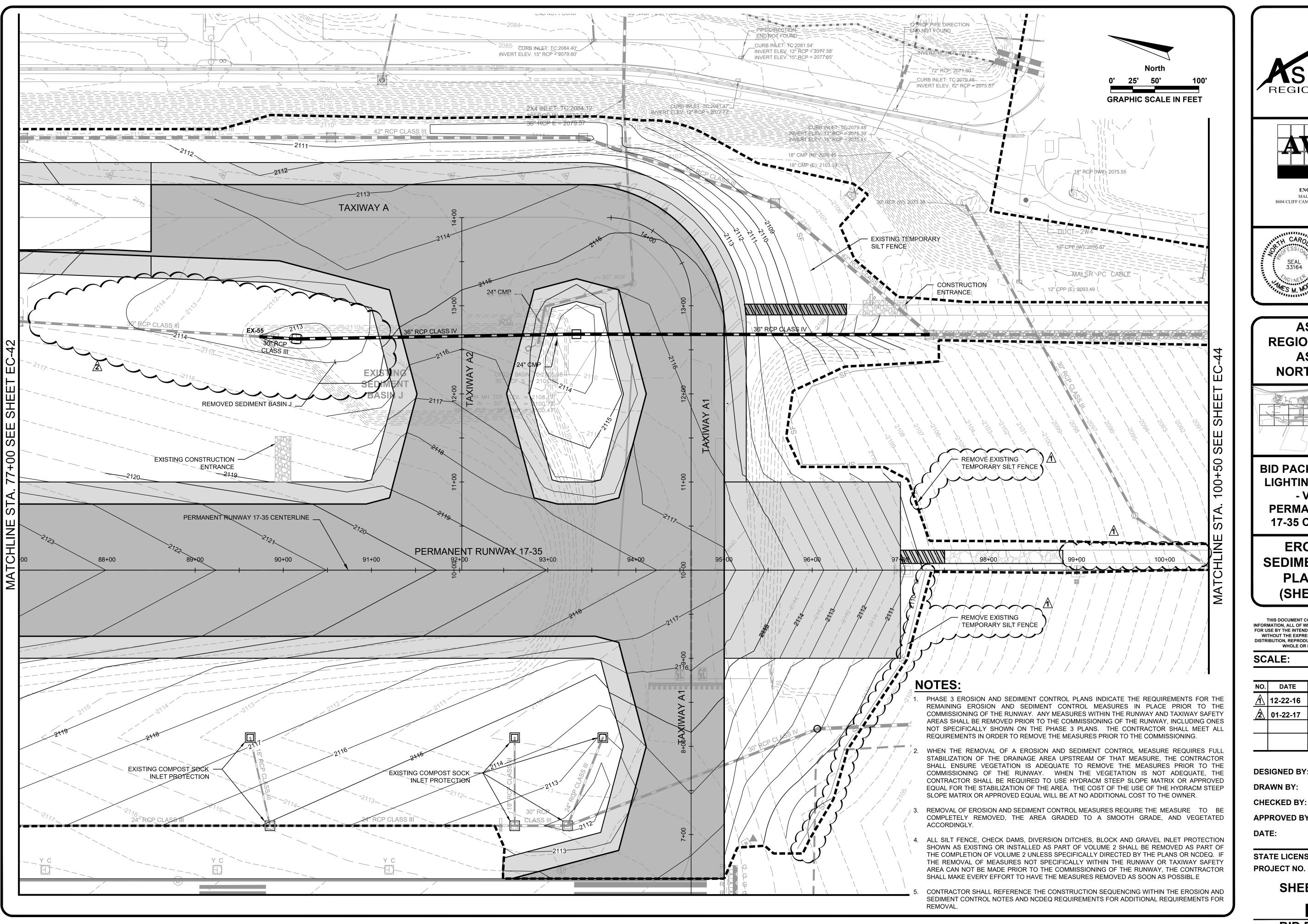
STATE LICENSE # PROJECT NO.

2014.157.01

N.C. C-2450

**SHEET NUMBER** 

EC-26
BID DOCUMENTS





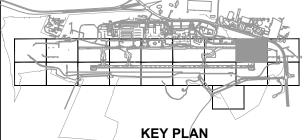


AVCON, INC. ENGINEERS & PLANNERS 04 CLIFF CAMERON DRIVE CHARLOTTE N.C. 28269 OFFICE: (704) 954-9008



Digitally signed by James M. Moose, P.E. Date: 2017.01.20 14:57:26 -05'00'

# **ASHEVILLE REGIONAL AIRPORT ASHEVILLE NORTH CAROLINA**



**BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS** - VOLUME 2 -**PERMANENT RUNWAY** 

**17-35 CONSTRUCTION EROSION AND** SEDIMENT CONTROL

**PLAN PHASE 3** (SHEET 8 OF 17)

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SC	SCALE:						
	REVISIONS:						
NO.	DATE	BY	DESCRIPTION				
A	12-22-16	W.L.J.	ADDENDUM NO. 2				
<u> </u>	01-22-17	A.M.T.	ADDENDUM NO. 4				

J.M.M. **DESIGNED BY: DRAWN BY: CHECKED BY: APPROVED BY:** J.M.M.

**DECEMBER 2016** 

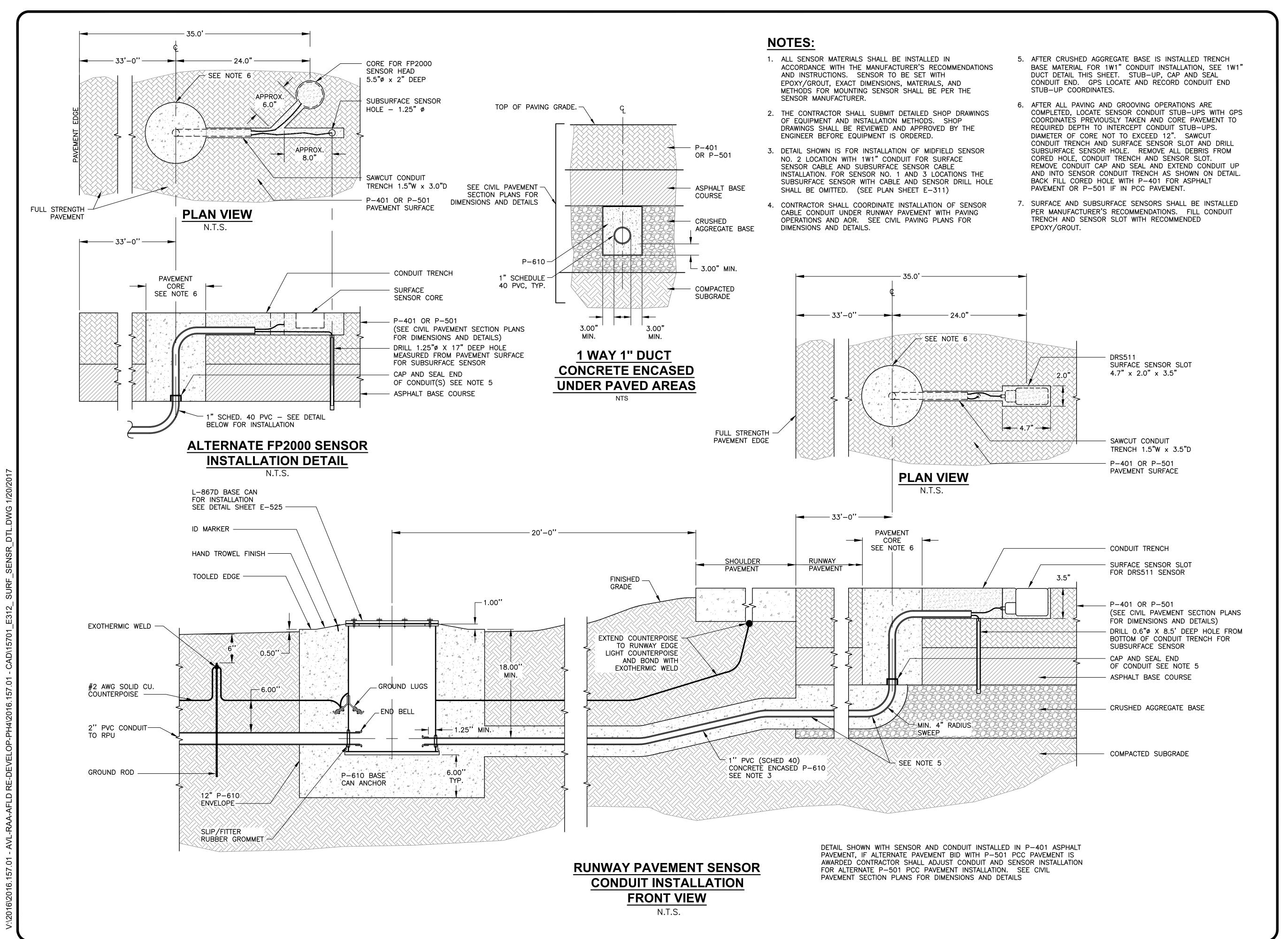
2014.157.01

DATE:

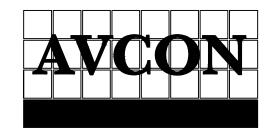
STATE LICENSE # N.C. C-2450

**SHEET NUMBER** 

**EC-43** 







AVCON, INC.
ENGINEERS & PLANNERS

MALLARD CREEK III, SUITE 152

8604 CLIFF CAMERON DRIVE CHARLOTTE N.C. 28269
OFFICE: (704) 954-9008

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ISSUED FOR BID
NOT RELEASED FOR
CONSTRUCTION



GILBERT ORTIZ JR 2017.01.20 15:02:05 -05'00'

**KEY PLAN** 

BID PACKAGE 4 - PAVING, LIGHTING AND NAVAIDS - VOLUME 2 -PERMANENT RUNWAY 17-35 CONSTRUCTION

RUNWAY PAVEMENT
SENSOR AND
CONDUIT
INSTALLATION

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# SCALE:

	REVISIONS:						
ŅO.	DATE	BY	DESCRIPTION				
1	1/20/17		ADDENDUM NO.4				

DESIGNED BY: M.A.G.
DRAWN BY: K.W.C.

CHECKED BY: J.M.M.

APPROVED BY: J.M.M.

DATE: DECEMBER 2016

STATE LICENSE # PROJECT NO.

SHEET NUMBER

N.C. C-2450

2014.157.01

E-312

BID DOCUMENTS

#### ADDENDUM NO. 5 TO PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR

#### PERMANENT RUNWAY 17-35 CONSTRUCTION BID PACKAGE 4 – PAVING, LIGHTING, AND NAVAIDS

## ASHEVILLE REGIONAL AIRPORT ASHEVILLE, NORTH CAROLINA

TO: ALL PROSPECTIVE BIDDERS

DATE: JANUARY 24, 2017

This Addendum No. 5 forms a part of the Contract Documents and modifies the original Issued for Bid contract documents, plan drawings and specifications dated December 2016 as noted and included herein. <u>Bidder must acknowledge receipt of this ADDENDUM in the space provided on the Bid Form.</u> Failure to do so may subject the Bidder to disgualification.

#### **GENERAL**

- 1. The deadline for bids remains Friday, January 27, 2017 at 2:00 PM Eastern Standard Time.
- 2. Bidders are reminded to utilize the Bid Proposal Form 3 issued in Addendum No. 4.
- 3. Bidders are reminded to ensure all proposal forms are properly and entirely completed. Bidders shall ensure Proposal Form No. 12 is completed with all subcontractors. If there are questions, please contact <a href="mailto:eric.rysdon@rsandh.com">eric.rysdon@rsandh.com</a>.

#### MODIFICATIONS TO CONTRACT PLANS AND SPECIFICATIONS

#### **SPECIFICATIONS**

- 1. Modify Instructions to Bidders, Section 12, Paragraph 12.3 to read:
  - "The Bid will be awarded to the lowest total bid (Volume 2 + Volume 3 + Selected Alternates) that meets the following criteria:
  - 1. Low bid (Volume 2 + Volume 3 + the sum of selected Alternates) is within GARAA budget
  - 2. Life Cycle Cost Analysis of total bid (Volume 2 + Volume 3 + the sum of selected Alternates)"

#### **ANSWERS TO WRITTEN INQUIRIES RECEIVED**

1. How will the bids be reviewed and awarded?

ANSWER: Bids will be reviewed based on the bidder and subcontractors being responsive and responsible as per the bid documents. The responsive and responsible bidder must meet all requirements of the bid documents, with award made in accordance with FAA General Provisions Section 20.

2. Please provide clarification on how concrete and asphalt options will be compared. Will the cost of Volume 3 and the bid alternates be considered in the bid selection?

ANSWER: The low bid is based on the <u>SUM</u> of Volume 2 Base Bid plus Volume 3 Base Bid plus the sum of selected Alternates. Please refer to the life cycle cost analysis spreadsheet issued via Addendum No. 3. The sum of the Volume 2 Base Bid plus the Volume 3 Base Bid plus the sum selected Alternates will be entered in Year 0 as "Initial Construction" (cell H16 in the spreadsheet). The concrete runway spreadsheet will be used for bids that include the concrete runway option and the asphalt runway spreadsheet will be used for bids that include the asphalt runway option.

Estimates for future maintenance work are based on NCDOT Department of Aviation average bid tabulations and historical cost data for previous projects within the region. The concrete runway expected life is 40 years, and the asphalt runway expected life is 30 years. Salvage Value at the end of the 30-year analysis is determined as:

Salvage Value = Initial Cost x [(Life Remaining, Years)/(Life Expectancy, Years)] x (Present Worth Factor at Year 30)

Initial Cost is the cost of initial construction, defined as the total of the Volume 2
Base Bid + Volume 3 Base Bid + the sum of selected Alternates.

Please note that Instructions to Bidders paragraph 12.3 was revised via this addendum to clarify that the all low bid analysis shall be done on the <u>SUM</u> of the Volume 2 Base Bid plus Volume 3 Base Bid plus the sum of selected Alternates.

3. We understand that the question was posed during the Pre-Bid Meeting that if a P-209 aggregate layer can produce a soaked CBR in the lab of 100%, could that material be substituted for the P-304 layer. We ask you to revisit your previous answer to this question.

ANSWER: The FAA Region Office has confirmed that a stabilized subbase is required for this design. There is no change in design.

4. Please re-visit the use of 7% as a discount rate for the life cycle cost evaluation, reference FAA Advisory Circulars and OMB A-94.

ANSWER: The FAA Region Office has confirmed that the rate of 7% is required on all life cycle analyses by the Airport Improvement Project (AIP) Handbook. There is no change in life cycle cost analysis procedure.

5. Reference Plan Sheet C304, sheet states that "removal limits to be verified with AOR." Will the perimeter road demolition be paid by the unit price per SY?

**ANSWER: Reference Specification S-140.** 

6. Reference Plan Sheet C322 Wildlife fence detail shows mow strip of 6" while the intrusion barrier detail show a nominal depth of 3.5". Please clarify depth for concrete?

ANSWER: Depth shall be per mowstrip/intrusion Barrier Detail.

7. Reference Plant Sheet C324. It is stated that there will be a waiting period for striping on asphalt from temporary striping to permanent of 30 days. Will the work we accepted as substantially complete and time be suspended for this period?

**ANSWER: No** 

8. Reference Plan Sheet C91. Detail B shows concrete to asphalt shoulder with a ¾" expansion joint material. Is this material necessary since the concrete product is competing with asphalt this will add unnecessary cost to the concrete paving item.

**ANSWER: Yes** 

9. Reference Plant Sheet C91 detail 1. Detail 1 shows concrete to concrete joint faces only (DOW 888 or 890). There are instances where detail 1 is called out that will be concrete face to asphalt face. DOW requires a different material in this case (DOW 890 only)

ANSWER: Material at joint should be as required by the manufacturer for type of materials at the joint.

10. Reference Sheet C91 and C92. All Joint Details with dowels say to:

Type 5 "Paint Entire Length"

Type D "Paint one end" Type F "Paint one end"

Typical Dowel Bar Basket "Paint.."

Specification P501-2.7 states to "...epoxy coat the dowel bars..."

Should it be that the dowel bars for the project will be "Epoxy Coated full length" and have an approved bond breaker applied?

ANSWER: Dowel, tie-bar, and jointing shall be per C-92, Table 1. Contractor shall reference the detail and Specification P-501 for requirements per the table.

11. Reference Specification Section T905- 3.3 and 3.4. Top soil on site or off site shall not receive additional compensation while the measurement and payment section clearly pays for the topsoiling on the project. Is it the intent to pay for topsoiling just once regardless of where is comes from or the number or times it is handled?

**ANSWER: Reference Specification T-905-5.1.** 

12. Reference Specification T904-3.4 states "....obtain and deliver and place sod within 24 hours of cutting in the field." In our experience this is not always achievable depending on the timing of cutting and delivering and placing. 72 hours is more realistic.

ANSWER: Reference T-904-3.4

13. Is the Contractor responsible for repairs to X's and does that include replacing X's parts such as generators that are worn out through normal wear and tear? How many X's does the Owner have on standby if an X goes out of service?

ANSWER: The Contractor is responsible for the maintenance and repair of the lighted X's. There are no lighted X's on stand-by.

14. Please clarify there are two items for Prime Coat Section 600 NCDOT and P602 FAA. Are they interchangeable?

ANSWER: There are two items for prime coat. They are not interchangeable.

15. Discussion of Concrete vs. Asphalt and Specification section P501-36 Note 1 Lot Pay Factors. Note 1 strikes the lot pay factor of 106% daily to be limited to 100% daily. The intent of P501 is to pay daily up to 106% not to exceed project total of 100%. This would allow concrete contractor to use days of 106% quality to offset days that are not quite 100%. Due to the nature of this project, competing with asphalt and the concrete cure time factors, the lot pay factor daily should not be limited to 100%.

ANSWER: Basis of payment is per FAA requirements.

16. Reference P-501-3.2 Proportions. Can the required flexural strength be modified to less than 700 psi?

ANSWER: Flexural strength is per pavement design.

17. Reference P501-5.1-a.2. Who is the Owners Quality Control Lab and where is it located so that transportation of sample cost can be calculated? Will the QA have a certified on site Lab?

ANSWER: The Quality Assurance lab is S&ME, Inc., of Arden, NC.

18. Reference Plan Sheet C102 and C104. Typical paving section on sheet C102 is 15" P501 PCC on 8" P304 CTB. Concrete notes on Sheet 104 is referring to 15" of P501 PCC on 4" of P403 and 4" of P209?

ANSWER: Concrete pavement section shall be as shown on C-102. Any reference to a different pavement section shall be revised to the pavement section shown on C-102 as part of the released for construction documents.

19. Will grooving need to be complete in each phase before it is open for taxiing aircraft? Or can we groove all pavements in 1 move in?

ANSWER: Reference SP-29.

20. Does the contractor have to install safety fence in all phases or just prior to starting that particular phase?

ANSWER: Contractor shall install all safety fence simultaneously. See Addendum No. 3, Response No. 144.

21. On Sheet SP-22, from Stations 96+50 to 99+00, is this an addition to the NAVAID road that will be permanent or will have to be removed?

ANSWER: Reference C-75.

22. Can the general contractor designate another contractor as the Project Management

ANSWER: Refer to General Provisions 80-01.

23. Will safety fence be required to be removed prior to the FAA test flight and then be reinstalled until the opening of the new runway?

ANSWER: The safety fence shall remain up during the FAA flight check.

24. Is the contractor responsible for removing or moving the engineer's trailer after the project is complete?

ANSWER: AOR field office, while it does require relocation, is to be relocated to a location within the boundaries of the airport as directed by the owner.

25. Reference P501-3.3b. With the strength requirements set at 700 psi Slag Cement should be allowed to be used in lieu of Fly Ash. If Slag Cement is available, it is a superior product in terms of strength gain.

ANSWER: Slag cement can be used as allowed.

P-501-2.3b shall be revised as follows: "Slag cement shall conform to ASTM C989, Grade 100 or Grade 120. Slag cement shall be used only at a rate between 25% and

55% of the total cementitious material by mass. Slag cement is permitted provided the contractor can demonstrate the slag will not have an impact on finishing the concrete or the final finished product."

P-501-3.3b shall be revised as follows: "Slag cement (ground granulated blast furnace (GGBF)). Slag cement may be used. The slag cement, or slag cement plus fly ash if both are used, may constitute between 25 to 55% of the total cementitious material by weight. If the concrete is to be used for slip-forming operations and the air temperature is expected to be lower than 55°F (13°C) the percent slag cement shall not exceed 30% by weight."

26. Reference P501-2.1.c Table 1. States that when a coarse aggregate is supplied with a nominal maximum size grater then 1" it shall be supplied in two size groups. Local aggregate produce and supply a #467 gradation that is a blend of #4 and #67 in one group. Will this be acceptable?

ANSWER: Yes, it may be approved by the Engineer as allowed per P-501-2.1 C-2. It is the responsibility of the contractor to meet all specified requirements in order to be allowed by the Engineer.

27. In the P-501 specification under P-501-2.1-C Aggregates, Table1 specifies the use of #67 aggregate. Can #467 aggregate be used in lieu of #4 aggregate if the combined aggregate gradation meets the requirements of P-501-2.1-C-2 – Combined Aggregate Gradation?

ANSWER: Yes, it may be approved by the Engineer as allowed per P-501-2.1 C-2. It is the responsibility of the contractor to meet all specified requirements in order to be allowed by the Engineer.

28. Reference P501-2.1.b, is manufactured sand acceptable in the P501 concrete mix?

ANSWER: The fine aggregate shall conform to P-501-2.1(b).

29. Reference Plan Sheet C92 Table 1. Will Weld Wire Fabric be allowed in lieu of #4 bar at 12" c-c?

ANSWER: No.

30. Reference Plan Sheet C92 Table 1. At what location (depth) is the reinforcement in the reinforced slabs?

ANSWER: Depth of T (thickness) / 2.

31. Proposal Form 10 is stating the DBE participation goal for the project is 13.7%. The Affirmative Action Requirement has participation goals for minority (8.5%) and female (6.9%) that add up to 15.4%. Please provide clarification to what the participation goal of this project is.

ANSWER: Proposal Form 10 pertains to Disadvantaged Business Enterprise (DBE) Utilization. The Affirmative Action Requirement found on page MCP-2 pertains to the requirement for affirmative action to ensure equal employment opportunity. Please refer to Page MCP-2 of the FAA Mandatory Contract Provisions.

32. Can the waste slurry be disposed of in the borrow area?

ANSWER: Reference Sheet C-104, Note 9. Slurry may not be permanently disposed of anywhere on site. The slurry holding pit may be located on site at a location approved by the Airport.

33. Does the FAA flight check require the pavements to be grooved?

ANSWER: No.

34. Will the fence have to be grounded?

ANSWER: Reference F-160 specification.

35. Is a mow strip not required?

ANSWER: Reference C-322.

36. Is the tension wire that runs along the bottom of the fence to be woven through the fabric or can it run between the fabric and the post?

ANSWER: There is no chain-link fence on this project.

37. What is the height the gate is required to sit off the ground?

ANSWER: Not more than 4" or less than 1".

38. Please provide clarification on "other unyielding material" that the contractor needs to be concerned with during pipe excavation?

ANSWER: Material that is unyielding other than the ones referenced in the specification.

39. If rock cannot be removed by ripping, can it be left or does the contractor need to trench blast?

ANSWER: Rock is not expected in the areas of pipe installation.

40. If the contractor has to trench blast, will that be considered incidental to the pipe?

ANSWER: Trench blasting is not expected to be required for pipe installation.

41. Please provide clarification on "lightly compacted in layers not over six (6) inches".

ANSWER: Backfill shall be compacted per the plans and specifications.

42. Will the removal of the "soft, spongy, or other unstable soil" be considered unsuitable soil? Or will the removal of this material be considered incidental to the pipe?

ANSWER: The material referenced shall be considered unsuitable material.

43. Will a concrete collar be required around metal pipe bands?

ANSWER: Metal bands shall be installed per requirements of the plans and specifications. Manufacturer's recommendation may also be used to make determination for need for concrete collars.

44. If the owner furnished materials contain defects that hinder the installation of that item, will the contractor be paid per contractor unit prices for purchase and installation of that specific material?

ANSWER: If materials are required to be furnished by the contractor that were previously indicated as owner furnished, the contractor shall be reimbursed per the contract unit prices.

45. How many rows of brick is allowed between the precast structures and the lid?

ANSWER: Precast drainage structures should not contain brick in order to meet requirements of the plans and specifications unless specified by the manufacturer. The contractor's inability or poor quality control to install the drainage structures per the requirements of the plans and specification does not allow for the contractor to make corrections to the drainage structures with additional rows of bricks without approval from the AOR prior to the corrections being made.

46. If there is a need for an approved granular material for a subbase, would this be considered incidental to the concrete ditch line?

ANSWER: Yes.

47. Will there be enough topsoil on site or does the contractor need to find and submit for review a suitable off site source of topsoil?

ANSWER: It is the intent of the project to use as much available topsoil onsite as possible. No offsite topsoil will be used for this project unless specifically directed by the Owner.

48. Is topsoil required to be compacted to 100 Modified?

ANSWER: No

49. Does Access Point 1 Allow for two way traffic?

ANSWER: It is up to the contractor to determine the ability of an access point to handle two way traffic.

50. If Access Point 2 is only for staging materials and equipment, does the contractor have to install signage on HWY 280 for the duration of the project or only prior to a delivery?

ANSWER: Signage for Access Point 2 to be installed as long as the access point is to be used by the contractor.

51. Will the gate on Ferncliff be an Access Point at any time during the project?

ANSWER: Reference G-07 and G-08.

52. Does Access Point 2 allow for two way traffic?

ANSWER: It is up to the contractor to determine the ability of an access point to handle two way traffic.

53. For Access Points 1, 2, & 3, does the contractor need to "ensure the gate is closed and locked" like Access Point 4?

ANSWER: The contractor shall ensure all gates being utilized by the contractor are closed and locked at all times unless they are manned by an approved gate guard. See contract documents for specific requirements of the gate guards and access points.

54. Does Access Point 4 allow for two way traffic?

ANSWER: It is up to the contractor to determine the ability of an access point to handle two way traffic.

55. Does the speed limit vary depending on the haul route?

**ANSWER: No** 

56. When Haul Route 1 is being used at night while the Airport is closed, does the one flagman that will remain at each taxiway crossing have to have a SIDA Badge and crossing guard training?

ANSWER: Yes.

57. If the contractor only intends to cross Taxiway C during night work, does that mean the contractor has to have a flagman at Taxiway C or at Taxiways C, E, P, & A?

ANSWER: Refer to Sheet G-07 Note 15 and 16.

58. What percentage of Haul Route 2 would be considered "not conductive to two- way hauling"?

ANSWER: It is up to the contractor to determine the ability of a haul road to handle two way traffic.

59. Can the contractor add additional haul routes in areas that would be considered "not conductive to two-way hauling?

ANSWER: The Owner may allow additional haul routes to be added within the project. The contractor must request the additional haul routes to be added prior to their installation. The contractor requesting the additional haul routes does not guarantee approval by the Owner. Any additional haul routes shall be removed at the end of the project unless specifically allowed to remain by the Owner.

60. What is the prerequisite for using Haul Route 3 during the day?

ANSWER: Reference Glide Slope Critical Area crossing requirements in the plans and specifications.

61. At night does the contractor need to place flagman on either sides of the ILS Critical Area?

ANSWER: Reference SP-09.

62. If the contractor has used Haul Route 3 at some point, does the contractor have to have flagman in place when this haul route is not in use?

ANSWER: No.

63. Do Gate Guards require SIDA Badged personnel?

ANSWER: Yes.

64. Please provide spec detailing what information is needed for the weekly list of subcontractor and contractor vehicles authorized to operate on site, specifically vehicle information.

ANSWER: A weekly list of subcontractor and contractor vehicles will not be required.

65. Does the AOR require any offsite routes be provided?

ANSWER: No.

66. Does the contractor have to get approval from the AOR for every vehicle that will be crossing active runways, NAVAID critical areas, or taxiways?

ANSWER: Contractor may not activate taxiway crossings with guards without approval from the AOR or Airport. Once taxiway crossings are established, communication shall be with Air Traffic Control via radio.

67. Can the contractor operate vehicles or equipment on the airport roadway system when given written approval from the owner or under the escort of Airport Operations?

ANSWER: Yes.

68. When a taxiway is closed, does the crossing guard that is stationed at that taxiway need to have SIDA badge and crossing guard training?

ANSWER: Yes.

69. Will the broom tractor and vacuum truck operators be trained to communicate with the tower?

ANSWER: While working on an active taxiway, broom tractor, vacuum truck, and/or water truck operators shall at all times be under direct control of the crossing guards or an individual possessing a blue badge with movement privileges in radio contact with air traffic control.

70. Does the contractor have to provide a single crossing guard at a taxiway that might have been crossed at night under a closure but has not yet been crossed during the day?

ANSWER: Refer to Sheet G-07, Note 16 (states Contractor may be required to include a single crossing guard on the side of an open taxiway that was previously used with crossing guards, to ensure contractor personnel do not accidentally cross).

71. Does the contractor have to provide a single crossing guard at a taxiway where crews were escorted across by a badged and trained employee of the contractor or by Airport Operations?

ANSWER: Refer to Sheet G-07, Note 16.

72. Does the contractor have to provide a crossing guard at a taxiway that has not been crossed yet, but work will be completed in close proximity of the taxiway?

ANSWER: Refer to Sheet G-07, Note 16.

73. If the contractor is not working in the inertial phases, does the contractor still need to provide a crossing guard at taxiway A1 & C to prevent accidental crossing?

ANSWER: Refer to Sheet G-07, Note 16.

74. Is the single crossing guard described on G-07, Note 16 required to have a SIDA Badge and crossing guard training?

ANSWER: Yes.

75. Is there any waterline on airport property that are near Contractor Staging Area #1

ANSWER: Reference Addendum 3, Question 49.

76. Is Staging Area #1 the only area where employees can park?

ANSWER: Reference Addendum 3, Question 189.

77. Can millings from Taxiway A be used in the Contractor Staging Area?

ANSWER: Yes.

78. If areas outside of the project areas are disturbed due to inadequate access to project areas, is the contractor entitled to additional compensation for returning the disturbed area back to original condition?

ANSWER: No.

79. Will the GC be required to provide electricity to contractors under BP-3 who will still be on site?

ANSWER: No.

80. Please provide clarification on what Staging Areas #2 and #3 will be used for.

ANSWER: Reference Addendum 3, Question 189.

81. Can the contractor use Access Point 1 for deliveries and hauling material?

ANSWER: The contractor can use Access Point 1 for deliveries, however, the deliveries must be escorted through the site by trained personnel, as required by the contract documents.

82. Can the contractor use standard NCDOT mixes for repair of damaged access roads?

ANSWER: Yes.

83. Reference, Sheet G-08, Note 2, will the contractor need to install signage on Ferncliff Park Dr. per NCDOT standards indicating trucks entering highway?

ANSWER: Yes.

84. Reference Sheet G-08, Note 2, will the contractor be required to wash and broom off the road daily?

ANSWER: The road shall be washed and broomed as needed to keep the road clean and free of debris.

85. Reference Sheet G-08, since the primary access point is being changed from Access Point 1 to Access Point 4, can the contractor move construction site signs from Access Point 2 to Access Point 4?

ANSWER: Construction signage can be moved from Access point 2 to Access Point 4 if Access Point 2 is not in use.

86. Can the contractor request for escorts to verify survey points prior to the notice to proceed date?

ANSWER: Yes.

87. Does the owner anticipate on starting a contract that will start the placement of CCB in Area 2 during the duration of AVL BP-4? If so will the contractor be entitled to additional time and compensation for having to use the same access points and staging areas?

ANSWER: No.

88. It appears that Area 3 is close to or under Haul Route 2. Will the contractor be responsible for providing CCB and liner locations in this area prior to the start of hauling operations?

ANSWER: No, however, if the hauling starts to impact the slope along the eastern edge of the haul road, the locations will need to be staked in the field. It shall be required that the contractor place stakes or markers along the eastern edge of the haul road in order to give limit drivers access to the slope prior to starting hauling operations.

89. Will the 6ft soil cap be able to be maintained after the grading is completed on Taxiway B5?

ANSWER: Yes.

90. Reference SP-03, Note 11, will the lighted X's be running during daylight hours?

ANSWER: Yes.

91. Can the contractor use NCDOT Standard steel plates to place over open trenches when a closure is not in effect?

ANSWER: Yes, with written approval from the AOR.

92. Reference Sheet SP-03, Note 11, when the note states that "hauling vehicles not so equipped shall be escorted by a vehicle so equipped." Does that mean any contractor employee can escort an individual that is not properly equipped with flags or lights if the escort vehicle is properly flagged or lighted?

ANSWER: Yes, however the driver providing the escort shall have the proper training and privileges to access those areas with all proper authorizations from the airport.

93. What are the qualifications of the Contractor Security Officer?

ANSWER: The CSSO shall be a person who is capable of the duties listed on Sheet SP-05.

94. Does the AOR require a resume to be submitted with the designation of the Contractor Security Officer?

ANSWER: No.

95. Can the Contractor Security Officer have additional role on the project?

ANSWER: Yes.

96. Can the Contractor Security Officer be part time?

ANSWER: No.

97. Can the Contractor Security Officer be employed by a subcontractor?

ANSWER: No.

98. Will the contractor have to schedule an escort through Operations in order to complete the moving of barricades for cleaning purposes?

ANSWER: No, however the personnel moving barricades shall have movement privileges and remain in contact with air traffic control until the barricades are replaced.

99. Will the contractor be instructed by the owner to secure the barricades any other way during the duration of the project other than water-filling or sandbags? If so is the contractor entitled to additional compensation?

ANSWER: Some barricades are subject to movement from jet blast, propeller wash, or rotor wash, and may be required to be strapped down or secured by other approved methods to ensure they stay in place.

100. If the contractor elects to use the guard shack, does it have to be on a trailer?

ANSWER: No, however Contractor shall remove guard shacks from taxiway crossings when not in use.

101. Please provide Spec Section P-102 Safety and Security.

ANSWER: Reference Addendum 1.

102. Reference Sheet SP-09, Note 1, may either the Project Manager, Project Engineer, Foreman, or CSSO call Airport Operations for crossing determination?

ANSWER: Yes.

103. If the contractor elects to use the guard shacks, can they be left at the X-ray 1 and X-ray 2 positions when not in use?

ANSWER: Yes.

104. Reference Sheet SP-10, will the stop sign need to be mounted on a breakaway post?

ANSWER: No.

105. Reference SP-11, the Taxiway Crossing 2 supposed to be offset from each other?

ANSWER: Yes.

106. Reference SP-11, does the owner want the crossing guard for E2 between the taxiway TOFA line and the line of low profile barricades?

ANSWER: Location of crossing guard shall be per the plans unless otherwise directed by the Owner or AOR.

107. Can the line of low profile barricades south of Taxiway E follow the TOFA line?

ANSWER: Low profile barricades shall be per the plans unless otherwise directed by the AOR or Owner.

108. Can the line of low profile barricades south of Taxiway P follow the TOFA line to where the orange safety fence will be?

ANSWER: Low profile barricades shall be per the plans unless otherwise directed by the AOR or Owner.

109. Reference SP-19, how is the contractor to cross equipment, personnel, and material to this work area?

ANSWER: Equipment and materials for Taxiway H shall be brought to the work area under escort. The work associated with this work area shall be coordinated with the airport a minimum of 7 days prior to starting work.

110. Please provide clarification in what ways additional erosion and sediment control will be considered incidental to the project.

ANSWER: Any additional measures required by the contractor to maintain positive drainage or divert water to erosion and sediment control measures shall be the responsibility of the contractor. It is not the intent of the project to direct means and methods for the contractor meet the individual requirements of the project during the contractors work schedule or internal phasing of work.

111. Will the owner pay over the contractor barricade amount?

ANSWER: If additional barricades are required to meet the operational requirements of the project, the contractor shall provide documentation in writing for the need of the additional barricades. If the documentation warrants additional barricades, in the opinion of the Owner, the additional barricades shall be paid for at the contract unit price. Contractor is responsible for replacing barricades damaged by Contractor's forces, with no payment.

112. Reference SP-20, Site Inspection Requirements Note 5, is this log in addition to the NCDENR requirements?

ANSWER: Yes.

113. Reference SP-36, is the contractor to access this phase of work with personnel and equipment? There is no designated access point or haul route. Will crossing guards be needed to gain access to the area?

ANSWER: Access to this area shall be via Wright Brothers Way unless otherwise directed by the Owner.

114. While the electrical work is being completed along the taxiways in Phase 4N will they have to be closed or can the work be completed under Operations Escort?

ANSWER: Electrical work along the taxiways shall be done while the taxiways area closed. At no time shall more than two taxiways be closed at one time from each ramp area, nor shall the closure of multiple taxiways restrict access into and out of the ramp areas. Closure of taxiways shall be coordinated with the airport a minimum of 7 days prior to the start of work.

115. Does the new storm line need to be completed in total prior to the old being demolished?

ANSWER: Means and method of installation and removal of storm drainage is the responsibility of the Contractor.

116. How is the contractor to rotate S-2 and maintain the pipe on either side of the structure?

**ANSWER: S-2 is a new structure, reference C-57.** 

117. Can S-2 not be rotated and the 18" RCP from S-1 be tapped into the corner of the box?

ANSWER: S-2 is a new structure, reference C-57.

118. Please provide clarification with the 36" CMP that is leaving S-6. Demolition Sheet C-24 says to "CAP WITH FLOWABLE FILL AND ABANDON PIPE"

ANSWER: 36" CMP leaving S-6 is not to be capped, abandoned or removed. C-24 to be revised as part of the released for construction plans.

119. Does the contractor have to complete the milling and repaving of Taxiway A at Taxiway A3 during one night closure?

ANSWER: Reference SP-24, Note 19.

120. Please provide clarification on the grading around the second structure north of Taxiway A4.

ANSWER: Grading adds a berm, approximately 1 foot above the existing structure in the location indicated on the plans. The berm shall be a minimum of 3' wide and tied in with a smooth grade.

121. Can the contractor choose to install a temporary fence so that S-35 can be installed?

ANSWER: Temporary fence may be added with prior approval from the Owner. The use of temporary fence in the location indicated shall require the submittal of a fence plan to indicate where the temporary fence will be installed. The use of temporary fence shall be at no additional cost to the owner. The submittal of such a plan does not guarantee approval of the plan by the Owner.

122. Reference EC-23, this sheet does not show the entire area of disturbance along Taxiway H as shown on C-46.

ANSWER: Erosion and sediment control along Taxiway H shall be as approved by NCDEQ and shown on the plans. If additional measures are required, they shall be paid for per the contract unit price.

123. Please provide additional erosion control information for missing area on EC-23.

ANSWER: Erosion and sediment control for Insert A shall be as approved by NCDEQ and shown on the plans. If additional measures are required, they shall be paid for per the contract unit price.

124. Please provide erosion control plans for Inset A shown on grading sheet C-47.

ANSWER: Erosion and sediment control for Insert A shall be as approved by NCDEQ and shown on the plans. If additional measures are required, they shall be paid for per the contract unit price.

125. Please provide clarification. In order to install the storm per the spec the fill in the basins must be brought up to the full diameter of the pipe before the pipe can be laid. How is the contractor to divert the outfall pipe of sediment basin K to the invert in of existing structure?

ANSWER: Means and methods are the responsibility of the contractor.

126. Please provide clarification. In order to install the storm per the spec the fill in the basins must be brought up to the full diameter of the pipe before the pipe can be laid. How is the contractor to divert the outfall pipe of sediment basin J to the invert in of existing structure?

ANSWER: Means and methods are the responsibility of the contractor.

127. How much time will vegetation be given to become adequate before the contractor is required to use Hydracm Steep Slope Matrix or approved equal at no cost to the owner?

ANSWER: Use of HyrdoCM steep slope matrix shall be per the plans and specifications. Reference Addendum 2, Question 2.

Please provide erosion control plans for Inset A shown on grading sheet C-47.

ANSWER: Erosion and sediment control for Insert A shall be as approved by NCDEQ and shown on the plans. If additional measures are required, they shall be paid for per the contract unit price.

129. Is the Westfeldt Drive tie in going to be Asphalt or Gravel?

**ANSWER: Gravel** 

130. Can off-road trucks be used to haul to Existing Sediment Basin C?

ANSWER: Hauling across a NCDOT road shall be per the requirements of NCDOT. Contractor shall coordinate hauling with NCDOT if there are other questions.

131. Will there be any additional requirements to flagging on Ferncliff Park Drive beyond what the NCDOT requires?

**ANSWER: No** 

132. What size is the proposed gate?

#### ANSWER: Reference C-322.

133. Is the contractor to put silt fence into the perimeter road next to S-42?

ANSWER: No.

134. What other types of trees is the owner considering?

ANSWER: None, however the Airport is open to the use of other trees as a cost savings. Use of different trees shall submitted and approved by the Airport.

135. Can someone who can be determined as competent that is under 25 years of age be considered for a SIDA Badge?

ANSWER: Yes.

136. What is the tolerance zone (distance perpendicular from the marking) the contractor is responsible for hand-digging? In the event that the cable is outside the tolerance zone, who is responsible for damage that may occur?

ANSWER: The tolerance is may vary due to depth and size of cable. Field verification of existing utilities and FAA cables is the sole responsibility of the Contractor.

- 137. Regarding the answer to Question 56 in Addendum 3, how are we to haul embankment from the borrow area during night work operations if work within the borrow pit is not allowed between 10:00 pm and 7:00 am?
  - a. There is approximately 70K CY of embankment in phase 4A...the majority of this work has to be performed at night.
  - b. Night work will allow ONLY a 4-5 hour window to work. We only have 56 days to complete this phase...Complete (i.e. embankment, stone, paving, lighting, striping, etc. etc.)
  - c. With the approximately 40K CY to be moved at night, with the limited work timeframe and tight schedule...there is no way to complete this phase within the timeframe required if the borrow pit will not be accessible both day and night (24hrs/day) Please clarify.

ANSWER: Night work will be allowed in the borrow pit, provided no noise complaints are received from adjacent property owners. On previous projects, complaints have typically been of vehicle and equipment back-up alarms. Prior to the start of night work within the borrow pit, the Contractor shall submit a noise mitigation plan designed to minimize or eliminate nuisance noise complaints from adjacent property owners. The plan shall be subject to Owner approval and the Contractor shall have no additional claims if the plan is rejected.

138. Is there a specific area in the borrow area that we are to haul embankment from? It appears there has been construction debris dumped in the borrow area from previous

projects (and possibly covered up). Is there sufficient clean material at the borrow site to complete this scope of work?

ANSWER: Construction debris to be removed prior to the start of BP-4. Sufficient clean borrow is expected within the borrow area.

139. Will the bottom of the sediment basins that are being removed be subject to a proof roll?

ANSWER: Embankment to be placed shall be placed per P-152.

140. If the bottom of the sediment basins do not pass a proof roll, how would over excavation of the sediment basins be paid? Is this cost to be absorbed in the LS basin removal item?

ANSWER: Silt and sediment shall be removed from the basins prior to removal. If additional remediation is required to meet the requirements of P-152, the work shall not be incidental to the cost of the basin removal.

141. Regarding the sediment basins that we are required to "remove" (or fill in), will the borrow material required to fill the basin be paid under "embankment" or will it be paid under the "remove sediment basin" item?

ANSWER: Embankment.

142. There is not a pay item in Volume 3 for T-905 Top soiling. Please clarify if topsoil is needed during Volume 3 it will be paid for at the same unit price as provided in Volume 2.

ANSWER: There is no top soil as part of Volume 3. If top soil is placed in Volume 3, it shall be paid for per P-152.

143. Does topsoil quantity listed in the bid proposal account for that anticipated quantity of Topsoil Stripping AND Topsoil Re-Spread?

ANSWER: The topsoil quantity is anticipated to be placed and paid for per T-905. Topsoil stripping is considered incidental to the topsoil re-spread.

144. Will the contractor be allowed to create and utilize an electronic bid form (i.e. in excel format) if it is identical to the bid form provided in the bid documents? Due to the number of bid items, alternates, etc. and the requirement of the original plus 2 copies, hand writing and submitting will be quite slow.

ANSWER: The Contractor may utilize an electronic bid form provided it is identical to the latest bid form provided in the bid documents addenda. Spreadsheet was and bid form were last updated in Addendum No. 4. Please contact <a href="mailto:nick.loder@rsandh.com">nick.loder@rsandh.com</a> for any addenda.

145. A pipe removal note on Sheet C-23 states to "remove & salvage existing drainage pipe". Is the intent for all pipe to be removed on this project to be salvaged? Additionally, is the pipe

that is being salvaged to be incorporated into the proposed drainage items? If this is correct, will the Contractor still be paid for the "Removal" and "Installation" of said pipe(s) under the respective bid items?

ANSWER: The pipe on C-23 is the only pipe intended to be salvaged during this project. Unless otherwise requested, the size of pipe being removed and salvaged does not meet the size requirements for the proposed pipe being installed.

146. For drainage structures/inlets called to be removed, will the Contractor be responsible for hauling these offsite? Are any inlets to be salvage?

ANSWER: The Contractor will be responsible for hauling these inlets offsite. Inlets are not to be salvaged.

147. A demo note on Sheet C-24 states to "coordinate in the field the demolition of pipe and cap with flowable fill and abandon pipe". How will flowable fill/abandonment of existing drainage pipe(s) be paid? Additionally, how is the Contractor to know how much pipe to flowable fill/abandon? Please explain.

ANSWER: Payment shall be made per the unit price for pipe removal. The flowable fill/abandonment shall be incidental to the removal unit price. Pipe to be flowable filled/abandoned shall be coordinated in the field with the Engineer unless specifically identified on the plans.

148. Note 3 on Sheet SP-21 states "Contractor shall ensure TW A/B1 be closed at the same time as connector TW P/B2 or A3." Please clarify if this note is a "typo" and that is should read "Contractor shall ensure TW A/B1 NOT be closed at the same time as connector TW P/B2 or A3."

ANSWER: Reference Addendum 2, Plans - Comment 5.

149. There appears to be no geotechnical information regarding the sectional thicknesses for pavement removal. Can this information be provided? There is no way to accurately quantify this item without this information.

ANSWER: Reference geotechnical information provided within the contractor documents (Appendices to Volume 2 Technical Specifications).

- 150. Can we close Taxiway A (Phase 4A) and Taxiway C (Phase 4E) simultaneously?
  - a. Taxiways A3 and A5 will be open during this period.
  - b. If we work Taxiway A and C simultaneously, could we be allotted the 56 calendar days to finish both? The CSPP shows Taxiway A can be closed 56 days maximum and Taxiway C can be closed 35 days maximum.

ANSWER: No.

151. Is the intent of the project phasing to have two taxiways open at all time?

ANSWER: Yes, a minimum of one on the north and one on the south side of the project. Refer to Sheets SP-22 through SP-26.

152. Is the intent of the project phasing to have one open at both the north and south ends at all time?

ANSWER: Yes, a minimum of one on the north and one on the south side of the project. Refer to Sheets SP-22 through SP-26.

- 153. Why is the Runway 17 Glide Slope milestone so close to the Runway Opening of Volume 2?
  - a. Runway Opening December 7, 2017
  - b. Runway 17 Glide Slope Milestone December 15, 2017
  - c. Runway 35 Glide Slope Milestone April 12, 2018

ANSWER: The Runway 17 and Runway 35 milestones are set to allow adequate time for FAA personnel to tune-up NAVAIDs facilities in time for flight check in order to meet the charting dates listed on SP-35. Completion Dates listed on SP-35 shall be revised to match those provided on General Provisions Section 80, Page GP-35.

154. Can we begin Phase 4M prior to the Flight Check? If so, we are under the assumption this will be night work only until Runway 17-35 is commissioned and open.

ANSWER: Some of the work for the glide slopes is already tied to phases as part of Volume 2. Reference the Volume 2 project documents for requirements for the glide slopes and working within the runway safety area. Refer to notes on Sheet SP-30.

155. Note 14 on C-20 states that the paved haul road is approximately 4"-6" in depth. Is this asphalt the complete depth? If not, what other type of material is present and at what thickness?

ANSWER: The paved haul road is the remainder of asphalt not removed from the previous project and used for hauling. The depth indicated is approximate. Reference geotechnical information provided within the contractor documents for additional information.

- 156. The wildlife fence calls for a 10' tall woven wire material.
  - a. Several fence subcontractors have indicated the woven wire fence specification is for a much shorter fence (<4' tall), not 10' as indicted in the plans.
  - b. Is the material required to be a solid 10' tall fence or can shorter fence material be "stacked" and tied together? If so, is there an installation method to follow?
  - c. Would a commercial galvanized chain link be considered for this project in lieu of the woven wire fence and wood posts?

ANSWER: The woven wire fence is required to be continuous. Shorter fence materials may not be stacked together. Commercial galvanized chain link may not be substituted in lieu of the woven wire wildlife fence.

157. Will an engineer's estimate be provided for the base bids?

ANSWER: No.

158. Given the aggressive schedule, weather sensitive scopes of work, limited working time-frames (night work), and other such requirements, how would the owner anticipate the contractor "recover the schedule" should inclement weather be encountered (which should be expected during the anticipated construction window)? We request that adverse weather days encountered be allowed to offset liquidated damages (day for day), should these days cause the delinquent completion of a critical phase. Please clarify if this will be allowed?

ANSWER: The project schedule is tied to hard dates tied to the FAA charting cycle that shall be met regardless of weather. Award of weather days per the contract specifications does not affect the critical milestone dates. See General Provisions Section 80-08.

159. This project has a high DBE goal of 13.7%, which will be difficult to achieve. What are the requirements for meeting the "good faith efforts" if this goal is not met?

ANSWER: Bidders shall demonstrate that they made good faith efforts to achieve participation with DBE subcontractors. Good faith effort documentation shall include documentation of contacts with DBE firms, including name, address, phone number, date of contact, and record of conversation.

160. Please confirm that all material on this project shall be in accordance with the 49 USC 50101 Buy American Act.

ANSWER: Refer to Buy American Certification of the Mandatory Contract Provisions page MCP-4 and Proposal Form 8, Buy American Certification.

161. Project documents note that 40% (or greater) of contract value should be self-performed. Being that there are many high-value items that are typically sub-contracted out due to the nature of the work, such as the paving and electrical, in addition to the DBE requirement, are there any stipulations or further details in regards to the self-perform minimum that the contractor should be aware of?

ANSWER: Refer to General Provisions Section 80-01.

162. Regarding wage rates; two rate tables are referenced, which will govern? Please clarify.

ANSWER: The Highway rates will govern.

163. In lieu of providing a certified financial statement at bid time, can we provide proof of NCDOT Pre-Qualification (which is based on the financial information)? This is confidential information and normally it is not provided at bid time.

ANSWER: Bidders are required to provide the required confidential statement of financial resources and liabilities. Sensitive materials submitted by bidders may be sealed in an envelope marked as "CONFIDENTIAL." Confidential materials will not be reproduced, and will only be viewed by members of the Greater Asheville Regional Airport Authority executive staff, Engineer (AVCON), and Program Manager (RS&H).

164. How the end for the coir logs to be interfaced?

Answer: Coir log ends are to be sleeved per the requirement of NCDEQ, Section 6.66.

165. Does the Airport have minimum requirements for the concrete wash out area to be installed at Staging Area 1?

Answer: As required by NCDENR, the concrete washout area shall meet the minimum requirements of the City of Raleigh, Public Works Department, Concrete Washout, SW-20.25, attached to this Addendum.

166. How is excavation and embankment paid throughout the project?

Answer: It is the intention of the project that any excavation within the limits of the proposed pavement section is to be used as embankment within the limits of the project. It shall be the responsibility of the Contractor to coordinate phasing of excavation and embankment between work areas. Excavation used within the limits of the embankment shall be paid for as embankment per the P-152 specification.

167. In reference to Sheet C-104, Pavement Grooving Note 9, are there specific requirements that may be shared for the design of the grooving slurry holding area?

Answer: Design of the grooving slurry holding area is the responsibility of the Contractor. Contractor shall provide at least 20% freeboard on the top of spillway/berm crest to ensure slurry material is contained onsite until it may be dried and disposed off-site in accordance with the Contract Documents. Location and installation of holding area is subject to Airport/NCDEQ approval.

168. On Plan Sheet SP-22, at the very top right corner of the sheet, there is a box that is Taxiway & Runway Closures Phase 4A. The first entry is Runway 17-35 and is showing a Night closure and then work only at night when the runway is closed. Please confirm that when you are speaking of "Runway 17-35" in this context, you are actually speaking of "Temporary Runway 17-35" which is the runway that is currently active at this time. The Temporary Runway 17-35 has to be closed at night, when any work is undertaken within

the RSA line shown on the plans. The footprint area that will eventually become Permanent Runway 17-35, is always available for work, regardless of day or night.

Answer: The runway mentioned in this table is Temporary Runway 17-35.

169. On Plan Sheet C-104 Typical Pavement Sections (Sheet 3 of 3), under the Asphalt Paving notes, Note #7 states that for the permanent runway paving, there will only be 5 longitudinal joints cold joints, and since 25 ft widths are not allowed, then echelon paving would be required by pulling 12.5 ft wide strips of pavement. However, on Phases 4A, 4D, & 4E, the station lengths of each phase is so short, it is not practical to pave in echelon for these short distances. Section P401-4.13 under Joints, allows a joint to cool to 175 degrees or be 4 hours "old" before considered a cold joint and requiring a saw cut edge. We feel that the 30 minute time frame in Note 7 could be a little bit tight, even in these short sections. One hour should be a manageable time for this requirement.

Answer: It is the intent of the project is to minimize the number of joints within the permanent runway. During construction, if the contractor can show that the joint is still "hot" beyond the specified 30 minutes, the Engineer and AOR may wave the requirement of dual pavers within specific areas of the runway. This must be agreed upon prior to placement of final lift of asphalt. The use of dual pavers shall not be waved for longer runs of paving.

170. In Addendum #3, Question #56 asked about working in the Borrow Pit at night. The response was that, "Work may be restricted . . . " This is something that is going to have to be decided prior to the bid. If we get started, then the Contractor is told to stop working at night, there will be considerable more expense to having to haul all materials during daytime, and then placing embankment material at night time, below the RSA line and/or other locations restricted to night work. This means we would have to double handle all the embankment material that has to be placed at night. As someone who worked out on site previously, we know that the Coal Ash contractor worked 24/7 when hauling the ash material in and also going to the borrow pit for cover material at various times during night hours. In order to eliminate the risk from the bid, we need to know, with certainty, that we can work at night in the borrow pit area.

Answer: As stated in previous question, night work will be allowed in the borrow pit, provided no noise complaints are received from adjacent property owners. On previous projects, complaints have typically been of vehicle and equipment back-up alarms. Prior to the start of night work within the borrow pit, the Contractor shall submit a noise mitigation plan designed to minimize or eliminate nuisance noise complaints from adjacent property owners. The plan shall be subject to Owner approval and the Contractor shall have no additional claims if the plan is rejected.

171. Please confirm the new FAA Owned Runway 35 PAPI system is being government supplied? Could a GFM list be provided showing what all is being supplied?

Answer: Please refer to Sheet N-102, Note 6. Per FAA, the PAPI is Model No. FA-24000, PAPI System with RMS (NSN:8200-00-002-9476-1). NSN-9476-1 breaks down

- to (4) lamp housing assemblies (LHA's), one (1) Power and Control Unit (PCU), Aiming Device, and Technical Instruction Manual.

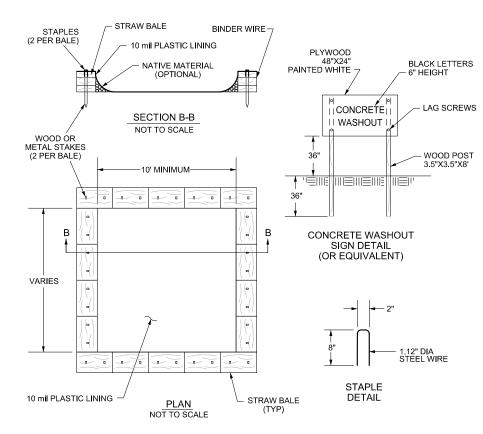
  Frangible couplings will be provided by FAA for use on the relocated PAPI (17 end).
- 172. Could you please clarify the answer to Question 165 from Addendum No. 3, regarding backfilling of basins per contract plans? Does this mean that backfilling will be paid as embankment under P-152-4.1?

Answer: Backfill will be constructed and paid for per P-152.

173. Do we fill anything out on the life cycle cost analysis forms provided with Addendum No. 3?

Answer: No. These forms are for reference only.

**END OF ADDENDUM NO. 5** 



TYPE "ABOVE GRADE" WITH STRAW BALES

