



Victoria F. Sheehan
Commissioner

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



William Cass, P.E.
Assistant Commissioner

38
Beaulieu

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, NH 03301

Bureau of Aeronautics
July 28, 2017

REQUESTED ACTION

Authorize the Department of Transportation to **retroactively** award a grant to the City of Manchester (Vendor Code 177433), AIP-108, to reconstruct portions of Runway 24, Taxiway J and Taxiway J1 at the Manchester-Boston Regional Airport. State and Federal participation in the amount of \$2,187,047.00 is effective upon Governor and Council approval from February 1, 2017 through July 6, 2021. 90% Federal Funds, 5% General Funds, 5% Other Funds.

Funding is available as follows:

FY 2018

04-96-96-960030-7976

FAA Projects

034-500161 New Construction

\$2,187,047.00

EXPLANATION

A Federal Aviation Administration (FAA) grant has been awarded for \$2,071,939.00 (attached), which represents 90% of the funding for AIP-108, to reconstruct portions of Runway 24, Taxiway J and Taxiway J1 at the Manchester-Boston Regional Airport. This project is **retroactive** because it commenced on February 1, 2017 and is currently in process prior to the issuance of the FAA grant and G&C approval in order to complete the work in a single construction season so that the airport may continue the work to address FAA's national priority for mitigating runway incursion safety threats.

Coordinating projects on active runways and taxiways must be done in a safe and efficient manner to minimize the impact to the traveling public; therefore, AIP-108 was phased to be completed ahead of AIP-109 (a future project). AIP-109 will address a significant safety issue that was determined by the Runway Incursion Mitigation Study (RIMS). AIP-109 was also started prior to receiving the FAA grant and G&C approval so that it can be completed in a single construction season to expeditiously minimize the runway incursion safety threats. AIP-109 will be granted under a separate FAA grant. FAA authorized the airport to move forward with this project with the understanding the FAA funding for this construction project was anticipated to materialize by the end of the federal fiscal year.

AIP-108 will replace pavement that is beyond its useful life with a 20-year pavement design. The project includes: pavement milling and inlay of bituminous pavement for a portion of Runway 24 between the

runway threshold and Taxiway H intersection, Taxiway J1, and a portion of Taxiway J and installing new runway guard lights near Runway 24 threshold. Work will include the grooving of runway pavement, shoulder rehabilitation, removal of a portion of Taxiway J and Taxiway J1, removal of elevated taxiway edge lights, installation of in-pavement taxiway edge lights, pavement markings and restoration of turf along the edges of pavement.

The cost breakdown for this project is as follows:

Sponsor Administration	\$ 1,560.00
Engineering Fees	\$ 213,900.00
Resident Engineering	\$ 64,200.00
Construction (Continental Paving, Inc.)	\$1,955,495.00 (Bid Tabulation attached)
Airport Personnel for escorting people and equipment	\$ 67,000.00
Total Cost of Project	\$2,302,155.00

The Department of Transportation accepts the Federal Funds for this project as a pass through to the City of Manchester in accordance with RSA 422:15. State participation in the amount of \$115,108.00 (5% of this project) is also requested. The City of Manchester will participate in the amount of \$115,108.00 (5% of this project). The total cost of this airport improvement project is \$2,302,155.00.

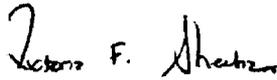
In the event that the federal funds are no longer available, General Funds will not be requested to support this program.

In accordance with the FAA Grant Assurances C - Sponsor Certifications, Responsibility and Authority of the Sponsor, the grant funds must be immediately available for the project to execute the grant offer; therefore all funding for this project is encumbered in the first fiscal year.

The Sponsor's Attorney will execute the grant offer after the approval of Governor and Council.

Please note that the state funds are from the General Fund and have been previously approved in HB25, 2013, 195:1, XVI- A.1.

Sincerely,


Victoria F. Sheehan
Commissioner

VFS/tls1
Attachments:



U.S. Department
of Transportation
Federal Aviation
Administration

GRANT AGREEMENT

PART I—OFFER

Date of Offer	<u>JUN 27 2017</u>
Airport/Planning Area	<u>Manchester Airport</u>
AIP Grant Number	<u>3-33-0011-108-2017</u>
DUNS Number	<u>075339106</u>
TO:	<u>City of Manchester, New Hampshire</u> (herein called the "Sponsor")

FROM: **The United States of America**(acting through the Federal Aviation Administration, herein called the "FAA")

WHEREAS, the Sponsor has submitted to the FAA a Project Application dated May 24, 2017, for a grant of Federal funds for a project at or associated with the Manchester Airport, which is included as part of this Grant Agreement; and

WHEREAS, the FAA has approved a project for the Manchester Airport (herein called the "Project") consisting of the following:

Reconstruct Portions of Runway 24 and Portions of Taxiways J and J1,

which is more fully described in the Project Application.

NOW THEREFORE, According to the applicable provisions of the former Federal Aviation Act of 1958, as amended and recodified, 49 U.S.C. § 40101, et seq., and the former Airport and Airway Improvement Act of 1982 (AAIA), as amended and recodified, 49 U.S.C. § 47101, et seq., (herein the AAIA grant statute is referred to as "the Act"), the representations contained in the Project Application, and in consideration of (a) the Sponsor's adoption and ratification of the Grant Assurances dated March 2014, and the Sponsor's acceptance of this Offer; and, (b) the benefits to accrue to the United States and the public from the accomplishment of the Project and compliance with the Grant Assurances and conditions as herein provided.

THE FEDERAL AVIATION ADMINISTRATION, FOR AND ON BEHALF OF THE UNITED STATES, HEREBY OFFERS AND AGREES to pay ninety (90) percent of the allowable costs incurred accomplishing the Project as the United States share of the Project.

This Offer is made on and **SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:**

CONDITIONS

1. **Maximum Obligation.** The maximum obligation of the United States payable under this Offer is \$2,071,939.

The following amounts represent a breakdown of the maximum obligation for the purpose of establishing allowable amounts for any future grant amendment, which may increase the foregoing maximum obligation of the United States under the provisions of 49 U.S.C. § 47108(b):
 \$0 for planning
 \$2,071,939 airport development or noise program implementation; and,
 \$0 for land acquisition.
2. **Period of Performance.** The period of performance begins on the date the Sponsor formally accepts this agreement. Unless explicitly stated otherwise in an amendment from the FAA, the end date of the period of performance is 4 years (1,460 calendar days) from the date of formal grant acceptance by the Sponsor.

The Sponsor may only charge allowable costs for obligations incurred prior to the end date of the period of performance (2 CFR §200.309). Unless the FAA authorizes a written extension, the sponsor must submit all project closeout documentation and liquidate (pay off) all obligations incurred under this award no later than 90 calendar days after the end date of the period of performance (2 CFR §200.343).

The period of performance end date does not relieve or reduce Sponsor obligations and assurances that extend beyond the closeout of a grant agreement.
3. **Ineligible or Unallowable Costs.** The Sponsor must not include any costs in the project that the FAA has determined to be ineligible or unallowable.
4. **Indirect Costs - Sponsor.** Sponsor may charge indirect costs under this award by applying the indirect cost rate identified in the project application as accepted by the FAA, to allowable costs for Sponsor direct salaries and wages.
5. **Determining the Final Federal Share of Costs.** The United States' share of allowable project costs will be made in accordance with the regulations, policies, and procedures of the Secretary. Final determination of the United States' share will be based upon the final audit of the total amount of allowable project costs and settlement will be made for any upward or downward adjustments to the Federal share of costs.
6. **Completing the Project Without Delay and in Conformance with Requirements.** The Sponsor must carry out and complete the project without undue delays and in accordance with this agreement, and the regulations, policies, and procedures of the Secretary. The Sponsor also agrees to comply with the assurances which are part of this agreement.
7. **Amendments or Withdrawals before Grant Acceptance.** The FAA reserves the right to amend or withdraw this offer at any time prior to its acceptance by the Sponsor.
8. **Offer Expiration Date.** This offer will expire and the United States will not be obligated to pay any part of the costs of the project unless this offer has been accepted by the Sponsor on or before August 2, 2017, or such subsequent date as may be prescribed in writing by the FAA.

- 9. Improper Use of Federal Funds.** The Sponsor must take all steps, including litigation if necessary, to recover Federal funds spent fraudulently, wastefully, or in violation of Federal antitrust statutes, or misused in any other manner for any project upon which Federal funds have been expended. For the purposes of this grant agreement, the term "Federal funds" means funds however used or dispersed by the Sponsor, that were originally paid pursuant to this or any other Federal grant agreement. The Sponsor must obtain the approval of the Secretary as to any determination of the amount of the Federal share of such funds. The Sponsor must return the recovered Federal share, including funds recovered by settlement, order, or judgment, to the Secretary. The Sponsor must furnish to the Secretary, upon request, all documents and records pertaining to the determination of the amount of the Federal share or to any settlement, litigation, negotiation, or other efforts taken to recover such funds. All settlements or other final positions of the Sponsor, in court or otherwise, involving the recovery of such Federal share require advance approval by the Secretary.
- 10. United States Not Liable for Damage or Injury.** The United States is not responsible or liable for damage to property or injury to persons which may arise from, or be incident to, compliance with this grant agreement.
- 11. System for Award Management (SAM) Registration And Universal Identifier.**
- A. Requirement for System for Award Management (SAM): Unless the Sponsor is exempted from this requirement under 2 CFR 25.110, the Sponsor must maintain the currency of its information in the SAM until the Sponsor submits the final financial report required under this grant, or receives the final payment, whichever is later. This requires that the Sponsor review and update the information at least annually after the initial registration and more frequently if required by changes in information or another award term. Additional information about registration procedures may be found at the SAM website (currently at <http://www.sam.gov>).
 - B. Data Universal Numbering System: DUNS number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D & B) to uniquely identify business entities. A DUNS number may be obtained from D & B by telephone (currently 866-705-5771) or on the web (currently at <http://fedgov.dnb.com/webform>).
- 12. Electronic Grant Payment(s).** Unless otherwise directed by the FAA, the Sponsor must make each payment request under this agreement electronically via the Delphi eInvoicing System for Department of Transportation (DOT) Financial Assistance Awardees.
- 13. Informal Letter Amendment of AIP Projects.** If, during the life of the project, the FAA determines that the maximum grant obligation of the United States exceeds the expected needs of the Sponsor by \$25,000 or five percent (5%), whichever is greater, the FAA can issue a letter amendment to the Sponsor unilaterally reducing the maximum obligation.
- The FAA can also issue a letter to the Sponsor increasing the maximum obligation if there is an overrun in the total actual eligible and allowable project costs to cover the amount of the overrun provided it will not exceed the statutory limitations for grant amendments. The FAA's authority to increase the maximum obligation does not apply to the "planning" component of condition No. 1.
- The FAA can also issue an informal letter amendment that modifies the grant description to correct administrative errors or to delete work items if the FAA finds it advantageous and in the best interests of the United States.
- An informal letter amendment has the same force and effect as a formal grant amendment.
- 14. Air and Water Quality.** The Sponsor is required to comply with all applicable air and water quality standards for all projects in this grant. If the Sponsor fails to comply with this requirement, the FAA may suspend, cancel, or terminate this agreement.

15. **Financial Reporting and Payment Requirements.** The Sponsor will comply with all federal financial reporting requirements and payment requirements, including submittal of timely and accurate reports.
16. **Buy American.** Unless otherwise approved in advance by the FAA, the Sponsor will not acquire or permit any contractor or subcontractor to acquire any steel or manufactured products produced outside the United States to be used for any project for which funds are provided under this grant. The Sponsor will include a provision implementing Buy American in every contract.
17. **Maximum Obligation Increase For Primary Airports.** In accordance with 49 U.S.C. § 47108(b), as amended, the maximum obligation of the United States, as stated in Condition No. 1 of this Grant Offer:
- A. May not be increased for a planning project;
 - B. May be increased by not more than 15 percent for development projects;
 - C. May be increased by not more than 15 percent for land project.
18. **Audits for Public Sponsors.** The Sponsor must provide for a Single Audit or program specific audit in accordance with 2 CFR part 200. The Sponsor must submit the audit reporting package to the Federal Audit Clearinghouse on the Federal Audit Clearinghouse's Internet Data Entry System at <http://harvester.census.gov/facweb/>. Provide one copy of the completed audit to the FAA if requested.
19. **Suspension or Debarment.** When entering into a "covered transaction" as defined by 2 CFR §180.200, the Sponsor must:
- A. Verify the non-federal entity is eligible to participate in this Federal program by:
 - 1. Checking the excluded parties list system (EPLS) as maintained within the System for Award Management (SAM) to determine if the non-federal entity is excluded or disqualified; or
 - 2. Collecting a certification statement from the non-federal entity attesting they are not excluded or disqualified from participating; or
 - 3. Adding a clause or condition to covered transactions attesting individual or firm are not excluded or disqualified from participating.
 - B. Require prime contractors to comply with 2 CFR §180.330 when entering into lower-tier transactions (e.g. Sub-contracts).
 - C. Immediately disclose to the FAA whenever the Sponsor (1) learns they have entered into a covered transaction with an ineligible entity or (2) suspends or debar a contractor, person, or entity.
20. **Ban on Texting While Driving.**
- A. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, October 1, 2009, and DOT Order 3902.10, Text Messaging While Driving, December 30, 2009, the Sponsor is encouraged to:
 - 1. Adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving when performing any work for, or on behalf of, the Federal government, including work relating to a grant or subgrant.
 - 2. Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as:
 - a. Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and
 - b. Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

- B. The Sponsor must insert the substance of this clause on banning texting while driving in all subgrants, contracts and subcontracts.

21. AIP Funded Work Included in a PFC Application.

Within 90 days of acceptance of this award, Sponsor must submit to the Federal Aviation Administration an amendment to any approved Passenger Facility Charge (PFC) application that contains an approved PFC project also covered under this grant award. The airport sponsor may not make any expenditure under this award until project work addressed under this award is removed from an approved PFC application by amendment.

- 22. Exhibit "A" Property Map.** The Exhibit "A" Property Map dated March 2015, attached to AIP 3-33-0011-101-2015, is incorporated herein by reference and made part of this grant agreement.

23. Employee Protection from Reprisal.

A. Prohibition of Reprisals –

1. In accordance with 41 U.S.C. § 4712, an employee of a grantee or subgrantee may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body described in sub-paragraph (A)(2), information that the employee reasonably believes is evidence of:
 - i. Gross mismanagement of a Federal grant;
 - ii. Gross waste of Federal funds;
 - iii. An abuse of authority relating to implementation or use of Federal funds;
 - iv. A substantial and specific danger to public health or safety; or
 - v. A violation of law, rule, or regulation related to a Federal grant.
2. Persons and bodies covered: The persons and bodies to which a disclosure by an employee is covered are as follows:
 - i. A member of Congress or a representative of a committee of Congress;
 - ii. An Inspector General;
 - iii. The Government Accountability Office;
 - iv. A Federal office or employee responsible for oversight of a grant program;
 - v. A court or grand jury;
 - vi. A management office of the grantee or subgrantee; or
 - vii. A Federal or State regulatory enforcement agency.
3. Submission of Complaint – A person who believes that they have been subjected to a reprisal prohibited by paragraph A of this grant term may submit a complaint regarding the reprisal to the Office of Inspector General (OIG) for the U.S. Department of Transportation.
4. Time Limitation for Submittal of a Complaint – A complaint may not be brought under this subsection more than three years after the date on which the alleged reprisal took place.
5. Required Actions of the Inspector General – Actions, limitations and exceptions of the Inspector General's office are established under 41 U.S.C. § 4712(b)
6. Assumption of Rights to Civil Remedy – Upon receipt of an explanation of a decision not to conduct or continue an investigation by the Office of Inspector General, the person submitting a complaint assumes the right to a civil remedy under 41 U.S.C. § 4712(c).

- 24. Pavement Maintenance Management Program.** The Sponsor agrees that it will implement an effective airport pavement maintenance management program as required by Grant Assurance Pavement Preventive Management. The Sponsor agrees that it will use the program for the useful life of any

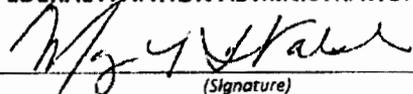
pavement constructed, reconstructed, or repaired with federal financial assistance at the airport. The Sponsor further agrees that the program will:

- A. Follow FAA Advisory Circular 150/5380-6, "Guidelines and Procedures for Maintenance of Airport Pavements," for specific guidelines and procedures for maintaining airport pavements, establishing an effective maintenance program, specific types of distress and its probable cause, inspection guidelines, and recommended methods of repair;
 - B. Detail the procedures to be followed to assure that proper pavement maintenance, both preventive and repair, is performed;
 - C. Include a Pavement Inventory, Inspection Schedule, Record Keeping, Information Retrieval, and Reference, meeting the following requirements:
 1. Pavement Inventory. The following must be depicted in an appropriate form and level of detail:
 - a. Location of all runways, taxiways, and aprons;
 - b. Dimensions;
 - c. Type of pavement; and,
 - d. Year of construction or most recent major rehabilitation.
 2. Inspection Schedule.
 - a. Detailed Inspection. A detailed inspection must be performed at least once a year. If a history of recorded pavement deterioration is available, i.e., Pavement Condition Index (PCI) survey as set forth in the Advisory Circular 150/5380-6, the frequency of inspections may be extended to three years.
 - b. Drive-By Inspection. A drive-by inspection must be performed a minimum of once per month to detect unexpected changes in the pavement condition. For drive-by inspections, the date of inspection and any maintenance performed must be recorded.
 3. Record Keeping. Complete information on the findings of all detailed inspections and on the maintenance performed must be recorded and kept on file for a minimum of five years. The type of distress, location, and remedial action, scheduled or performed, must be documented. The minimum information is:
 - a. Inspection date;
 - b. Location;
 - c. Distress types; and
 - d. Maintenance scheduled or performed.
 4. Information Retrieval System. The Sponsor must be able to retrieve the information and records produced by the pavement survey to provide a report to the FAA as may be required.
- 25. Project which Contain Paving Work in Excess of \$500,000.** The Sponsor agrees to:
- A. Furnish a construction management program to the FAA prior to the start of construction which details the measures and procedures to be used to comply with the quality control provisions of the construction contract, including, but not limited to, all quality control provisions and tests required by the Federal specifications. The program must include as a minimum:
 1. The name of the person representing the Sponsor who has overall responsibility for contract administration for the project and the authority to take necessary actions to comply with the contract;

2. Names of testing laboratories and consulting engineer firms with quality control responsibilities on the project, together with a description of the services to be provided;
 3. Procedures for determining that the testing laboratories meet the requirements of the American Society of Testing and Materials standards on laboratory evaluation referenced in the contract specifications (D 3666, C 1077);
 4. Qualifications of engineering supervision and construction inspection personnel;
 5. A listing of all tests required by the contract specifications, including the type and frequency of tests to be taken, the method of sampling, the applicable test standard, and the acceptance criteria or tolerances permitted for each type of test; and
 6. Procedures for ensuring that the tests are taken in accordance with the program, that they are documented daily, and that the proper corrective actions, where necessary, are undertaken.
- B. Submit at completion of the project, a final test and quality assurance report documenting the summary results of all tests performed; highlighting those tests that indicated failure or that did not meet the applicable test standard. The report must include the pay reductions applied and the reasons for accepting any out-of-tolerance material. Submit interim test and quality assurance reports when requested by the FAA.
- C. Failure to provide a complete report as described in paragraph b, or failure to perform such tests, will, absent any compelling justification; result in a reduction in Federal participation for costs incurred in connection with construction of the applicable pavement. Such reduction will be at the discretion of the FAA and will be based on the type or types of required tests not performed or not documented and will be commensurate with the proportion of applicable pavement with respect to the total pavement constructed under the grant agreement.
- D. The FAA, at its discretion, reserves the right to conduct independent tests and to reduce grant payments accordingly if such independent tests determine that sponsor test results are inaccurate.
26. **Force Account.** The Sponsor agrees that proposals to accomplish construction or engineering with the Sponsor's own personnel must receive approval from the FAA prior to Sponsor incurring costs and that no reimbursement payments will be made on that portion of this grant until the Sponsor has received FAA approval for the force account information.

The Sponsor's acceptance of this Offer and ratification and adoption of the Project Application incorporated herein shall be evidenced by execution of this Instrument by the Sponsor, as hereinafter provided, and this Offer and Acceptance shall comprise a Grant Agreement, as provided by the Act, constituting the contractual obligations and rights of the United States and the Sponsor with respect to the accomplishment of the Project and compliance with the assurances and conditions as provided herein. Such Grant Agreement shall become effective upon the Sponsor's acceptance of this Offer.

**UNITED STATES OF AMERICA
FEDERAL AVIATION ADMINISTRATION**


(Signature)

Mary T. Walsh
(Typed Name)

Manager, Airports Division
(Title of FAA Official)

PART II - ACCEPTANCE

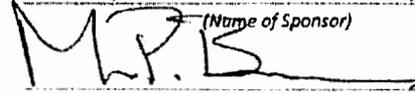
The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the terms and conditions in this Offer and in the Project Application.

I declare under penalty of perjury that the foregoing is true and correct.¹

Executed this 7th day of July, 2017.

 Heather Freeman
Assistant City Clerk

City of Manchester, New Hampshire

 (Name of Sponsor)
(Signature of Sponsor's Authorized Official)

By: Mark Paul Brewer
(Typed Name of Sponsor's Authorized Official)

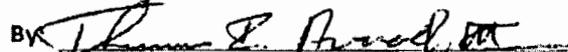
Title: Airport Director
(Title of Sponsor's Authorized Official)

CERTIFICATE OF SPONSOR'S ATTORNEY

I, Thomas J. Arnold, III, acting as Attorney for the Sponsor do hereby certify:
(Typed Name of Sponsor's Attorney)

That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of New Hampshire. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor's official representative has been duly authorized and that the execution thereof is in all respects due and proper and in accordance with the laws of the said State and the Act. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

Dated at Manchester (location) this 7th day of July, 2017

By: 
(Signature of Sponsor's Attorney)

¹Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. Section 1001 (False Statements) and could subject you to fines, imprisonment, or both.

Rehabilitation of Portion of RW 24 and Portions of TW J and J1

BID OPENING: APRIL 26, 2017 1:00 PM

LOW BID vs. ENGINEER ESTIMATE COMPARISON

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	Continental Paving, Inc.		ENGINEER ESTIMATE		COMPARISON	
				UNIT COST	UNIT TOTAL	ESTIMATED UNIT COST	ESTIMATED UNIT TOTAL	COST DIFFERENCE	PERCENT DIFFERENCE
BASE BID									
M-001-1	ALLOWANCE - GATE GUARDS	ALL	1	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ 12,000.00	\$ -	0.00%
M-001-2	ALLOWANCE - UNIFORMED OFFICER WITH VEHICLE	ALL	1	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ -	0.00%
M-100-1	MOBILIZATION	LS	1	\$ 56,000.00	\$ 56,000.00	\$ 60,000.00	\$ 60,000.00	\$ (4,000.00)	-6.67%
M-200-1	MAINTENANCE AND PROTECTION OF TRAFFIC	LS	1	\$ 40,000.00	\$ 40,000.00	\$ 25,000.00	\$ 25,000.00	\$ 15,000.00	60.00%
M-300-1	FIELD DATA COLLECTION FOR GIS SURVEY CONVERSION	LS	1	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ -	0.00%
M-400-1	CONSTRUCTION ACCESS MODIFICATIONS	LS	1	\$ 30,000.00	\$ 30,000.00	\$ 25,000.00	\$ 25,000.00	\$ 5,000.00	20.00%
P-101-1	MILL BITUMINOUS PAVEMENT (0 - 4")	SY	52,900	\$ 3.50	\$ 185,150.00	\$ 4.00	\$ 211,600.00	\$ (26,450.00)	-12.50%
P-101-2	SAW CUT PAVEMENT	LF	1,000	\$ 3.00	\$ 3,000.00	\$ 5.00	\$ 5,000.00	\$ (2,000.00)	-40.00%
P-101-3	SAW AND SEAL JOINTS	LF	300	\$ 12.00	\$ 3,600.00	\$ 15.00	\$ 4,500.00	\$ (900.00)	-20.00%
P-101-4	CRACK REPAIR TYPE 1	LF	1,700	\$ 3.00	\$ 5,100.00	\$ 5.00	\$ 8,500.00	\$ (3,400.00)	-40.00%
P-101-5	CRACK REPAIR TYPE 2	LF	800	\$ 9.00	\$ 7,200.00	\$ 15.00	\$ 12,000.00	\$ (4,800.00)	-40.00%
P-101-6	CRACK RECONSTRUCTION	SF	100	\$ 20.00	\$ 2,000.00	\$ 20.00	\$ 2,000.00	\$ -	0.00%
P-101-7	BITUMINOUS PAVEMENT REMOVAL	CY	330	\$ 20.00	\$ 6,600.00	\$ 30.00	\$ 9,900.00	\$ (3,300.00)	-33.33%
P-156-1	INLET PROTECTION / CATCH BASIN FILTER BAGS	EA	16	\$ 250.00	\$ 4,000.00	\$ 350.00	\$ 5,600.00	\$ (1,600.00)	-28.57%
P-156-2	EROSION CONTROL WATTLES	LF	440	\$ 10.00	\$ 4,400.00	\$ 9.00	\$ 3,960.00	\$ 440.00	25.00%
P-401-1	BITUMINOUS SURFACE COURSE	TON	13,000	\$ 84.50	\$ 1,098,500.00	\$ 95.00	\$ 1,235,000.00	\$ (136,500.00)	-11.05%
P-803-1	BITUMINOUS TACK COAT	GAL	7,900	\$ 3.00	\$ 23,700.00	\$ 3.00	\$ 23,700.00	\$ -	0.00%
P-820-1	PERMANENT PAVEMENT MARKINGS	SF	45,800	\$ 2.25	\$ 103,050.00	\$ 2.00	\$ 91,600.00	\$ 11,450.00	12.50%
P-820-2	PAVEMENT MARKING REMOVAL	SF	3,800	\$ 2.00	\$ 7,600.00	\$ 3.00	\$ 11,400.00	\$ (3,800.00)	-33.33%
P-821-1	SAW-CUT GROOVING	SY	25,400	\$ 2.50	\$ 63,500.00	\$ 3.00	\$ 76,200.00	\$ (12,700.00)	-19.67%
T-900-1	BORROW TOPSOIL SEED FERTILIZE & MULCH	SY	2,750	\$ 10.00	\$ 27,500.00	\$ 10.00	\$ 27,500.00	\$ -	0.00%
F-162-1	TEMPORARY 8-FT CHAIN LINK FENCE WITH BARBED WIRE	LF	800	\$ 3.00	\$ 2,400.00	\$ 4.00	\$ 3,200.00	\$ (800.00)	-22.50%
F-162-2	TEMPORARY 8-FT CHAIN LINK FENCE ON BARRIER WITH BARBED WIRE	LF	400	\$ 45.00	\$ 18,000.00	\$ 50.00	\$ 20,000.00	\$ (2,000.00)	-10.00%
F-162-3A	TEMPORARY 8-FT CHAIN LINK GATE WITH BARBED WIRE	EA	2	\$ 2,000.00	\$ 4,000.00	\$ 2,500.00	\$ 5,000.00	\$ (1,000.00)	-20.00%
F-162-3B	PERMANENT 8-FT CHAIN LINK GATE WITH BARBED WIRE	EA	1	\$ 2,250.00	\$ 2,250.00	\$ 3,000.00	\$ 3,000.00	\$ (750.00)	-25.00%
L-108-1A	#8 AWG, 5KV L-824, TYPE C CABLE INSTALLED IN CONDUIT	LF	14,000	\$ 1.50	\$ 21,000.00	\$ 2.00	\$ 28,000.00	\$ (7,000.00)	-25.00%
L-108-1B	#8 AWG, 5KV L-824, TYPE C COLORED CABLE, EXCESS MINIMUM QUANTITY	LF	14,000	\$ 0.85	\$ 11,900.00	\$ 0.75	\$ 10,500.00	\$ 1,400.00	13.33%
L-108-2	#8 AWG BARE COUNTERPOISE WIRE INSTALLED IN TRENCH, INCLUDING GROUND RODS AND CONNECTIONS	LF	410	\$ 1.50	\$ 615.00	\$ 3.00	\$ 1,230.00	\$ (615.00)	-50.00%
L-108-3	REMOVAL OF CABLE IN EXISTING CONDUIT	LF	9,700	\$ 0.60	\$ 5,820.00	\$ 1.00	\$ 9,700.00	\$ (3,880.00)	-40.00%
L-110-1	CONCRETE ENCASED 2" CONDUIT, TYPE III PVC, SCH. 80 - RW GUARD LIGHT TRENCH	LF	410	\$ 11.00	\$ 4,510.00	\$ 20.00	\$ 8,200.00	\$ (3,690.00)	-45.00%
L-125-1A	L-852G(L) IN PAVEMENT GUARD LIGHT WITH 8 BOLT LIGHT BASE	EA	19	\$ 2,500.00	\$ 47,500.00	\$ 2,800.00	\$ 53,200.00	\$ (5,700.00)	-10.71%
L-125-1B	L-852G(L) IN PAVEMENT GUARD LIGHT WITH 12 BOLT LIGHT BASE	EA	15	\$ 2,750.00	\$ 41,250.00	\$ 3,000.00	\$ 45,000.00	\$ (3,750.00)	-8.33%
L-125-2	REMOVE PLATE & LIGHT BASE IN SHOULDER PAVEMENT	EA	10	\$ 275.00	\$ 2,750.00	\$ 1,000.00	\$ 10,000.00	\$ (7,250.00)	-72.50%
L-125-3A	RETROFIT EXISTING RUNWAY EDGE/END LIGHT	EA	24	\$ 275.00	\$ 6,600.00	\$ 400.00	\$ 9,600.00	\$ (3,000.00)	-31.25%
L-125-3B	RETROFIT EXISTING RUNWAY CENTERLINE LIGHT	EA	31	\$ 275.00	\$ 8,525.00	\$ 750.00	\$ 23,250.00	\$ (14,725.00)	-63.33%
L-125-3C	RETROFIT EXISTING TAXIWAY EDGE LIGHT	EA	45	\$ 275.00	\$ 12,375.00	\$ 400.00	\$ 18,000.00	\$ (5,625.00)	-31.25%
L-125-4	RETROFIT EXISTING GUIDANCE SIGN	EA	10	\$ 350.00	\$ 3,500.00	\$ 400.00	\$ 4,000.00	\$ (500.00)	-12.50%
L-125-5	PAVEMENT SENSOR REPLACEMENT	EA	2	\$ 9,500.00	\$ 19,000.00	\$ 10,000.00	\$ 20,000.00	\$ (1,000.00)	-5.00%
BASE BID TOTAL					\$ 1,955,495.00		\$ 2,187,700.00	\$ (232,205.00)	-10.61%
ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	UNIT TOTAL	ESTIMATED UNIT COST	TOTAL COST	ESTIMATED UNIT COST	TOTAL COST
ADDITIVE ALTERNATE NO. 1									
M-001-3	ALLOWANCE - MHT IT FIBER CONTRACTOR	ALL	1	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ -	0.00%
L-110-2	CONCRETE ENCASED 2" CONDUIT, TYPE III PVC, SCH. 80 - FIBER LINE TRENCH IN TURF	LF	1,480	\$ 25.00	\$ 36,500.00	\$ 25.00	\$ 36,500.00	\$ -	0.00%
L-110-3	CONCRETE ENCASED 2" CONDUIT, TYPE III PVC, SCH. 80 - FIBER LINE TRENCH IN PAVT	LF	360	\$ 50.00	\$ 17,500.00	\$ 38.00	\$ 12,250.00	\$ 5,250.00	42.86%
L-110-4	2" CONDUIT - RIGID GALVANIZED STEEL - FIBER LINE	LF	1,470	\$ 30.00	\$ 44,100.00	\$ 25.00	\$ 36,750.00	\$ 7,350.00	20.00%
L-115-1	FIBER LINE HAND HOLE	EA	7	\$ 2,750.00	\$ 19,250.00	\$ 5,000.00	\$ 35,000.00	\$ (15,750.00)	-45.00%
L-120-1	FIBER CABLE INSTALLED IN CONDUIT	LF	3,850	\$ 6.75	\$ 25,837.50	\$ 5.00	\$ 18,250.00	\$ 7,587.50	35.00%
L-120-2	PATCH PANEL & INTERCONNECTION	EA	3	\$ 3,850.00	\$ 11,550.00	\$ 4,000.00	\$ 12,000.00	\$ (450.00)	-3.75%
L-120-3	MHT ENGINEERING BUILDING INTERCONNECTION	EA	1	\$ 2,750.00	\$ 2,750.00	\$ 3,200.00	\$ 3,200.00	\$ (450.00)	-14.06%
ADDITIVE ALTERNATE NO. 1 TOTAL					\$ 188,287.50		\$ 163,950.00	\$ 2,337.50	1.43%
BASE BID + ADDITIVE ALTERNATE NO. 1 TOTAL					\$ 2,121,782.50		\$ 2,351,650.00	\$ (229,867.50)	-9.77%