



Illinois Department of Transportation

Office of Intermodal Project Implementation / Division of Aeronautics
1 Langhorne Bond Drive / Springfield, Illinois 62707-8415

September 8, 2023

SUBJECT: Lewis University Airport
Romeoville, Illinois
Will County
Illinois Project Number: LOT-4536
SBG Project Number: 3-17-SBGP-TBD
Contract No. LE056
Item No. 03A, September 22, 2023 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

Reason for Addendum:
Revision to Proposal

To All Plan Holders:
Replace Proposal Document with Attachment.

Plan Changes:
None

Special Provisions Changes:
None

Schedule of Prices Changes:
None

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Attachments

- Revised Proposal

03A

Letting September 22, 2023

Notice to Bidders, Specifications and Proposal

WARNING: FAA Buy American Preference provisions apply to this contract. Failure to submit a "Certification of Compliance with FAA Buy American Preference – Construction Projects" form in accordance with the bidding procedures set forth herein (Appendix A4) will result in the bid being declared non-responsive.



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. LE056
Lewis University Airport
Romeoville, Illinois
Will County
Illinois Project No. LOT-4536
SBG Project No. 3-17-SBGP-TBD**



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on September 22, 2023, at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. LE056
Lewis University Airport
Romeoville, Illinois
Will County
Illinois Project No. LOT-4536
SBG Project No. 3-17-SBGP-TBD**

Install Airport Security Fencing

For engineering information, please contact Kris Salvatera, P.E. of Primera Engineers, Ltd. at 312.242.6362.

3. INSTRUCTIONS TO BIDDERS.

- (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-23 of the Standard Specifications for Construction of Airports (Adopted March 22, 2023), become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
- (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded within 90 calendar days to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

- 5. PRE-BID CONFERENCE.** N/A

- 6. DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 13.0%.

- 7. SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Standard Specifications for Construction of Airports (Adopted March 22, 2023), the Special Provisions dated July 28, 2023, and the Construction Plans dated July 28, 2023 as approved by the Illinois Department of Transportation, Division of Aeronautics.

8. BIDDING REQUIREMENTS AND BASIS OF AWARD. When alternates are included in the proposal, the following shall apply:

a. Additive Alternates

(1) Bidders must submit a bid for the Base Bid and for all Additive Alternates.

(2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

The lowest aggregate amount of (i) the Base Bid plus (ii) any Additive Alternate(s) which the Department elects to award based on the availability of funding.

Award of this contract will be limited to the following bid alternate combinations:

- I. Base Bid
- II. Base Bid + Additive Alternate 1
- III. Base Bid + Additive Alternate 1 + Additive Alternate 2
- IV. Base Bid + Additive Alternate 1 + Additive Alternate 2 + Additive Alternate 3

The Department may elect not to award any Additive Alternates. In that case, award will be to the lowest responsible qualified bidder of the Base Bid.

b. Optional Alternates

(1) Bidders must submit a bid for the Base Bid and for either Alternate A or Alternate B or for both Alternate A and Alternate B.

(2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

The lower of the aggregate of either (i) the Base Bid plus Alternate A or (ii) the Base Bid plus Alternate B.

9. CONTRACT TIME. The Contractor shall complete all work within the specified contract time. Any calendar day extension beyond the specified contract time must be fully justified, requested by the Contractor in writing, and approved by the Engineer, or be subject to liquidated damages.

The contract time for this contract is Base Bid: 65 calendar days; Additive Alternate #1: 8 additional calendar days; Additive Alternate #2: 0 additional calendar days.

10. INDEPENDENT WEIGHT CHECKS. The Department reserves the right to conduct random unannounced independent weight checks on any delivery for bituminous, aggregate or other pay item for which the method of measurement for payment is based on weight. The weight checks will be accomplished by selecting, at random, a loaded truck and obtaining a loaded and empty weight on an independent scale. In addition, the department may perform random weight checks by obtaining loaded and empty truck weights on portable scales operated by department personnel.

11. MATERIAL COST ADJUSTMENTS. Federal Aviation Administration rules prohibit the use of escalation clauses for materials. Therefore, the Illinois Department of Transportation, Division of Aeronautics cannot offer any material cost adjustment provisions for projects that utilize Federal Funds.

12. GOOD FAITH COMPLIANCE. The Illinois Department of Transportation has made a good faith effort to include all statements, requirements, and other language required by federal and state law and by various offices within federal and state governments whether that language is required by law or not. If anything of this nature has been left out or if additional language etc. is later required, the bidder/contractor shall cooperate fully with the Department to modify the contract or bid documents to correct the deficiency. If the change results in increased operational costs, the Department shall reimburse the contractor for such costs as it may find to be reasonable.

By Order of the
Illinois Department of Transportation

Omer Osman,
Secretary

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS

REQUIRED CONTRACT PROVISIONS FOR STATE FUNDED AIRPORT CONSTRUCTION PROJECTS

The following provisions are State of Illinois requirements and are in addition to the **REQUIRED CONTRACT PROVISIONS FOR AIRPORT IMPROVEMENT PROGRAM AND FOR OBLIGATED SPONSORS**

DISADVANTAGED BUSINESS POLICY

NOTICE: This proposal contains the special provision entitled "Disadvantaged Business Participation." Inclusion of this Special Provision in this contract satisfies the obligations of the Department of Transportation under federal law as implemented by 49 CFR 23 and under the Illinois "Minority and Female Business Enterprise Act."

POLICY: It is public policy that the businesses defined in 49 CFR Part 23 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with State or Federal funds. Consequently, the requirements of 49 CFR Part 23 apply to this contract.

OBLIGATION: The Contractor agrees to ensure that the businesses defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of this contract. In this regard, the Contractor shall take all necessary and reasonable steps, in accordance with 49 CFR Part 23, to ensure that the said businesses have the maximum opportunity to compete for and perform portions of this contract. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

The Contractor shall include the above Policy and Obligation statements of this Special Provision in every subcontract, including procurement of materials and leases of equipment.

DBE/WBE CONTRACTOR FINANCE PROGRAM: On contracts where a loan has been obtained through the DBE/WBE Contractor Finance Program, the Contractor shall cooperate with the Department by making all payments due to the DBE/WBE Contractor by means of a two-payee check payable to the Lender (Bank) and the Borrower (DBE/WBE Contractor).

BREACH OF CONTRACT: Failure to carry out the requirements set forth above and in the Special Provision shall constitute a breach of contract and may result in termination of the contract or liquidated damages as provided in the special provision.

SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: March 2, 2019

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

The Contractor, subrecipient, 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 contracts funded in whole or in part with federal or state funds. 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, which may include, but is not limited to:

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 13.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:
<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate and adequately document enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere *pro forma* efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.

(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

(a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

(b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

(c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

(d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.

(e) DBE as a material supplier:

(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

(2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.

(3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

(a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at DOT.DBE.UP@illinois.gov.

(b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(c) SUBCONTRACT. The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.

(d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

(1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

(2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

(3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

(f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

(g) **ENFORCEMENT.** The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(h) **RECONSIDERATION.** Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: November 1, 2021

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Resident Engineer on Division of Aeronautics Form "AER 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

To account for the preparatory work and the operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting according to Section 80-01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form AER 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form AER 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%

The mobilization payment to the subcontractor is an advance payment of the reported amount of the subcontract and is not a payment in addition to the amount of the subcontract; therefore, the amount of the advance payment will be deducted from future progress payments.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS

Effective: November 2, 2017

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 90-07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause. If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

SPECIAL PROVISION FOR SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Subcontractor and Disadvantaged Business Enterprise Payment Reporting

The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment.

SPECIAL PROVISION FOR ADDITIONAL STATE REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

Effective: February 1, 1969

Revised: January 1, 2017

EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

- (1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- (2) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (in accordance with the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

(3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.

(4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

(5) That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

(6) That it will permit access to all relevant books, records, accounts, and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

(7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

SPECIAL PROVISION FOR SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021

Revised: November 1, 2022

STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, and the worker's starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable.

The Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected.

SPECIAL PROVISION FOR NPDES CERTIFICATION

In accordance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder, this certification is required for all construction contracts that will result in the disturbance of one or more acres total land area.

The bidder certifies under penalty of law that he/she understands the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR100000) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

The Airport Owner or its Agent will:

- 1) prepare, sign and submit the Notice of Intent (NOI)
- 2) conduct site inspections and complete and file the inspection reports
- 3) submit Incidence of Non-Compliance (ION) forms

- 4) submit Notice of Termination (NOT) form

Prior to the issuance of the Notice-to-Proceed, for each erosion control measure identified in the Storm Water Pollution Prevention Plan, the contractor or subcontractor responsible for the control measure(s) must sign the above certification (forms to be provided by the Department).

SPECIAL PROVISION FOR COMPLETION TIME VIA CALENDAR DAYS

It being understood and agreed that the completion within the time limit is an essential part of the contract, the bidder agrees to complete the work within Base Bid: 65 calendar days; Additive Alternate #1: 8 additional; Additive Alternate #2: 0 additional calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)

Effective: June 2, 2021

Revised: September 2, 2021

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
SECTION 80 PROSECUTION AND PROGRESS

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports (Adopted March 22, 2023) and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

80-09 Failure to complete on time.

ADD:

Schedule of Deductions for Each Day of Overrun in Contract Time			
Original Contract Amount		Daily Charges	
From More Than	To and Including	Calendar Day	Work Day
\$ 0	\$ 100,000	\$ 475	\$ 675
100,000	500,000	750	1,050
500,000	1,000,000	1,025	1,425
1,000,000	3,000,000	1,275	1,725
3,000,000	6,000,000	1,425	2,000
6,000,000	12,000,000	2,300	3,450
12,000,000	And over	6,775	9,525

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
SECTION 90 MEASUREMENT AND PAYMENT

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports (Adopted March 22, 2023) and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

90-07 Partial payments.

DELETE: The entire section.

ADD: Partial payments will be made to the Contractor at least once each month as the work progresses. The payments will be based upon estimates, prepared by the Resident 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 Section 90-08 PAYMENT FOR MATERIALS ON HAND. From the amount of partial payment so determined on Federal-Aid projects, there shall be deducted an amount up to ten percent of the cost of the completed work which shall be retained until all conditions necessary for financial closeout of the project are satisfied. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1,000.00 will be approved for payment other than the final payment. A final voucher for under \$5.00 shall not be paid except through electronic funds transfer. (15 ILCS 405/9(b-1))

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, 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 Department 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 Section 90-09 ACCEPTANCE AND FINAL PAYMENT.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610) progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

In accordance with 49 USC § 47111, the Department will not make payments totaling more than 90 percent of the contract until all conditions necessary for financial closeout of the project are satisfied.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.

90-09 Trust agreement option.

DELETE: The entire section.

APPENDIX A – FEDERAL AVIATION ADMINISTRATION (FAA) REQUIRED CONTRACT PROVISIONS

A1 ACCESS TO RECORDS AND REPORTS

A1.1 CONTRACT CLAUSE

ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, 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.

A2 AFFIRMATIVE ACTION REQUIREMENTS

A2.1 SOLICITATION CLAUSE

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

The following goal for female utilization in each construction craft and trade shall apply to all Contractors holding Federal and federally-assisted construction contracts and subcontracts in excess of \$10,000. The goal is applicable to the Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or nonfederally related construction contract or subcontract.

AREA COVERED (STATEWIDE)

Goals for Women apply nationwide.

GOAL

Goal (percent)

Female Utilization..... 6.9

Until further notice, the following goals for minority utilization in each construction craft and trade shall apply to all Contractors holding Federal and federally-assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to the Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally-assisted or nonfederally related construction contract or subcontract.

<u>Economic Area (percent)</u>	Goal
056 Paducah, KY: Non-SMSA Counties - IL - Hardin, Massac, Pope KY - Ballard, Caldwell, Calloway, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, McCracken, Marshall	5.2
080 Evansville, IN: Non-SMSA Counties - IL - Edwards, Gallatin, Hamilton, Lawrence, Saline, Wabash, White IN - Dubois, Knox, Perry, Pike, Spencer KY - Hancock, Hopkins, McLean, Mublenberg, Ohio, Union, Webster	3.5
081 Terre Haute, IN: Non-SMSA Counties - IL - Clark, Crawford IN - Parke	2.5
083 Chicago, IL: SMSA Counties: 1600 Chicago, IL - IL - Cook, DuPage, Kane, Lake, McHenry, Will	19.6

3740 Kankakee, IL - IL - Kankakee	9.1
Non-SMSA Counties IL - Bureau, DeKalb, Grundy, Iroquois, Kendall, LaSalle, Livingston, Putnam IN - Jasper, Laporte, Newton, Pulaski, Starke	18.4
084 Champaign - Urbana, IL: SMSA Counties: 1400 Champaign - Urbana - Rantoul, IL - IL - Champaign	7.8
Non-SMSA Counties - IL - Coles, Cumberland, Douglas, Edgar, Ford, Piatt, Vermilion	4.8
085 Springfield - Decatur, IL: SMSA Counties: 2040 Decatur, IL - IL - Macon	7.6
7880 Springfield, IL - IL - Menard, Sangamon	4.5
Non-SMSA Counties IL - Cass, Christian, Dewitt, Logan, Morgan, Moultrie, Scott, Shelby	4.0
086 Quincy, IL: Non-SMSA Counties	3.1
IL - Adams, Brown, Pike MO - Lewis, Marion, Pike, Ralls	
087 Peoria, IL: SMSA Counties: 1040 Bloomington - Normal, IL - IL - McLean	2.5
6120 Peoria, IL - IL - Peoria, Tazewell, Woodford	4.4
Non-SMSA Counties - IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren	3.3
088 Rockford, IL: SMSA Counties: 6880 Rockford, IL - IL - Boone, Winnebago	6.3
Non-SMSA Counties - IL - Lee, Ogle, Stephenson	4.6
098 Dubuque, IA: Non-SMSA Counties - IL - JoDaviess IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik WI - Crawford, Grant, Lafayette	0.5
099 Davenport, Rock Island, Moline, IA - IL: SMSA Counties: 1960 Davenport, Rock Island, Moline, IA - IL - IL - Henry, Rock Island IA - Scott	4.6
Non-SMSA Counties - IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine MO - Clark	3.4
107 St. Louis, MO: SMSA Counties: 7040 St. Louis, MO - IL - IL - Clinton, Madison, Monroe, St. Clair MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City	14.7
Non-SMSA Counties - IL - Alexander, Bond, Calhoun, Clay, Effingham, Fayette, Franklin, Greene,	11.4

Jackson, Jasper, Jefferson, Jersey, Johnson, Macoupin, Marion, Montgomery, Perry, Pulaski, Randolph, Richland, Union, Washington, Wayne, Williamson
MO - Bollinger, Butler, Cape Girardeau, Carter, Crawford, Dent, Gasconade, Iron, Lincoln, Madison, Maries, Mississippi, Montgomery, Perry, Phelps, Reynolds, Ripley, St. Francois, St. Genevieve, Scott, Stoddard, Warren, Washington, Wayne

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 also is subject to the goals for both its federally involved and nonfederally involved construction.

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 must 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 of the 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 the 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 Romeoville, Illinois; Will County.

A3 BREACH OF CONTRACT TERMS

A3.1 CONTRACT CLAUSE

This provision is required for all contracts that exceed the simplified acquisition threshold as stated in 2 CFR Part 200, Appendix II (A). This threshold is occasionally adjusted for inflation and is \$250,000.

BREACH OF CONTRACT TERMS

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 the 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.

A4 BUY AMERICAN PREFERENCE

A4.1 SOLICITATION CLAUSES

A4.1.1 Certification of Compliance with FAA Buy American Preference Statement

FAA BUY AMERICAN PREFERENCE

The Contractor certifies that its bid/offer is in compliance with 49 USC § 50101, BABA and other related Made in America Laws¹, U.S. statutes, guidance, and FAA policies, which provide that Federal funds may not be obligated unless all iron, steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration 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.

The bidder or offeror must complete and submit the certification of compliance with FAA's Buy American Preference, BABA and Made in America laws included herein with their bid or offer. The Illinois Department of Transportation, Division of Aeronautics will reject as nonresponsive any bid or offer that does not include a completed certification of compliance with FAA's Buy American Preference and BABA.

The bidder or offeror certifies that all constructions materials, defined to mean an article, material, or supply other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall used in the project are manufactured in the U.S.

¹Per Executive Order 14005 "Made in America Laws" means all statutes, regulations, rules, and Executive Orders relating to federal financial assistance awards or federal procurement, including those that refer to "Buy America" or "Buy American," that require, or provide a preference for, the purchase or acquisition of goods, products, or materials produced in the United States, including iron, steel, and manufactured products offered in the United States.

A4.1.2 Illinois Department of Transportation, Division of Aeronautics Requirements

The bidder shall submit the completed and signed “Certification of Compliance with FAA Buy American Preference – Construction Projects” form with the bid. The required form must be uploaded in the “Miscellaneous Documents” area as a single .pdf file in the “Integrated Contractor Exchange (iCX)” application within the Department’s “EBids System”.

The Department will not accept a “Certification of Compliance with FAA Buy American Preference – Construction Projects” form if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder’s proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

Any and all steel products used in the performance of this contract by the Contractor, subcontractors, producers, and suppliers are required to adhere to the Illinois Steel Products Procurement Act (30 ILCS 565/), which requires that all steel items be of 100 percent domestic origin and manufacture. Any products listed under the Federal Aviation Administration’s (FAA) nationwide approved list of “Equipment Meeting Buy American Requirements” shall be deemed as meeting the requirements of the Illinois Steel Products Procurement Act.

All FAA Buy American Waivers are the responsibility of the Contractor, must be obtained prior to the Notice to Proceed, and must be submitted to the Illinois Department of Transportation, Division of Aeronautics for review and approval before being forwarded to the FAA. Any products used on the project that cannot meet the domestic requirement, and for which a waiver prior to the Notice to Proceed was not obtained, will be rejected for use and subject to removal and replacement with no additional compensation, and the contractor deemed non-responsive.

A4.1.3 Certification of Compliance with FAA Buy American Preference – Construction Projects

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101, BABA and other related Made in America Laws, U.S. statutes, guidance, and FAA policies, by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e., not both) by inserting a checkmark (✓) or the letter “X”.

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA and other related U.S. statutes, guidance, and policies of the FAA by:
- a) Only installing iron, steel and manufactured products produced in the United States;
 - b) Only installing construction materials defined as: an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber or drywall that have been manufactured in the United States.
 - c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - d) 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:

- a) To provide to the Illinois Department of Transportation, Division of Aeronautics and the FAA evidence that documents the source and origin of the iron, steel, and/or manufactured product.
 - b) To faithfully comply with providing U.S. domestic products.
 - c) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
 - d) Certify that all construction materials used in the project are manufactured in the U.S.
- The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for 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:
- a) To submit to the Illinois Department of Transportation, Division of Aeronautics and the FAA within 15 calendar days of being selected as the responsive bidder, a formal waiver request and required documentation that supports the type of waiver being requested.
 - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
 - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
 - d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
 - e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 2 Waiver (Nonavailability) - The iron, steel, manufactured goods or construction materials or manufactured goods are not available in sufficient quantity or quality in the United States. The required documentation for the Nonavailability waiver is

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire

- b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;
- c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility/project.” The required documentation for a Type 3 waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire including;
- b) Listing of all manufactured products that are not comprised of 100 percent U.S. 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).
- c) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- d) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver (Unreasonable Costs) - Applying this provision for iron, steel, manufactured goods or construction materials would increase the cost of the overall project by more than 25 percent. The required documentation for this waiver is:

- a) A completed Content Percentage Worksheet and Final Assembly Questionnaire from
- b) At minimum two comparable equal bids and/or offers;
- c) Receipt or record that demonstrates that supplier scouting called for in Executive Order 14005, indicates that no domestic source exists for the project and/or component;
- d) Completed waiver applications for each comparable bid and/or offer.

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 render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

A5 CIVIL RIGHTS - GENERAL

A5.1 CONTRACT CLAUSES

A5.1.1 General Clause that is used for Contracts, Lease Agreements, and Transfer Agreements

GENERAL CIVIL RIGHTS PROVISIONS

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A5.1.2 Specific Clause that is used for General Contract Agreements

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.1 CONTRACT CLAUSE

A6.1.1 Title VI Solicitation Notice

Title VI Solicitation Notice:

The Illinois Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

A6.1.2 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Title VI List of Pertinent Nondiscrimination Acts and Authorities

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 USC § 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 USC § 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 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (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 (42 USC § 12101, *et seq.*) (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) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 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 (ensures nondiscrimination 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. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, *et seq.*)

A6.1.3 Nondiscrimination Requirements/Title VI Clauses for Compliance

Compliance with Nondiscrimination Requirements:

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:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts 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. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability 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 Nondiscrimination Acts and Authorities, 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 Nondiscrimination Acts and Authorities 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 Nondiscrimination Acts and Authorities 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.

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.

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.1 CONTRACT CLAUSE

This provision is required for all contracts and lower tier contracts that exceed \$150,000.

CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC §§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 USC §§ 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 exceed \$150,000.

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.1 CONTRACT CLAUSE

This provision applies to all contracts and lower tier contracts that exceed \$100,000, and employ laborers, mechanics, watchmen, and guards.

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

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) of this clause, 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) of this clause, in the sum of \$29 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) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner 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 moneys 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) of this clause.

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 clause.

A9 COPELAND "ANTI-KICKBACK" ACT

A9.1 CONTRACT CLAUSE

COPELAND "ANTI-KICKBACK" ACT

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 USC 874 and 40 USC 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.

A10 DAVIS-BACON REQUIREMENTS

A10.1 CONTRACT CLAUSE

DAVIS-BACON REQUIREMENTS

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 § 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;

(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, U.S. Department of Labor, Washington, DC 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 the 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 guarantee 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 that 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 Federal Aviation Administration 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 Federal Aviation Administration. 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 <https://www.dol.gov/agencies/whd/government-contracts/construction/payroll-certification> 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 Federal Aviation Administration 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 Federal Aviation Administration, 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 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), 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, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, 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 Office of Apprenticeship Training, Employer and Labor Services 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 Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, 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 that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that 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 §§ 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 § 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 USC § 1001.

A11 DEBARMENT AND SUSPENSION

A11.1 CERTIFICATION CLAUSES

A11.1.1 Bidder or Offeror Certification

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

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

A11.1.2 Lower Tier Contract Certification

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must confirm 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>.

Collecting a certification statement similar to the Certification of Offeror /Bidder Regarding Debarment, above.

Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration 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.

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.1 REQUIRED PROVISIONS

A12.1.1 Solicitation Language (Solicitations that include a Contract Goal)

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 responsiveness, the Bidder or Offeror must submit the following information with its 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) Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment; and
- (6) 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 documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

A12.1.2 Solicitation Language (Race/Gender Neutral Means)

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the Illinois Department of Transportation 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.

A12.1.3 Prime Contracts (Projects covered by DBE Program)

DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (49 CFR § 26.13) - The Contractor, subrecipient 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, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

A13 DISTRACTED DRIVING

A13.1 CONTRACT CLAUSE

TEXTING WHEN DRIVING

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 Federal Aviation Administration 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 subgrant.

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 \$10,000 that involve driving a motor vehicle in performance of work activities associated with the project.

A14 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

A14.1 CONTRACT CLAUSE

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [Public Law 115-232 § 889(f)(1)].

A15 EQUAL EMPLOYMENT OPPORTUNITY (EEO)

A15.1 MANDATORY CONTRACT CLAUSE

A15.1.1 EEO Contract Clause

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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) 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.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any such 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 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.

(8) The Contractor will include the provisions of paragraphs (1) through (8) 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 may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

A 15.1.2 EEO Specification

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 part 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 must 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 7a through 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 areas 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 nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must 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 therefor, 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 woman 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 as 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 work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
- l. 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 nonsegregated 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 (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a

member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 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, the Contractor may be in violation of the Executive Order if a 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, sexual orientation, gender identity, 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 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 part 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 numbers, 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).

A16 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

A16.1 SOLICITATION CLAUSE

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, et seq, 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.

A17 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

A17.1 CERTIFICATION CLAUSE

This provision is required for all contracts that equal or exceed \$100,000.

CERTIFICATION REGARDING LOBBYING

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, subgrants, 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.

A18 PROHIBITION of SEGREGATED FACILITIES

A18.1 CONTRACT CLAUSE

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 Employment 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, sexual orientation, gender identity, 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 Employment Opportunity clause of this contract.

A19 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A19.1 CONTRACT CLAUSE

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. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer 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 (29 CFR Part 1910). The employer 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.

A20 PROCUREMENT OF RECOVERED MATERIALS

A20.1 CONTRACT CLAUSE

PROCUREMENT OF RECOVERED MATERIALS

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 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 www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

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.

A21 RIGHT TO INVENTIONS

A21.1 CONTRACT CLAUSE

RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR § 401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

A22 SEISMIC SAFETY

A22.1 CONTRACT CLAUSE

A22.1.1 Construction Contracts

SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A23 TAX DELINQUENCY AND FELONY CONVICTIONS

A23.1 CERTIFICATION CLAUSE

CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

Certifications

- 1) The applicant represents that it is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the Sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

Felony conviction: Felony conviction means a conviction within the preceding twenty four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. Code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 USC § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

A24 TERMINATION OF CONTRACT

A24.1 CONTRACT CLAUSE

A24.1.1 Termination for Convenience

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.
2. 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:

1. Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;

2. 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;
3. Reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
4. 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.

A24.1.2 Termination for Default

TERMINATION FOR CAUSE (CONSTRUCTION)

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

A25 TRADE RESTRICTION CERTIFICATION

A25.1 SOLICITATION CLAUSE

TRADE RESTRICTION CERTIFICATION

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

- 1) 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 (USTR);
- 2) 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 USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

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 USC § 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 USTR; or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list; or
- 3) who incorporates in the public works project any product of a foreign country on such USTR 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 USTR, 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 (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

A26 VETERAN'S PREFERENCE

A26.1 CONTRACT CLAUSE

VETERAN'S PREFERENCE

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 USC § 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.

A27 DOMESTIC PREFERENCES FOR PROCUREMENTS

A27.1 CERTIFICATION CLAUSE

CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

SECTION III

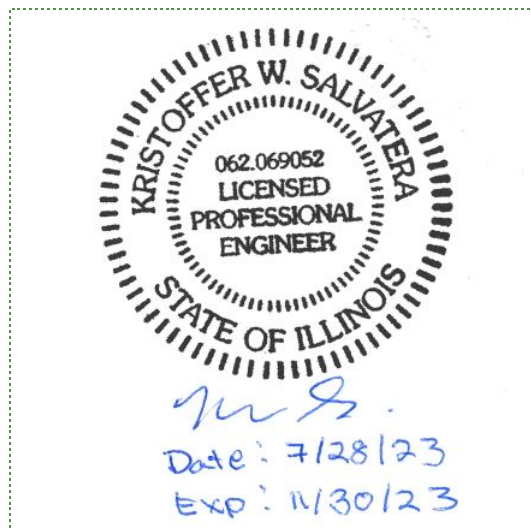
SPECIAL PROVISIONS

LEWIS UNIVERSITY AIRPORT (LOT)
ROMEORVILLE, WILL COUNTY, ILLINOIS

INSTALL AIRPORT SECURITY FENCING

ILLINOIS PROJECT NO. LOT-4536
SBG PROJECT NO. 3-17-SBGP-TBD
BCM CONTRACT NO. LE056

100% SUBMITTAL
JULY 28, 2023



Primera Engineers, Ltd.
550 West Jackson Boulevard, Suite 600
Chicago, Illinois 60661
312.606.0910

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SPECIAL NOTICE

Please note this important reminder regarding the following section of the Proposal document: APPENDIX A – FEDERAL AVIATION ADMINISTRATION (FAA) REQUIRED CONTRACT PROVISIONS, A4 BUY AMERICAN PREFERENCE, A4.1 SOLICITATION CLAUSES, A4.1.2 Illinois Department of Transportation, Division of Aeronautics Requirements.

The bidder shall submit the completed and signed “Certification of Compliance with FAA Buy American Preference – Construction Projects” form with the bid. The required form must be uploaded in the “Miscellaneous Documents” area as a single .pdf file in the “Integrated Contractor Exchange (iCX)” application within the Department’s “EBids System”.

The Department will not accept a “Certification of Compliance with FAA Buy American Preference – Construction Projects” form if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder’s proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

The “Certification of Compliance with FAA Buy American Preference – Construction Projects” form has been included with this Addendum for your convenience.

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INDEX OF SPECIAL PROVISIONS

Contents

GENERAL	1
ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF AERONAUTICS	2
MANUALS, POLICY MEMORANDUMS, AND TEMPLATES	2
PART 1 GENERAL CONTRACT PROVISIONS	3
SECTION 10 DEFINITION OF TERMS	3
SECTION 20 PROPOSAL OF TERMS.....	4
SECTION 30 ADVERTISEMENT, BIDDING, AWARD, AND CONTRACT EXECUTION	5
SECTION 40 SCOPE OF WORK.....	6
SECTION 50 CONTROL OF WORK.....	10
SECTION 60 CONTROL OF MATERIALS	11
SECTION 70 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC.....	12
SECTION 80 PROSECUTION AND PROGRESS	13
SECTION 90 MEASUREMENT AND PAYMENT.....	14
PART 2 GENERAL CONSTRUCTION ITEMS.....	15
ITEM 102 TEMPORARY AIR AND WATER POLLUTION, EROSION CONTROL, AND SILTATION CONTROL	15
ITEM 105 MOBILIZATION.....	18
ITEM 150 RESIDENT ENGINEER FIELD OFFICE	19
ITEM 150530 TRAFFIC MAINTENANCE	21
ITEM 156540 RIPRAP (RR4)	23
PART 3 SITEWORK	24
ITEM 152 EXCAVATION, SUBGRADE, AND EMBANKMENT.....	24
PART 4 BASE COURSES.....	28
ITEM 208606 AGGREGATE BASE COURSE.....	28
PART 6 FLEXIBLE PAVEMENTS.....	32
ITEM 401665 BITUMINOUS PAVEMENT SAWING.....	32
PART 7 RIGID PAVEMENTS.....	33
ITEM 501606 PORTLAND CEMENT CONCRETE SIDEWALK.....	33
PART 8 SURFACE TREATMENTS.....	35
PART 9 MISCELLANEOUS.....	36
ITEM 610 STRUCTURAL PORTLAND CEMENT CONCRETE.....	36
ITEM 801013 PROTECTION BOLLARD	37
ITEM 801035 CONCRETE WASH OUT.....	38
ITEM 801036 ELECTRIC GATE OPERATOR - COMPLETE	39

ITEM 80103X COATING UPGRADE TO VINYL	59
PART 10 FENCING	60
ITEM 162 CHAIN-LINK FENCE	60
PART 11 DRAINAGE	64
ITEM 701 PIPE FOR STORM DRAINS AND CULVERTS	64
ITEM 705 PIPE UNDERDRAINS FOR AIRPORTS	65
ITEM 751 MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES	68
ITEM 752 CONCRETE CULVERTS, HEADWALLS, AND MISCELLANEOUS DRAINAGE STRUCTURES	70
PART 12 TURFING	72
ITEM 901 SEEDING	72
ITEM 905 TOPSOILING	76
ITEM 908 MULCHING	78
PART 13 LIGHTING INSTALLATION	80
ITEM 108 INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS	80
ITEM 110 INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT	87

GENERAL

These Special Provisions, together with applicable Standard Specifications, Manuals, Policies, Memorandums, Worksheets, Rules and Regulations, Contract Requirements for Airport Improvement Projects, Payroll Requirements and Minimum Wage Rates, which are hereto attached or which by reference are herein incorporated, cover the requirements of the State of Illinois, Department of Transportation (IDOT), Division of Aeronautics (Division) for the following improvement project at Lewis University Airport, Romeoville, Will County, Illinois:

- Install Airport Security Fencing

This Project is to install chain-link fencing and install vehicle and pedestrian gates at LEWIS UNIVERSITY AIRPORT including, among other work, the following items:

Base Bid

- Placement of temporary soil erosion control measures.
- Provide of traffic maintenance.
- Provide grading of earth to accommodate new fence line.
- Install drainage improvements, including reinforced concrete pipe, flared end sections, manholes, and infiltration basin.
- Install chain-link fence fencing.
- Install vehicular sliding gates, vehicular swing gates, gate operators, and manual pedestrian swing gates.
- Construct electrical power, and control cabling and equipment.
- Construct PC concrete sidewalk and concrete protection bollards.
- Topsoil, seed and install erosion control blanket of disturbed areas.
- Electric Gate Operator Installation (South Gate).

Additive Alternate No. 1

- Electric Gate Operator Installation (North Gate).

Additive Alternate No. 2

- Fence and Gate Coating Vinyl Upgrade – All Fence and Gates.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The Illinois Standard Specifications for Construction of Airports, State of Illinois Department of Transportation, Division of Aeronautics, adopted March 22, 2023 as revised (Standard Specifications), shall govern the Project except as otherwise revised or noted in these Special Provisions July 28, 2023. All references to IDOT Specifications refer to Standard Specifications for Road and Bridge Construction (SSRBC), Illinois Department of Transportation, adopted January 1, 2022, as revised. Resolution of conflicts with any part or parts of said Specifications shall be in accordance with Section 50-03 of the Standard Specifications.

ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF AERONAUTICS

MANUALS, POLICY MEMORANDUMS, AND TEMPLATES

The Illinois Department of Transportation, Division of Aeronautics, Manuals, Policy Memorandums, and Templates that are incorporated into this Project by reference are listed below. Also provided is a notation as to whether all or a portion of each applicable Manual, Policy Memorandum, and Template has been modified by these Special Provisions.

It is the Bidder's and Contractor's responsibility to review and incorporate into their bid and work, the requirements contained in these Manuals, Policy Memorandums, and Templates. Copies of each manual, policy memorandum and template can be found on the Illinois Department of Transportation website at: <http://www.idot.illinois.gov/home/resources/Manuals/Manuals-and-Guides>.

Manuals

<u>Title</u>	<u>Modified by Special Provisions</u>
Airport Construction Documentation Manual	No
Manual for Documentation of Airport Materials	No

Policy Memorandums

<u>No.</u>	<u>Title</u>	<u>Modified by Special Provisions</u>
96-1A	Item 610, Structural Portland Cement Concrete: Job Mix Formula Approval and Production Testing (2022)	No
07-21	Acceptance Procedure for Finely Divided Minerals Used in Portland Cement Concrete and Other Applications	No
2001-1	Requirements for Cold Weather Concreting (2020)	No
22-1	Cement Types	No

PART 1

GENERAL CONTRACT PROVISIONS

SECTION 10

DEFINITION OF TERMS

The Work shall be provided in accordance with Section 10 of the Standard Specifications.

SECTION 20

PROPOSAL OF TERMS

The Work shall be provided in accordance with Section 20 of the Standard Specifications.

SECTION 30

ADVERTISEMENT, BIDDING, AWARD, AND CONTRACT EXECUTION

The Work shall be provided in accordance with Section 30 of the Standard Specifications.

SECTION 40

SCOPE OF WORK

Revise Section 40 of the Standard Specifications as follows:

40-05 MAINTENANCE OF TRAFFIC. Add the following Paragraphs:

Prior to the issuance of a construction Notice-to-Proceed (NTP) by the Illinois Division of Aeronautics, the Contractor shall prepare and submit a Safety Plan Compliance Document (SPCD) in accordance with FAA Advisory Circular 150/5370-2 (current issue), paragraph 204b, or equivalent section in subsequent/current issue. The SPCD shall be reviewed and approved by the Airport Manager, who will then submit the document to the Illinois Division of Aeronautics for their approval prior to Notice to Proceed.

Construction of the project shall be performed in accordance with the guidelines specified in FAA Advisory Circular 150/5320-2 (current issue) and the Airport Rules and Regulations (as published on Lewis University Airport's website at <http://www.flylot.com> under JRPD Ordinances and Minutes (except fees for vehicle driving permits shall not be paid)). Any Contractor activities required for Project safety shall be incidental to the Contract.

"To minimize disruptions to Airport operations, construction operations must be controlled throughout the Project's duration, and work must be completed expeditiously. A Construction Safety and Phasing Plan detailing the sequencing of the Contractor's Work throughout the Project is included in the Plans. The Contractor shall provide his written acceptance of the Project Construction Safety and Phasing Plan at the Pre-construction Conference. Any and all changes to the Construction Safety and Phasing Plan that may be requested by the Contractor must be approved by the Project Engineer and the Airport Owner. It shall be the Contractor's responsibility to provide sufficient advance notice of any proposed phasing change to permit consideration and approval by the Project Engineer and the Airport Owner. The Contractor shall not be entitled to any extra compensation nor extension to the Contract time because of a phasing change request nor for any time necessary in receiving the required approvals. The Contractor shall expedite work at those stages where active runways, taxiways, hangar access, aprons, roadways, or parking lots must be closed, to minimize the length of time that Airport operations are restricted.

The Contractor shall expedite work at those stages where active runways, taxiways, hangar access, aprons, roadways, or parking lots must be closed, to minimize the length of time that Airport operations are restricted.

At the Pre-construction Conference, the Contractor shall provide a "Contractor Coordination Plan" that coordinates his work with the work of his subcontractors and the work of other contractors of other on-going Airport projects.

"The Contractor shall erect and maintain, at no cost to the Contract, directional and informational signs for the Contractor's access routes at the existing construction entrances and for the Contractor's route within the Airport operations area, as noted on the plans or as directed by the Resident Engineer. Where contractor equipment is operating within active aircraft operations areas, radio-equipped flaggers shall be furnished by the Contractor. Continuous pavement sweeping shall be furnished to remove debris from active aircraft movement paths. The cost of traffic control/flaggers and pavement sweeping shall be incidental to the Contract.

"The Contractor shall not have access to any part of the active airfield for any equipment or personnel without the approval of the Resident Engineer and the Airport Owner. Activities within the Airport Operations Area (AOA) are subject to federal access control. Because of the high requirements for airport security and safety, the following requirements must be adhered to:

- All employees of the Contractor shall park their personal vehicles in the designated equipment parking and storage area. Each person or vehicle entering the Contractor area shall do so in accordance with the policies and procedures of the Airport Owner. The Contractor will transport the workers from the parking areas to the work area. Only Contractor vehicles will be allowed outside of the proposed equipment storage and parking areas.
- Should any Contractor personnel be identified as noncompliant with any vehicle driving safety requirements in this Project Safety Plan or in the Airport Vehicle Operations Regulations, such drivers shall be penalized by rescission of their on-airport driving privileges, and their access to the Construction Limit Area when operating vehicles shall be revoked.
- The Contractor will be required to be in contact with Airport Operations. This will keep the Contractor in contact with Airport personnel and enable the Airport personnel to immediately contact the Contractor in case of an aeronautical emergency that would require action by the Contractor and/or his personnel.

Work along George J. Michas Drive, Don Walden Road, Airport Road, parking lots, and aircraft aprons shall require the use of appropriate vehicular traffic control. Traffic control shall be furnished in accordance with IDOT Specifications (Highway Standards). The Contractor shall furnish, place, maintain, relocate, and remove traffic control devices, and flaggers and other safety personnel, as required by these Standards as shown and detailed in the Construction Plans, or as directed by the Resident Engineer. The cost of this work shall be included in Item AR150530, Traffic Maintenance.

"The Contractor shall remain within the Construction Limits Line shown in the Plans. When construction operations must be conducted within these separations, the pavement must be closed to aircraft activity by the Contractor by providing temporary barricades as shown in the Plans, and in the case of helistop pavements, closed runway markers.

"The Contractor shall keep all of his equipment and personnel at least 15 feet from the edge of any active roadway or auto parking pavement. When his activities require working within 15 feet of the road/pavement edge, the Contractor shall provide for traffic control in accordance with IDOT Specifications (highway standards).

"Open trenches, excavations and stockpiled material at the construction site shall be delineated with the use of barricades during hours of restricted visibility and/or darkness.

No open trenches shall be allowed within the project site and along any public road Right of Way. No vertical drop of greater than 3-inches in height from pavement edge to earth grade or earth grade to earth grade. The Contractor will have steel plates on-site to allow for the rapid covering of trenches or earth drops in the event of unexpected work stoppages for weather or airport emergencies. For larger excavated areas such as the Helistop pavements, proper barricades shall be placed to avoid any vehicles from entering the site.

"When not in use and during non-working hours, Contractor's equipment shall be parked within the Contractor's equipment storage and parking areas. The equipment storage and parking areas are to be located as shown on the Construction Safety and Phasing Plan. The Contractor will be responsible for maintaining the construction entrances and Contractor areas in good condition. The cost of maintaining the construction entrance and Contractor areas is to be incidental to the contract. The Contractor shall protect all existing pavement edges from damage from construction equipment and haul vehicles.

"Contractor's access to the project when on Airport property is shown in the Plans. Contractor's access to the Airport itself is to be provided by public rights-of-way. The Contractor is to secure all necessary permits for the use of any public rights-of-way and is to maintain traffic on these public roads at all times, with the costs of permitting, cleaning, and repairing of pavement damaged by contractor's activities incidental to the Contract. Use of and repairs to any public facilities are to be completed to the satisfaction of the facility's owner.

"The Contractor is to provide temporary construction roads within the Construction Limit Lines as may be required by his activities. Heavy vehicles shall not cross existing pavement surfaces except as approved by the Airport Owner and the Resident Engineer. Any damage to pavements that may occur by the Contractor's activities shall be repaired at the Contractor's expense and to the satisfaction of the Airport Owner and the Resident Engineer. For haul routes made by Contractor through grassed areas, Contractor shall grade, level, topsoil, seed, and mulch at the end of the Project, cost incidental to the Contract.

"The Contractor is to provide an equipment storage and parking area at the location(s) shown in the Plans. It is the Contractor's responsibility to maintain the storage area(s) during construction and to restore the areas at project completion to conditions suitable to the Airport Owner and the Resident Engineer. At the Airport Owner's discretion, the temporary facilities may remain, but they must be left in conditions suitable to the Airport Owner. The cost of providing, maintaining, and restoring the temporary facilities is incidental to the Contract.

"At no time shall the contractor operate or park equipment so as to obstruct active Part 77 Airport Imaginary Surfaces. Contractor's equipment shall extend no higher than 25 feet, except at crane locations shown in the Construction Plans where 50-foot-high equipment may be used. Cranes shall not be used during instrument weather conditions or at night. Cranes shall be lowered when not in use.

"The Contractor must notify the Resident Engineer and the Airport Owner three (3) days in advance of any required partial or complete closing of any taxiway or apron, or airfield lighting circuit. The date, time and scheduled duration of the closing must be approved by the Resident Engineer and the Airport Owner. The Contractor shall notify the Resident Engineer and Airport Owner three (3) days in advance of the Contractor's closing of other active roadways, roadway lighting circuits, or other Airport facilities.

"All notes and details shown on the Construction Safety and Phasing Plan are applicable to this Project.

"All work shall be completed in accordance with the approved Project Safety Plan, issued by the Illinois Division of Aeronautics. Failure to use these prescribed procedures or adhere to the safety requirements will result in the suspension of work."

SECTION 50

CONTROL OF WORK

Revise Section 50 of the Standard Specifications as follows:

50-06 CONSTRUCTION LAYOUT STAKES. Add the following to RESPONSIBILITY OF THE CONTRACTOR

"These grades shall be furnished by the Contractor to the Project Engineer and shall include: the final grade established under Item 152; the final lift of aggregate base course furnished under Item 208; and the final grade elevations for PCC Sidewalk, Item AR 501606, final rim and invert elevations for new drainage structures made under Items 751 and 752, and which are to be furnished prior to final grading, and: final grade and invert elevations for 801 infiltration basin.

Surveying shall also be furnished by the Contractor after any constructed surface for which deviations from Plan grade elevations and/or slopes that are greater than those allowed in the Standard Specifications, or these Special Provisions, are identified by the Resident Engineer."

50-10 LOAD RESTRICTIONS. Add the following:

By submitting his bid, the Contractor acknowledges that the existing Airport pavements are of the "light-duty" type, requiring his consideration of construction vehicle weights. Any damage to existing Airport pavements shall be repaired by the Contractor at his own expense and to the satisfaction of the Airport Owner and the Resident Engineer.

"The Contractor shall acquaint himself with the load restrictions of all local streets, roadways and highways intended for use as access/haul roads.

The Contractor shall erect and maintain directional and informational signs for the Contractor's access routes at the existing construction entrance and for the Contractor's route within the Airport and Airport Operations Area, as noted in the Plans or as directed by the Resident Engineer, whose cost shall be paid under Item AR150520, Mobilization."

SECTION 60

CONTROL OF MATERIALS

Revise Section 60 of the Standard Specifications as follows:

60-05 RESIDENT ENGINEER'S FIELD OFFICE. Add the following:

"The Contractor will be required to furnish and maintain a Resident Engineer's Field Office throughout the Project, in accordance with Item 150510, Engineer's Field Office."

SECTION 70

LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

Revise Section 70 of the Standard Specifications as follows:

70-09 CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). Add the following:

"The Contractor shall also meet the requirements of the Standard Specifications, Paragraph 40-5, and Special Provisions, Item 150530, Traffic Maintenance."

SECTION 80

PROSECUTION AND PROGRESS

Revise Section 80 of the Standard Specifications as follows:

80-04 LIMITATIONS OF OPERATIONS. Add the following:

“The Contractor shall also meet the requirements of the Standard Specifications, Paragraph 40-5, and Special Provisions, Item 150530, Traffic Maintenance.”

SECTION 90

MEASUREMENT AND PAYMENT

The Work shall be provided in accordance with Section 90 of the Standard Specifications.

PART 2

GENERAL CONSTRUCTION ITEMS

ITEM 102

TEMPORARY AIR AND WATER POLLUTION, EROSION CONTROL, AND SILTATION CONTROL

MATERIALS

102-2.1 GRASS. Replace this Paragraph with the following:

"Temporary Grass or Temporary Seed shall be used if temporary erosion control shall be needed if the project is suspended for long duration not liable by the Contractor . Temporary seed shall be annual ryegrass, applied at a rate of 100 pounds per acre."

102-2.5 SILT FENCE. Add the following:

"This fence shall be of either a pre-fabricated type or shall be constructed in the field, and regardless of the fabrication method, shall be of materials meeting the dimensions and material requirements shown in the Plans. NOTE: The silt fence shall include woven wire fabric backing, as shown in the Plans."

102-2.9 INLET AND PIPE PROTECTION. Add the following:

"Erosion control protection shall be provided for at drainage manholes/inlets at the locations shown in the Plans and as detailed in the Plans. The complete inlet fabric and fabric insert assembly shall be furnished, installed, and maintained as shown in the Plans, and shall be IPP Flexstorm by Inlet & Pipe Protection, FLEXSTORM CATCH-IT by Advanced Drainage Systems, FloGard Temporary Inlet Filter by Oldcastle, or approved equivalent. The Contractor shall determine the required assembly size to be used at each location based upon manufacturer recommendations. The manufacturer shall furnish a certification with each assembly stating the number of assemblies furnished and that the material complies with the requirements of this Special Provision and all Contract requirements for materials, including the Buy American Preferences Act (49 U.S.C. § 50101). The used inlet protection assembly shall be disposed of off-site at a lawful disposal site when instructed by the Resident Engineer."

CONSTRUCTION REQUIREMENTS

102-3.5 RIPRAP. Revise the first paragraph to:

Riprap shall be constructed to the layout and depth as shown in the plans. Riprap shall be installed as a permanent condition and shall remain after the project completion.

102-3.7 TEMPORARY EROSION CONTROL

- B. Inlet and pipe protection. Add the following:

“The Contractor shall empty the inlet fabric basket when the bag is half-full, or earlier when directed by the Resident Engineer.”

- C. Temporary erosion control seeding. Revise this Section:

“Prior to seeding, the area to be covered shall be wetted to the satisfaction of the Resident Engineer to encourage germination of the seed. The required moisture content of the soil may be estimated and judged closely by the hand squeeze test. The soil should readily form a tight cast when squeezed in the hand. The cast should break into two pieces without crumbling and without leaving excess water on the hand after casting.”

“After approval for the application is made by the Resident engineer, the annual ryegrass seed shall be spread by hand broadcasting or by mechanical broadcaster to achieve a reasonably uniform coverage of at least 100 pounds per acre. After application, the Contractor shall furnish a watering of the seed bed to encourage germination of the seeds. After planting, the Contractor shall be required to mow the area covered with temporary seeding before the seed heads mature (the seeds could become a strong wildlife attractant if allowed to mature).

“Seed shall be re-applied to bare spots every seven days, regardless of weather conditions or progress of work. Re-seeding and maintenance shall not be measured for payment but shall be incidental to the original quantity of temporary seeding measured and paid. The Resident Engineer may require that critical locations be seeded immediately, and the Contractor shall seed these areas within 48 hours of such a directive.”

METHOD OF MEASUREMENT

- 102.4.1 Revise this section.

“Temporary seeding and mulching shall not be measured for payment but shall be incidental to the contract.”

- 102.4.5 Revise this section.

“Silt fence shall not be measured for payment but shall be incidental to the cost of Inlet Protection, Each.”

- 102.4.7 Revise this section.

“The quantity of temporary ditch shall be measured under the number of units placed as Each.”

- 102.4.10 Revise this section.

“The quantity of filter fabric shall not be measured for payment but shall be incidental to the Contract.

BASIS OF PAYMENT

102-5.1 Add the following:

"Items measured for payment under Section 102.4 shall be full compensation for furnishing all materials for preparation and installation of these materials including excavation, placement, tie-down stakes, staples, maintenance and removal for all labor, equipment, tools, and incidentals necessary to complete these items.

Any erosion control measured required by the Contractor within his staging or storage areas shall not be measured for payment and shall be incidental to the contract.

"Payment will be made under:

Item AR156511 Ditch Check - per each.
Item AR156520 Inlet Protection - per each."

ITEM 105

MOBILIZATION

This Item shall be provided in accordance with Section 150520 of the Standard Specifications.

BASIS OF PAYMENT

Add:

105.3.1 Add

Payment will be made under:

Item AR150520 Mobilization - per lump sum.

ITEM 150

RESIDENT ENGINEER FIELD OFFICE

Revise Item 150 of the Standard Specifications as follows:

CONSTRUCTION METHODS

150-2.1 Add the following to the first Paragraph:

"Should sanitary facilities that are an integral part of the office not be practicable, temporary toilet facilities shall be provided. The temporary facilities must be of a size to permit use by access-challenged persons. A separate facility for hand washing must also be available and maintained. Solid waste disposal consisting of two (2) waste baskets and an outside trash container of sufficient size to accommodate a weekly-provided pick-up shall be furnished."

Replace Item H. in the list of equipment to be furnished by the Contractor with the following:

"H. One dry process copy machine (including maintenance and operating supplies) capable of both collating and reproducing prints up to a Ledger Size (11" by 17"); the copier shall be interconnected with Items G. and M. to permit printing directly from the router and the scanner (a separate printer (with maintenance and operating supplies) may also be permitted)."

Replace Item M. in the list of equipment to be furnished by the Contractor with the following:

"M. Available for the exclusive use of the Resident Engineer, an Internet service connection using cable broadband (Comcast and ATT are on-site), or high-speed wireless (5G U/W minimum speed) technology. Additionally, an 802.11g/n wireless router shall be provided, which will allow connection by the Resident Engineer and up to two (2) engineer staff."

Add the following to the list of equipment to be furnished by the Contractor:

"N. One (1) Windows®-compatible scanner configured to operate with the wireless router furnished in this item (Item N. as added to the list of items to be furnished), and capable of producing images of documents sized up to 11 inch by 17 inch, for the exclusive use by the Resident Engineer."

"P. One (1) 800-watt, 0.8 cubic foot microwave oven."

"Q. Two (2) 28-quart wastebaskets with 8-gallon trash bags."

"R. One (1) first aid cabinet - fully equipped."

Add:

150-2.2 ALTERNATE METHOD FOR FURNISHING ENGINEER'S FIELD OFFICE

In lieu of furnishing a mobile or temporary facility meeting the space requirements for the Engineer's Field Office, the Contractor may at his option make arrangements with the

Airport Owner for the use of an Airport Office and adjacent toilet as the method for furnishing the office and toilet space/area needs prescribed in Paragraph 150-2.1. This space is available for rent, paid directly to the Airport Owner, at the rent of \$850.00 per month (for each whole month or any portion of a month {not pro-rated} occurring within the Contract calendar days awarded). Rent shall be paid for any month or portion of month that the construction work is suspended, and substantial completion has not been made. Even though the Contractor may elect to use the available Airport office space, the Contractor shall still be required to provide all of the furnishings and equipment listed in Items A through R of Paragraph 150-2.1.

BASIS OF PAYMENT

150-3.1 Revise this Section to read:

"The building fully equipped as specified herein will be paid for at the Contract unit price per lump sum for Engineer's Field Office. This price shall include all utility costs and shall reflect the salvage value of the building, equipment, and furniture, which become the property of the Contractor after release by the Resident Engineer. All telephone calls within Area Code 815 and to Area Codes 217, 224, 312, 331, 630, 708, 773, 779, 815 and 847 shall be included in the cost of the Engineer's Field Office. The Resident Engineer shall reimburse the Contractor for all long-distance calls outside of these area codes.

Payment will be made under:

Item AR150510 Engineer's Field Office - per lump sum."

ITEM 150530

TRAFFIC MAINTENANCE

DESCRIPTION

150530-1.1 DESCRIPTION. This work shall consist of the furnishing, installation, maintenance, relocation, and removal of work zone traffic control and protection, and will be in accordance with the Plans, Plan details, and the guidelines specified in FAA Advisory Circular 150/5320-2 (current issue). The item shall also include the provision of sweepers for pavement cleaning, and flaggers and radio equipment for traffic control, as shown in the Construction Safety and Phasing Plan and as specified in the Special Provisions.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices as shown in the Plans.

All traffic control devices used for the maintenance of traffic, as detailed on the Plans, shall be reflectorized prior to installation, and cleaned as specified by the Engineer. When directed by the Engineer, the Contractor shall remove all traffic control devices which were furnished, installed, or maintained by Contractor under this contract. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer. The Contractor shall be responsible for and replace any devices that are supplied by others and damaged by the Contractor's and/or Subcontractor's workforce during relocation or construction operation.

The Contractor will notify the Engineer in writing seven (7) days prior to any activities that will disrupt runway, taxiway and/or apron traffic, or impact vehicle roadways or auto parking facilities.

MATERIALS

150530-2.1 MATERIALS. Materials shall be according to the following:

- FAA Advisory Circular 150/5320-2 (current issue), Operational Safety on Airports During Construction.
- Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, adopted January 1, 2022.
- Illinois Department of Transportation Supplemental Specifications and Recurring Special Provisions, adopted January 1, 2023.

CONSTRUCTION METHODS

150530-3.1 GENERAL. All work zone traffic control and protection shall be according to the Construction Plans, and the Plan details, and FAA Advisory Circular 150/5320-2 (current issue), Operational Safety on Airports During Construction.

The traffic control shown on the Construction Plans represents the minimum required combination of traffic control devices needed for a particular construction operation. Conditions created by the Contractor's operation which are not covered by the Construction

Plans shall be delineated by devices as directed by the Engineer at no additional cost to the Project.

The Construction Safety Plan represents one suggested alternative for the construction sequencing and method of handling traffic. Revisions or modifications of the traffic control shall have the Engineer's written approval and must be approved by the IDA. Any deviation from the proposed plan shall be approved in writing by the Engineer before implementation.

The traffic control should remain in place only as long as needed and shall be removed when directed by the Engineer. All existing pavement markings to be temporarily removed in accordance with FAA Advisory Circular 150/5320-2 (current issue), Operational Safety on Airports During Construction.

At the pre-construction conference meeting, the Contractor shall furnish the name and telephone number of the individual in the Contractor's employ who is to be responsible, 24 hours a day, for the installation and maintenance of traffic control for the Project. When the actual installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer at the time of the preconstruction conference. This shall not relieve the Contractor of furnishing a responsible individual in the Contractor's direct employ. The Engineer will provide the Contractor with the name of its representative who will be responsible for administration of the traffic control.

Removal, relocation, maintenance, and inspection of traffic control devices, as required by the Contractor's activities, shall be included in the item, and not measured separately for payment.

METHOD OF MEASUREMENT

150530-4.1 Traffic control and protection required under Traffic Maintenance will be paid by the unit measurement of lump sum under Traffic Maintenance.

BASIS OF PAYMENT

150530-5.1 This work shall be included in bid unit price under item:.

AR150530 Traffic Maintenance – per lump sum.

ITEM 156540

RIPRAP (RR4)

GENERAL

156540-1.1 This item shall consist of furnishing, transporting, placing, and shaping crushed stone, laid as riprap on separation filter fabric in the areas specified in the Contract plans.

MATERIALS

156540-2.1 Refer to Section 102-2.10 of the Standard Specifications for material requirements for riprap aggregate. Section 102.2.11 of the Standard Specifications shall be used for separation filter fabric.

CONSTRUCTION METHODS

156540-3.1 Refer to Section 102-3.5 for construction methods and placement of riprap.

METHOD OF MEASUREMENT

156540-4.1 The riprap to be paid for shall be the measured area in square yards for each thickness of aggregate base course placed, bonded, and accepted by the Resident Engineer.

Separation fabric shall not be measured separately for payment but shall be included in the Contract price for riprap.

BASIS OF PAYMENT

156540-5.1 Payment will be made at the Contract unit price per square yard, per each thickness indicated on the Plans, for Riprap (RR4) This price shall be full compensation for furnishing all materials and for the preparation, hauling, and placing of these materials, for furnishing certified scales, and for all labor, equipment, tools, and incidentals necessary to complete the item to the satisfaction of the Engineer.

Payment will be made under:

Item AR156540 Rip Rap - per square yard.

PART 3

SITWORK

ITEM 152

EXCAVATION, SUBGRADE, AND EMBANKMENT

Revise Item 152 of the Standard Specifications as follows:

152-1.1 DESCRIPTION. Add the following:

“For the purposes of Excavation and Embankment in this Project, this item is to be constructed for aircraft weighing less than 60,000 pounds (Standard Proctor).

“All earthworks shall be performed in accordance with the applicable NPDES Construction Site permit (if required) issued for this Project, and any applicable municipal or county ordinances or regulations.

“Work under this item shall include the following:

- Clearing and removal of surface irregularities under the new fence line, in accordance with Item 162; paid under Item AR152411 (Lump Sum).
- Topsoil stripping a surface-irregularity locations along the fence line and in the proposed embankment area (for drainage work) and temporary stockpiling of this material for re-distribution along the fence line final grades and the proposed embankment area final grades; paid under Item AR152411 (Lump Sum). Re-distribution of topsoil is to be paid separately under Item 905530.
- Placing of embankment material from adjacent stockpile furnished by others to within the embankment area (for drainage work); paid under Item AR152411 (Lump Sum).
- Clearing and removal of existing vegetation, existing aggregate, and other unsuitable material to be disposed of on-site with approval of the Airport. Other incidental unclassified excavation required under the Work and not furnished under other individual pay items; paid under AR152411 (Lump Sum).

152-1.3 CLASSIFICATION.

Delete the second, third and fourth Paragraphs.

Add the following:

“Earthwork cut as required in the Plans may result in excess suitable and unsuitable/unstable material that cannot be incorporated into the work as fill material when constructing the lines and grades shown in the Plan. All excess material shall be loaded and hauled on-site to the existing stockpile as shown on the Plans, or as directed by the Resident Engineer or Airport Owner. Any excess material hauled off-site, as elected by the Contractor, shall provide for all materials testing and suitability documentation as required by State law for the disposal of construction debris. Loading, haul, and disposal of excess material to the off-site location shall not be paid for separately but shall be included in the Contract unit price for “Unclassified Excavation”.

"Some of the excess material has been identified for use as on-site topsoil. The haul and re-distribution of this material for use shall be included in the Contract unit price for "Unclassified Excavation."

"Unsuitable/unstable material such as broken pavement or excavated aggregate used at existing end sections,, and produced from excavation or other project work, shall not be used in the Work. Unsuitable/unstable material identified by the Resident Engineer for haul and disposal on-site shall be hauled from the Work and disposed of at a stockpile location as approved by the Resident Engineer and Airport Owner. Any excess material elected to be hauled off-site by the Contractor shall provide for all materials testing and suitability documentation as required by State law for the disposal of construction debris. Loading, haul, testing and disposal of the excess material to the off-site disposal site shall not be paid for separately, but shall be included in the Contract unit price for "Unclassified Excavation".

Geotextile Fabric for ground stabilization shall meet the requirements of Section 1080.02 of the SSRBC dated January 1, 2022 and shall consist of woven yarns or nonwoven filaments of polyolefins or polyesters. Woven fabrics shall be Class 2 and nonwoven fabrics shall be Class 1 according to AASHTO M288.

CONSTRUCTION METHODS

152-3.1 GENERAL. Add the following:

"The Contractor will proof-roll the subgrade when required by the Resident Engineer, and as directed by the Resident Engineer. The cost for this proofing will not be paid for separately but shall be included in the cost for "Unclassified Excavation".

Geotextile fabric for ground stabilization shall be installed per the requirements of Article 210.03 of the SSRBC dated January 1, 2022.

152-3.2 EXCAVATION. Add the following:

"Earthwork cut as required in the Plans may result in excess suitable and unsuitable/unstable material that cannot be incorporated into the work as fill material when constructing the lines and grades shown in the Plan. All excess material shall be loaded and hauled to an on-site location as designated in the Plans, or as directed by the Resident Engineer and Airport Owner. If the Contractor elects to haul excess material off-site, the Contractor shall provide for all materials testing and suitability documentation as required by State law for the disposal of construction debris. Loading, haul, and disposal of excess material to the off-site location shall not be paid for separately but shall be included in the Contract unit price for "Unclassified Excavation".

"Unsuitable/unstable material such as broken pavement, aggregates used for existing end sections, or concrete pipe, and produced from excavation or other project work, shall not be used in the Work. Unsuitable/unstable material identified by the Resident Engineer for haul and disposed of on-site shall be hauled from the Work and disposed of at a stockpile location shown on the plans or as directed by the Resident Engineer or Airport Owner. If the Contractor elects to haul excess material off-site, the Contractor shall provide for all materials testing and suitability documentation as required by State law for the disposal of construction debris. Loading, haul, testing and disposal of the excess material to the

off-site disposal site shall not be paid for separately, but shall be included in the Contract unit price for "Unclassified Excavation".

Add the following:

"Topsoil to be used elsewhere under this project shall be stockpiled within the construction limits but located so as not to violate any airfield safety area or object area criteria, or obstruct any FAR Part 77 imaginary surfaces, until separately placed as topsoil under Item 905. Placement and storage of the topsoil shall be paid for separately and shall be included in the Contract unit price for AR905530 Topsoiling.

Add the following:

"The Contractor will not be allowed to haul any materials across existing pavements, except for pavement areas shown for removal in the Plans or as shown in the Site Plan and prescribed in the Phasing Plan and the Construction Safety Plan, or to cross any unpaved areas that have been designated by the Airport Owner as used for agriculture, or which have already been seeded under this contract."

Add the following:

"An existing embankment borrow stockpile will be placed by others prior to the project start. The Contractor may borrow from this stockpile for this work. The Contractor shall perform tests that meet borrow excavation requirements prior to use for the proposed work.

152-3.14 SURFACE TOLERANCES. Add the following:

"For purposes of verifying these tolerances, the Contractor shall furnish survey elevations for the prepared subgrade to the Project Engineer for review, as specified under Section 50-06 (Responsibility of the Contractor)."

Add:

152-3.19 DUST CONTROL WATERING. This Work shall consist exclusively of the control of dust from construction operations and not for use in the compaction of earth embankment.

Dust shall be controlled by the regular, uniform application of sprinkled water to earth surfaces and shall be applied as directed by the Resident Engineer, in a manner meeting his approval. Dust control watering shall not be paid for separately but shall be considered incidental to this item."

METHOD OF MEASUREMENT

152-4.1 Add the following:

"The earthwork quantities summary provided in the Plans is for the Contractor's reference for constructability, only. Unclassified Excavation shall not be measured but shall be paid as a Lump Sum. Unclassified Excavation shall include removal and hauling of suitable/unsuitable material, dust control watering, soil stabilization/geotechnical fabric, topsoil stripping, including that specified to be performed along the new fence line as specified in Item 162, maintaining an on-site stockpile location, and the embankment and grading to the elevations as shown in the plans. No additional measurement or payment shall be made for material testing for hauling material off-site and shall be included in the contract cost."

BASIS OF PAYMENT

152-5.1 Add the following:

"Payment will be made under:

"Item AR152411 Unclassified Excavation – per lump sum.

PART 4

BASE COURSES

ITEM 208606

AGGREGATE BASE COURSE

GENERAL

208606-1.1 This item shall consist of furnishing, placing, shaping, and compacting crushed stone for use as a granular subbase course and drainage layer. The material is to be placed to the lines and grades as shown on the Plans and as directed by the Resident Engineer.

MATERIALS

208606-2.1 COARSE AGGREGATE. The crushed coarse aggregate shall conform with the requirements of Article 1004.01 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2022, and the following specific requirements:

- (a) Description. The coarse aggregate shall be crushed gravel, novaculite, crushed stone or crushed sandstone. Pit run gravel and gravel shall not be used for the granular subbase material.

The granular material, if approved by the Engineer, may be produced by blending aggregates from more than one source, provided the method of blending results in a uniform product. The components of a blend may not be of the same kind of material. The source of material shall not be changed during the progress of the Work without written permission of the Engineer. Where a natural aggregate is deficient in fines, the material added to make up deficiencies shall be a material approved by the Engineer.

- (b) Quality. The coarse aggregate shall be Class D Quality or better.

- (c) Gradation. The coarse aggregate base gradation shall be CA-7.

CONSTRUCTION METHODS

208606-3.1 GENERAL. All work involved in clearing and stripping of quarries and pits, including the handling of unsuitable material, shall be performed by the Contractor at his own expense. The subbase material shall be obtained from approved sources. The material shall be handled in a manner that shall secure a uniform and satisfactory product.

208606-3.2 EQUIPMENT. All equipment necessary for the proper construction of this Work shall be on the Project, in first-class working condition, and approved by the Resident Engineer before construction is permitted to start. Equipment available shall meet the requirements of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2022 Article 311.03, of Section 311, Granular Subbase.

208606-3.3 PREPARING UNDERLYING COURSE. The underlying subgrade shall be checked and accepted by the Resident Engineer before placing and spreading operations are started. The subgrade shall be free of ruts, objects, and debris.

The crushed aggregate is to be placed over separation fabric as specified in Item 156513. The furnishing and placement of the fabric will be included in the cost of the course aggregate. The aggregate will be spread over the fabric in a manner that is not injurious to the fabric. To protect the underlying course and to insure proper drainage, the spreading of the aggregate shall begin along the centerline of the area for a crowned section or on the high side of the pavement with a one-way slope.

Grade control shall be provided by the Contractor using string lines, checkboards, forms, or other suitable methods that will assure that the soil stabilization fabric or separation fabric beneath is not damaged.

208606-3.4 PLACING AND SPREADING. The depositing and spreading of the material shall commence where designated and shall progress without breaks. The drainage layer shall be constructed in a layer of not less than 3-inches nor more than 6-inches of compacted thickness. The material shall be deposited and spread on the underlying subgrade and separation fabric in lanes of a uniform thickness and gradation, without segregation by size or pockets of fine or coarse materials, and to such loose depth that, when compacted, the layer shall have the required thickness. The aggregate shall be spread by spreader boxes or other approved devices or methods that shall spread the aggregate in the required amount to avoid or minimize the need for re-handling the material and to prevent the rutting of the underlying subgrade. Hauling over the un-compacted material shall not be permitted.

No material shall be placed in snow or on a soft, muddy, or frozen underlying course, unless directed by the Resident Engineer.

When more than one layer is required, the construction procedure described herein shall apply similarly to each layer.

During the placing and spreading, sufficient caution shall be exercised to prevent the incorporation of subgrade or shoulder material in the base mixture.

208606-3.5 ROLLING AND COMPACTING. After spreading, the crushed aggregate shall be thoroughly compacted by rolling. The rolling shall progress gradually from the sides to the center of the lane under construction, or from one side toward previously placed material by lapping uniformly each preceding rear wheel track by one-half the width of such track. Rolling shall continue until the stone is thoroughly set, the interstices of the material reduced to a minimum, and creeping of the stone ahead of the roller is no longer visible. The base shall be compacted to the satisfaction of the Resident Engineer.

The course shall not be rolled when the underlying course is soft or yielding or when the rolling causes undulation in the subbase course.

In areas inaccessible to rollers, the crushed aggregate material shall be tamped thoroughly with mechanical tampers.

The sprinkling during rolling, if necessary, shall be in the amount and by equipment approved by the Resident Engineer.

208606-3.6 FINISHING OF SUBBASE. Prior to final shaping, the subbase shall be brought to true shape. After the subbase has been brought to its true shape and correct elevation, the surface shall be wetted and rolled as directed by the Resident Engineer with a three-wheel or tandem roller weighing between 6 and 10 tons and weighing not less than 200 pounds/inch nor more than 325 pounds/inch of width of the roller.

After the subbase has been compacted and shaped, the surface of the subbase shall be tested for crown and elevation. The Contractor shall furnish all equipment necessary for these checks. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified, reshaped, re-compacted, and otherwise manipulated as the Resident Engineer may direct until the required smoothness and accuracy are obtained. The finished surface shall not vary more than ½-inch from a 16-foot straightedge when applied to the surface parallel with, and at right angles to, the centerline, or shall not be more than 0.05 foot from the true grade as established by grade hubs or pins.

The subbase shall be moist at the time of placing subsequent base materials. If the subbase subsequently becomes too dry, it shall be sprinkled again, in such a manner as not to form puddles of water. The Contractor shall provide water and all equipment necessary to meet this requirement. The cost of watering shall be incidental to the Contract.

208606-3.7 TOLERANCE IN THICKNESS. The subbase shall be constructed to the thickness shown on the Plans. Thickness determinations shall be made by depth tests or cores taken at intervals in such a manner that each test shall represent no more than 400 square yards. When the base deficiency is more than ½-inch, the Contractor shall correct such areas by scarifying, adding satisfactory base mixture, rolling, sprinkling, reshaping, and finishing in accordance with these Specifications.

The Contractor shall replace, at his expense, the subbase material where borings have been taken for test purposes.

For purposes of determining suitability for placement of Item 208606, the Contractor shall furnish grade elevations for the granular drainage subbase to the Project Engineer for review, as specified under Section 50-06 (Responsibility of the Contractor).

208606-3.8 PROTECTION. Work on the subbase shall not be accomplished during freezing temperatures nor when the subgrade is wet. When the aggregates contain frozen materials or when the underlying course is frozen, the construction shall be stopped. Hauling equipment may be routed over completed portions of the subbase, provided no damage results and provided that such equipment is routed over the full width of the course to avoid rutting or uneven compaction. However, the Resident Engineer shall have the full and specific authority to stop all hauling over completed or partially completed subbase when, in his opinion, such hauling is causing damage. Any damage resulting from routing equipment over the course shall be repaired by the Contractor at his own expense.

208606-3.9 MAINTENANCE. Following the completion of the subbase, the Contractor shall perform all maintenance work necessary to keep the subbase in good condition. The subbase shall be properly drained at all times. If cleaning is necessary, any work or restitution necessary shall be at the expense of the Contractor.

METHOD OF MEASUREMENT

208606-4.1 The Aggregate Base Course to be paid for shall be the measured area in square yards for each thickness of aggregate base course placed, bonded, and accepted by the Resident Engineer.

BASIS OF PAYMENT

208606-5.1 Payment will be made at the Contract unit price per square yard, per each thickness indicated on the Plans, for Aggregate Base Course. This price shall be full compensation for furnishing all materials and for the preparation, hauling, and placing of these materials, for furnishing certified scales, and for all labor, equipment, tools, and incidentals necessary to complete the item to the satisfaction of the Engineer.

Payment will be made under:

Item AR208606 Aggregate Base Course, 6" - per square yard.

PART 6

FLEXIBLE PAVEMENTS

ITEM 401665

BITUMINOUS PAVEMENT SAWING

DESCRIPTION

401665-1.1 This item shall consist of a saw cut at the extremity of bituminous pavements where proposed PCC sidewalk will be constructed. The depth of saw shall be full depth for and provide a clean vertical face for new adjacent pavement as shown in the Plans or as directed by the Resident Engineer.

CONSTRUCTION METHODS

401665-2.1 The existing pavement shall be saw cut at the locations shown in the Plans or as directed by the Resident Engineer. Saw depth shall be as shown in the Plans at milling locations, or full depth at hand removal locations. During sawing and removal, should any of the pavement to remain be damaged due to a saw cut of insufficient depth, the damaged pavement shall be replaced in a manner satisfactory to the Resident Engineer. However, this pavement replacement shall not be measured for payment.

METHOD OF MEASUREMENT

401665-3.1 This item will not be measured for payment. Sawcutting shall be included in the contract unit price of AR501606 – 6" PCC Sidewalk.

BASIS OF PAYMENT

401665-4.1 This item will not be measured for payment. Sawcutting shall be included in the Contract unit price of AR501606 – 6" PCC Sidewalk, which price shall be full compensation for the labor, equipment, tools, and incidentals necessary to complete the item as specified and to the satisfaction of the Engineer.

PART 7

RIGID PAVEMENTS

ITEM 501606

PORTLAND CEMENT CONCRETE SIDEWALK

501606-1.1 This item shall consist of Portland Cement concrete sidewalk constructed on a prepared aggregate base course, at the locations shown in the Plans. The concrete thickness shall be six (6) inches, as shown in the Construction Plans.

MATERIALS AND EQUIPMENT

501606-2.1 MATERIALS. Concrete materials shall meet the requirements of Item 610, Structural Portland Cement Concrete, including curing requirements. Preformed fiber joint filler shall meet the requirements of Section 1051 of the IDOT Specifications, Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised. Hot-poured joint sealer shall be ASTM D 6690, Type II, Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements. All sidewalks shall be reinforced with welded wire fabric - 6x6 - 2.9x2.9, meeting IDOT requirements.

501606-2.2 EQUIPMENT. Equipment shall meet the requirements of Section 424.03 of the IDOT Specifications, Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised.

CONSTRUCTION REQUIREMENTS

501606-3.1 CONSTRUCTION REQUIREMENTS. The construction shall be completed as shown in the details and notes shown in the Plans and in accordance with Sections 424.04 through 424.11 of the IDOT Specifications, Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised. In addition, all expansion and sawed contraction joints shall be sealed with hot-poured joint sealer, meeting requirements of ASTM D 6690, Type II, Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.

METHOD OF MEASUREMENT

501606-4.1 METHOD OF MEASUREMENT. Portland Cement concrete sidewalk will be measured for payment in place, and the area computed in square feet. Curb ramps, detectable warnings, expansion joints with joint filler and sealant, backfill, and disposal of surplus material shall not be measured separately for payment but shall be incidental to the Contract unit price for sidewalk.

BASIS OF PAYMENT

501606-5.1 BASIS OF PAYMENT. This work will be paid for at the Contract unit price per square foot for Portland Cement Sidewalk of the thickness specified, which price shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including all required curb ramps, detectable warnings, expansion joints, sawed or tooled joint sealing, special texturing, and variable height edge treatment at sidewalk aprons and accessibility ramps, backfill and disposal necessary to complete the item as specified.

Payment will be made under:

Item AR501606 6" PCC Sidewalk – per square foot.

PART 8

SURFACE TREATMENTS

This Section not used.

PART 9

MISCELLANEOUS

ITEM 610

STRUCTURAL PORTLAND CEMENT CONCRETE

Revise Item 610 of the Standard Specifications as follows:

DESCRIPTION

610-1.1 Add the following:

"PCC items within the construction plans including foundations, sidewalks, and other concrete items within the project.

"This item shall also include the requirements prescribed in Illinois Division of Aeronautics Policy Memorandums 96-1A, Item 610, Structural Portland Cement Concrete: Job Mix Formula Approval and Production Testing (2022); 07-21, Acceptance Procedure for Finely Divided Minerals Used in Portland Cement Concrete and Other Applications; 2001-1, Requirements for Cold Weather Concreting (2020), and; 22-1, Cement Types, current issues."

CONSTRUCTION METHODS

610-3.12 CURING AND PROTECTION. Add the following:

"All Structural Portland Cement Concrete placed under Item 610 which is exposed to weather shall be cured and protected by the Liquid Membrane Curing Method using an IDOT-approved curing compound, as specified herein, and whose cost shall be incidental to Item 610. The compound shall meet all Contract requirements for materials, including the Buy American Preferences Act (49 U.S.C. § 50101)."

BASIS OF PAYMENT

No direct payment will be made for structural Portland cement concrete. The cost of furnishing and installing structural concrete shall be considered incidental to the Contract unit prices for the respective pay items utilizing the concrete. These prices shall be full compensation for furnishing all materials and for all preparation, delivering and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

ITEM 801013

PROTECTION BOLLARD

DESCRIPTION

801013-1.1 This item shall consist of the installation of protective concrete bollards for the gate proximity card / keypad reader at the proposed electric gate locations associated with Item 801036 Electric Gate Operator – Complete.

MATERIALS

801013-2.1 The protection bollard shall be constructed as detailed in the Construction Plans. Galvanized Rigid Steel (GRS) conduit shall meet the requirements of Item 110, Paragraph 110-2.2. Concrete used to reinforce the conduit in its specified position shall meet the requirements of Item 610. A commercial-grade, manufactured HDPE bollard covering shall be installed over each bollard – color YELLOW.

All materials used for this item shall be made in USA from raw materials manufactured in the USA.

CONSTRUCTION METHODS

801013-3.1 The bollard shall be constructed, as detailed in the Construction Plans. Concrete used for this item shall be furnished and accepted in accordance with Item 610.

METHOD OF MEASUREMENT

801013-4.1 The quantity of Protection Bollard to be paid under this item shall be the number of individual bollards installed, measured in place, completed, and accepted. No separate measurements shall be made for any other materials or incidentals required to complete this item, as they are incidental to a completed and accepted bollard installation.

BASIS OF PAYMENT

801013-5.1 Payment will be made at the Contract unit price for each protection bollard completed and accepted. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials; for all sawing and pavement removal; for all excavation and backfilling with aggregate backfill, earth backfill, and concrete; and for all labor, coordination, equipment, tools, and incidentals necessary to complete this Item.

Payment will be made under:

Item AR801013 Protection Bollard - per each.
Item AS801013 Protection Bollard – pear each.

ITEM 801035

CONCRETE WASH OUT

DESCRIPTION

801035-1.1 This item shall consist of the installation and removal of a temporary concrete wash out facility and barrier wall as required by Illinois Erosion and Sediment Control Field Guide for Construction inspection. This item shall conform to the materials and details as shown in the plans. This work shall be included and but not limited to work involving concrete used for fence posts, protection bollards, and PCC sidewalk.

MATERIALS

801035-2.1 The materials required for this item shall conform as detailed in the plans.

CONSTRUCTION METHODS

801035-3.1 This item shall be installed, maintained, and removed as required by the Illinois Erosion and Sediment Control Field Guide for Construction inspection. Item shall be dimensioned as shown in plan details. The location of the temporary concrete washout facility shall be installed away from any area that may runoff and enter existing storm sewer or waterways, and the location shall be pre-approved by the Resident Engineer or Owner's representative.

METHOD OF MEASUREMENT

801035-4.1 This item shall not be measured for payment but shall be incidental to the contract. The price shall be full compensation for furnishing all materials for operations, hauling, and placing these materials, removal of item, disposal of solidified concrete waste, site cleanup, and for all labor, equipment, tools, and incidentals to complete the item.

BASIS OF PAYMENT

801035-5.1 Payment shall not be paid for separately but incidental to the Contract.

ITEM 801036

ELECTRIC GATE OPERATOR - COMPLETE

DESCRIPTION

801036-1.1 This item shall consist of furnishing and installing new electrical gate operator system for the sliding gates specified in Item 162, in accordance with the Standard Specifications and these Special Provisions, and the locations shown on the Construction Plans. All items necessary for a complete electrical gate operator system shall be furnished under this item, except for the sliding gate itself, to be paid under Item AR162230, Class E Manual Slide Gate – 30', and the power cables in unit duct or conduit, to be paid under Items AR108051, Power Cable in Unit Duct, and AR108052, Power Cable in Conduit.

This item will include all labor, equipment, and materials required to put the proposed electric sliding gate operator(s) in proper working order. This item shall also include furnishing and installing all proximity cards, remote transmitters, in-pavement detector loops, circuit breakers, surge arresters/protectors, disconnects, conduits, ducts, wire, and all other electrical equipment as detailed the Plans and specified herein, necessary for the completion of the gate operator system as detailed on the Construction Plans and within the Standard Specifications and these Special Provisions. Cable, conduits, and duct related to the electric feeder, branch circuits, and/or control wiring for each gate operator shall be incidental to the respective item of work for which it is being installed.

The electric gate operator system - complete for each gate shall include the following features:

- A. A new slide gate operator with operating hardware, gate operator, heater, controller, proximity card reader, and detector loops and amplifiers. Include associated concrete foundations as detailed in the Construction Plans.
- B. The gate operator shall be a access control unit entry/free exit gate.
- C. The gate operator shall have an automatic closing feature activated by an adjustable timer. Safety loops shall be provided at both sides of the gate to delay the closing of the gate in the event that it detects that the vehicle has not yet passed through the gate. The inner loop shall also provide automatic opening to exit upon detection of a vehicle.
- D. Provide twenty (20) remote control transmitter units for automatic gate operation. Coordinate frequencies with the Airport Manager.
- E. Provide Multi-class SE Proximity Card Readers (two at each gate operator location) with Surface Wall Box, UL294 Outdoor-rated (IP65), Signo 40 PIV Reader by HID Global, or approved equal. Readers shall be compatible with S2 Security's S2 Netbox web-based Access Control and Event Monitoring System.
- F. Provide 500 programmable PIV-based proximity cards compatible with specified proximity card reader and the S2 Netbox Access Control System.
- G. Power for the gate operator shall be from a 120/240 VAC, 1 phase, 3 wire power source or 120/208 VAC, 1 phase, 3 wire originating from a 208/120 VAC, 3 phase, 4-wire power source as detailed on the Plans.
- H. Controls, safety devices, and associated control wiring shall be as shown on the Plans and detailed herein.

- I. Include surge protection on the gate operator and associated control systems.
- J. Engage a factory trained and authorized service representative to provide commissioning, start-up, testing, adjustments, calibration, and checkout for each electrically operated gate.

801036-1.2 REFERENCES.

- A. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
- B. ANSI C80.4 - Fittings Rigid Metal Conduit and EMT.
- C. ASTM F 1184-05 Standard Specification for Industrial and Commercial Horizontal Slide Gates.
- D. ASTM F1043 Standard Specification for Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework.
- E. ASTM F2200 Standard for Automated Vehicular Gate Construction.
- F. FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- G. Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022.
- H. NEMA TC-2 – Electrical Plastic Tubing and Conduit.
- I. NEMA TC-3 – Fittings Rigid PVC Conduit and Tubing.
- J. NFPA 70 – National Electrical Code (most current issue in force).
- K. NFPA 70E – Standard for Electrical Safety in the Workplace.
- L. OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures.
- M. UL Standard 6 – Rigid Metal Conduit.
- N. UL 325, (Fourth Edition), Standard for Safety for Door, Drapery, Gate, Louver and Window Operators and Systems.
- O. UL Standard 651 – Schedule 40 and 80 Rigid PVC Conduit.
- P. UL Standard 514B – Conduit, Tubing and Cable Fittings.

801036-1.3 SHOP DRAWINGS.

The Contractor shall furnish shop drawings for approval before ordering material and equipment for the following system components. Shop drawings are required for the electric gate operator system. Note: Shop drawings that are submitted that do not include all of the

following listed requirements will be rejected and will require resubmittal. Contractor shall use the following as a check list and shall verify all information noted below is included with the respective electric gate shop drawing prior to submitting the shop drawing for review. Shop drawing shall be clear and legible. Copies that are illegible will be rejected. Separate shop drawings shall be prepared for each electric gate location unless they are identical in all respect. Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus four (4) copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. Certification of compliance with the AIP (Airport Improvement Program) Buy American Preferences for all materials and equipment. Do not submit ARRA (American Recovery and Reinvestment Act) certification as a substitute for certification of compliance with the AIP Buy American Preferences. Shop drawings submitted without certification of compliance with the Airport Improvement Program Buy American Preferences or without certification of manufacture in the United States of America in accordance with the AIP Buy American Requirements will be rejected. See the FAA website at: http://www.faa.gov/airports/aip/buy_american/ for more information on the Airport Improvement Program Buy American Preferences requirements.
- B. In order to expedite the shop drawing review, inspection and/or testing of materials and equipment, the Contractor shall furnish complete statements to the Project Engineer as to the origin and manufacturer of all materials and equipment 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 and equipment.
- C. Cut sheets and specifications for the gate operator. Include manufacturer's name, address, phone number, gate operator model number, gate operator UL listing or ETL listing, gate load capability and drive rail force requirements, traveling speed, housing data, input voltage, motor horsepower rating, full load amperage requirements, manufacturer's recommended wiring requirements, and respective options, (heater option, audible beeper option, etc.).
- D. Include information, specs, and cut sheets for the surge suppressor included with the gate operator.
- E. Provide data sheets for the detector amplifiers with manufacturer's name and model number. Include lightning protection on the detector amplifiers.
- F. Provide data sheets on the loop/lead-in cables.
- G. Provide cut sheets, information, voltage rating, amperage rating, manufacturer catalog number, fuse size and manufacturer catalog number, and options for the 30 amp, 2-pole, 240 VAC, UL listed heavy duty safety switch in a NEMA 4X stainless steel enclosure that is for the gate operator.
- H. Provide cut sheets for the Proximity Card Reader Control Stations and pedestals.
- I. Provide cut sheets for the Remote-control transmitters and radio receiver.

- J. Provide cut sheets for the Control Panel Enclosure/Junction Box.
- K. Provide cut sheets for all types of conduits used with the electric gate (for example galvanized rigid steel conduit, Schedule 40 PVC conduit, and UL listed liquid tight flexible metal conduit). Include certification that steel conduits are made with 100 percent domestic steel.
- L. Provide cut sheets with manufacturer's name, catalog number, dimensions, material, and UL listing for each type and size of ground rod used with the electric gate installation. Include certification that ground rods are made with 100 percent domestic steel.
- M. All steel used in the manufacture of gate posts and gate materials shall be 100% domestic steel. Contractor shall provide certification that the respective steel used in the manufacture of gate posts and gate materials on this project is manufactured from 100 percent domestic steel.
- N. Concrete mix design, per Item 610.

EQUIPMENT AND MATERIALS

801036-2.1 GENERAL. All equipment and materials used in the construction shall be in accordance with the Standard Specifications and detailed instructions as furnished by the manufacturer.

801036-2.2 GATE. Cantilever sliding gate shall be specified in Item 162.

801036-2.3 GATE OPERATOR.

The hydraulic gate operator shall be equipped with a minimum one (1) horsepower electric motor (larger motors will be required where recommended by the respective gate operator manufacturer for the respective size and type of gate) capable of operating cantilever gate up to 50 feet in overall length weighing up to 3,000 pounds with a drive rail draw force requirement of no less than 300 lbs. at a preset speed of approximately 3 feet per second, to close the prescribed opening. Gate operators shall be equipped with a heater to allow operation within a temperature range of -40/F to +150/F ambient temperature, in rain, snow, sun, and high humidity. Hydraulic fluid shall be suitable for applications in cold weather and hot weather applications located in Northern Illinois. The gate operator shall be suitable for operation in a climate that has rain, snow, sleet, and ice. The operator shall consist of the motor starter/controller and all relays required from the operation outlined herein. The operator and components shall be factory assembled and wired so as to require only field connections of the card reader, loops, and system power supply. The operator housing shall be weatherproof, fabricated from stainless steel, or galvanized steel with a corrosion resistant, powder coated paint finish (for Items AT801037 and AT801038, the housing shall be green to match fence fabric) and shall completely enclose the motor and electrical components of the unit. Appropriate time delays shall be incorporated for safe gate operation. Gates shall close automatically after an extensive adjustable delay period, unless manually disabled.

The gate operator shall be UL-listed or ETL-listed to have met requirements of UL 325, (Fourth Edition), Standard for Safety for Door, Drapery, Gate, Louver and Window Operators and Systems and suitable for UL 325 Usage Classes III and Class IV applications. The gate operator shall include UL 325 entrapment protection sensors Type A - Inherent entrapment sensing system and Type E- inherent audio alarm to warn personnel of gate activation to comply with the requirements of UL 325 for a Class III usage application.

The proposed gate operator shall be HySecurity Model Slide-Driver 50VF2/3 (222 X3 ST), Tymetal Corporation Model TYM-HYD-VF3, or approved equal. Include appropriate software and/or hardware to ensure that the gate operator will operate properly on the respective power supply systems.

Supply voltage for the gate operator will be 120/240 VAC, 1 phase, 3 wire with ground or 120/208 VAC, 1 phase, 3 wire with ground.

Gate operators shall be rated for the respective voltage available at the site and shall properly operate on the respective nominal voltage system plus or minus 10 percent. Contractor shall confirm with the gate operator manufacturer that the respective gate operator he selects is rated suitable for the respective application, is suitable and compatible with the respective gate, and will operate properly on the respective power supply. Note the gate operator must also operate properly on standby engine generator power and shall not require manual reset due to transfer from utility power to standby generator power or back to utility power. The gate operator must not require manual reset for momentary power outages. Where a power outage occurs the gate operator shall automatically resume normal operation upon restoration of power.

All gate operators furnished on this project shall be by the same manufacturer.

Include AC surge protector/transient voltage surge suppressor at the point of the input power connection to the gate operator. AC surge protector shall be UL 1449 listed with a surge current rating of 40,000 Amps, suitable for 120/240 VAC, 1 phase, 3 wire plus ground system; Joslyn Model 1265-21, Lightning Protection Corp. Model LPC-11765U-13, Square D Catalog Number TVS120XR50S, or approved equal.

The gate operator foundation shall be a minimum of 48 in. depth, to the dimensions recommended by the manufacturer. Foundation shall be constructed of Item 610 concrete. Anchor bolts shall be per the gate operator manufacturer's requirements. The concrete must have strength of 3,500 psi after 14 days.

801036-2.4 PROXIMITY CARD READER UNIT.

Proximity Card Reader Unit shall be Multi-class SE Proximity Card Reader (two at each gate operator location) with Surface Wall Box, UL294 Outdoor-rated (IP65), Signo 40 PIV Reader by HID Global, or approved equal. Readers shall be compatible with S2 Security's S2 Netbox web-based Access Control and Event Monitoring System. The card reader shall provide the capability of restricted access to certain gates, allowing only certain cards to be programmed for access. Card reader shall also be capable of programming a previously issued card to be deleted, and no longer allow access through the respective gate. Programming of cards shall take place by interfacing a lap top computer to the respective card reader through a RS-232 cable and appropriate adapters. Provide 500 cards for each Gate Operator System – Complete in this project. Card reader access control unit shall be suitable for outdoor installation, with a weather- proof housing and operating temperature

range of -15°F to +160°F. Card reader unit shall be surface mount housing, with appropriate adapters and hardware to install on a gooseneck-type pedestal as detailed on the Plans. For Item AT801037 and AT801038, the card reader units and pedestals shall be powder-coated finish in green to match fence fabric. All hardware shall be corrosion resistant. Include RS-232 Cable, 15 feet in length to interface the card reader to a lap top personal computer. Include RS-232 to USB adapter cable and/or other adapters to be compatible with a lap top personal computer.

Power for each card reader unit shall be as specified by the equipment manufacturer. Contractor shall furnish the control power transformer, with built in surge protection, and a two-prong plug compatible with 120 VAC receptacle (NEMA I-15R). Include a 120 VAC specification grade simplex receptacle rated and compatible with the respective control power transformer. Contractor shall ensure compatibility between the gate operator control voltages, the card reader unit input voltage and output contact ratings, and the respective control interface. Contractor shall include interfacing relays, transformers, and power and control wiring, as applicable. Contractor shall provide a NEMA 4X stainless steel enclosure to house the receptacle, transformer, and other associated controls. Coordinate programming the card reader with the Airport Manager.

The concrete foundation for the keypad unit shall be a minimum of 48 Inches below ground level and to the of the larger dimensions shown in the Plans or as recommended by the manufacturer. The concrete shall have the same requirements of the gate operator foundation.

801036-2.5 DETECTOR AMPLIFIERS.

Detector amplifiers shall consist of digital design units capable of automatic tuning, pulse, and presence outputs, excellent stability, and accuracy, with long term reliability. The device shall be 100 percent solid state construction, with plug in and plug out circuits for rapid repair. The unit shall constantly monitor the frequency of the loop, and compare and adjust automatically for changes, such as loop aging, moisture, mechanical deterioration, and foreign bodies in the loop area. Detector amplifiers shall contain lightning protection and be capable of total loop isolation. Amplifiers shall be mounted in or on the outside of the gate controller housing. Weatherproof enclosures, when required, shall be of NEMA 4 design. The amplifiers shall be capable of stable operation and automatic tuning over a range of minus 30 F to plus 180 F. Loop detectors shall be selective as to direction of travel of vehicle with respect to the instantaneous position of the gate, i.e., close loops will activate system only with gate in open or opening state. Open loop will activate gate only with gate in closed or closing state. Contractor shall verify the selected loop detector is suitable for the respective gate installation.

801036-2.6 SECONDARY SAFETY DEVICES.

The gate operator shall include UL 325 entrapment protection sensors Type A - Inherent entrapment sensing system and Type E - inherent audio alarm to warn personnel of gate activation to comply with the requirements of UL 325 for a Class III usage application.

801036-2.7 POWER SOURCE.

Power for the gate operator shall be from a 120/240 VAC, 1 phase, 3 wire system or 120/208, 1 phase, 3 wire system that originates from a 208/120 VAC, 3 phase, 4 wire system located as detailed on the Plans. Power to the gate operator shall be as detailed on

the Plans and in accordance with the gate operator's manufacturer's recommendations. The Contractor will be responsible for providing all necessary material for the installation of electrical power and control wiring from the respective disconnecting means to the gate operator, from the gate operator to the card reader, and from the gate operator to the detector loops. It will also be the Contractor's responsibility to locate, identify and protect all existing utilities. Any damage to these utilities will be immediately repaired at the Contractor's own expense.

801036-2.8 CONTROL WIRING.

Control wires between devices shall be Copper, Type THWN, No. 14 minimum, or as recommended by the respective equipment manufacturer, color coded and tagged with wire markers for easy identification. The control wiring between the card reader station and the gate operator shall include a #12 AWG THWN or XHHW Copper with green colored insulation equipment ground wire.

Induction loop feed wires shall be Copper, No. 12 minimum, Twin-Twisted-Shielded, meeting the State of Illinois, Department of Transportation, specifications and all the requirements of manufacturer of the respective Detector Amplifier furnished. Detector loop wires shall conform to the requirements Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Section 1079, DETECTOR LOOP.

1-inch Galvanized Rigid Steel conduit will be required for all control wires from outside the pavement area to the operator, from the card reader to the operator, from the photoelectric eye safety devices to the operator, and from the operator to the detector loops. All metal conduits entering the gate operator shall be bonded to the frame of the gate operator.

801036-2.9 REMOTE RECEIVER.

The Contractor shall provide a remote receiver for each gate operator. Remote receiver shall have frequency as specified by the Airport Manager. Remote receiver shall have proper shielding to eliminate potential problems caused by stray radio frequency interference or noise. Remote receiver shall be high quality and capable of being activated by the respective transmitter at a distance of up to 100 feet. The Contractor is responsible to provide a properly operating receiver and transmitter pair for each gate operator. Antenna for receiver shall be mounted above the fence to ensure proper operation by remote transmitter from a distance of up to 100 feet. Include all support and mounting hardware for antenna.

801036-2.10 REMOTE TRANSMITTERS.

The Contractor shall provide with each remote receiver, 20 remote transmitters for use by Airport or other authorized personnel. Remote transmitter shall be high quality and capable of activating the respective receiver at a distance of up to 100 feet. Coordinate programming of frequency with the Airport Manager.

801036-2.11 BRANCH CIRCUIT BREAKERS.

Circuit breakers for the gate operator branch circuit, and any other required circuits, shall have voltage ratings, amperage trip ratings, amp interrupting ratings, and number of poles as detailed on the Plans. Circuit breakers to be installed in an existing panelboard shall be bolt-on type, compatible with the respective panelboard and manufactured by the same manufacturer as the panelboard. Circuit breakers to be installed in an existing load center

shall be plug-on type, compatible with the respective load center and manufactured by the same manufacturer as the load center. Where circuit breakers manufactured by the same manufacturer as the respective panelboard or load center are not readily available, a circuit breaker by a different manufacturer will be acceptable.

801036-2.12 SAFETY SWITCHES.

Furnish and install a safety switch for the respective gate operator as detailed on the Plans and specified herein. Safety switches shall be heavy duty, UL-listed, with amperage, voltage, number of poles, and type (fusible or not fusible), and accessories as detailed on the Plans. Safety switches shall be pad lockable in the off position. Include ground lugs or grounding kits with all safety switches. Safety switches located outdoors, or in damp areas shall be in NEMA 4X stainless steel enclosures. Safety switches located in hazardous classified areas shall be UL-listed or FM approved as suitable for the respective location. Safety switches shall be as manufactured by Square D, Eaton Cutler-Hammer, or equivalent. Safety switches shall be manufactured in the United States to comply with the "Buy American Act".

801036-2.13 FUSES.

Fuses shall be Class RK5, UL listed with 100,000 Amp (minimum) interrupting rating at the respective voltage system. Fuses shall be properly sized and suitable for the respective equipment in accordance with the respective equipment manufacturer's recommendations and/or in accordance with the requirements of National Electrical Code for the respective motor/equipment. Fuses shall be manufactured by Bussmann, Littlefuse, or approved equal. Furnish two additional fuses of each size and type used on the project, for use as spares.

801036-2.14 GALVANIZED RIGID STEEL CONDUIT.

Galvanized rigid steel conduit (GRSC) shall be heavy wall hot dipped galvanized steel pipe bearing the UL label and conforming to UL 6 and ANSI Specification C80.1. Couplings, connectors, and fittings for rigid steel conduit shall be threaded galvanized steel or galvanized malleable iron specifically designed and manufactured for the purpose. All fittings shall be threaded type. Fittings shall conform to ANSI C80.4. Set screw type fittings are not acceptable. Steel used to manufacture conduits shall be 100 percent domestic steel. Contractor shall provide certification that the respective steel conduits used on this project are manufactured from 100 percent domestic steel.

801036-2.15 LIQUID TIGHT FLEXIBLE METAL CONDUIT.

Liquid-tight, flexible metal conduit shall consist of polyvinyl jacket over flexible, hot-dip, galvanized steel tubing. The flexible conduit shall be completely sealed from liquids, dust, dirt, and fumes and be resistant to oil, gasoline, grease, and abrasion. Jacket shall also be sunlight-resistant. Liquid-tight, flexible metal conduit shall be UL-listed, suitable for use as a grounding conductor, and comply with Article 350 of the NEC. Liquid-tight, flexible metal conduit and associated fittings shall be UL-listed to meet the requirements of NEC 350.6. Liquid-tight, flexible metal conduit shall be Anaconda Sealtite Type UA, as manufactured by Anamet Electrical Inc., 1000 Broadway Avenue East, Mattoon, Illinois 61938-0039, (Phone: 217-234-8844), Liguatite Type LA as manufactured by Electri-Flex Company, 222 W. Central Ave., Roselle, Illinois 60172, (Phone: 630-529-2920 or 1-800-323-6174), or approved equal. Do not install liquid-tight, flexible metal conduit that is not

UL listed. Confirm liquid-tight, flexible metal conduit bears the UL label prior to installation.

801036-2.16 SCHEDULE 40 PVC CONDUIT.

Schedule 40 PVC conduit shall comply with Item 110 and the following: Conduit shall be Schedule 40 PVC, 90° C, UL-rated or approved equal. Material shall comply with NEMA Specification TC-2 (Conduit), TC-3 (Fittings), UL-651 (Standard for rigid nonmetallic conduit), and UL-514B. The conduit and fittings shall carry a UL label (on each 10 ft length of conduit and stamped or molded on every fitting). Conduit and fittings shall be identified for type and manufacturer and shall be traceable to location of plant and date manufactured. The markings shall be legible and permanent. The conduit shall be made from polyvinyl chloride C-300 compound that includes inert modifiers to improve weather ability, heat distortion. Clean reworked material, generated by the manufacturer's own conduit production, may be used by the same manufacturer, provided the end products meet the requirements of this Specification. The conduit and fittings shall be homogenous plastic material free from visible cracks, holes, or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks, or other imperfections which could mar conductors or cables. Conduit fittings and cement shall be produced by the same manufacturer to assure system integrity.

801036-2.17 JUNCTION AND PULL BOXES.

Unless otherwise noted on the Plans, all junction boxes shall be 16-gauge minimum construction. Surface mounted exterior junction and pull boxes located in non-hazardous, non-classified areas, shall be NEMA 4X stainless steel or aluminum, Hoffman, or approved equal. Flush-mounted exterior boxes located in non-hazardous, non-classified areas, in floors, walkways, and walls shall be NEMA 4, cast aluminum, Crouse-Hinds, Hubbell-Killark, or approved equal, and shall be supplied with asphalt paint applied to all surfaces imbedded in concrete. All junction and pull boxes installed in classified hazardous areas (Class 1, Division 1 or 2, Group D) shall be NEMA 7 and shall comply with applicable provisions of the NEC including, but not limited to, Articles 500 and 501. Junction and pull boxes shall be sized as required for conductors and splices and per 2011 NEC Article 314. Boxes shall be UL-listed. Special boxes made to suit conditions shall be used to accommodate the respective application or where required by National Electrical Code even though they might not be indicated on the drawings.

801036-2.18 GROUND RODS.

Ground rods for electrical installations shall be 3/4-inch diameter by 10 foot long, UL listed, copper clad with 10 mil minimum copper coating. Ground rods for fence grounding shall be 5/8-inch diameter by 8 foot long, UL listed, copper clad with 10 mil minimum copper coating. Steel used to manufacture ground rods shall be 100 percent domestic steel.

801036-2.19 LEGEND PLATES.

Legend plates shall be required for all safety switches, individual circuit breakers, disconnects, etc. Legend plates shall be provided to identify the equipment controlled, the power source, the voltage system, and the function of each device. Legend plates shall be weatherproof and abrasion resistant phenolic material. Lettering shall be black letters on a white background, unless otherwise noted.

801036-2.20 SIGNAGE.

The gate shall include signage as detailed on the Plans. Furnish and install warning signs at gate exterior face and interior face noting "WARNING - MOVING GATE CAN CAUSE SERIOUS INJURY OR DEATH". Signage shall be secured to the gate with corrosion resistant metal connectors.

801036-2.21 CONCRETE.

Concrete for use with the gate installation and/or associated equipment shall conform to Item 610 of the Standard Specifications for Construction of Airports.

801036-2.22 SOFTWARE.

Include appropriate software to program the card readers. Include appropriate cables, terminations, and adapters to interface the card reader to the lap top personal computer. Provide instruction to Airport Staff regarding programming of the card readers with the lap top computer. Include a disk with the programming software for the card reader systems.

801036-2.23 SECURITY CHAIN AND PADLOCK.

The Contractor shall furnish a new security chain and padlock for each slide gate (whether electric or manual). Chain shall be 5/16-inch stainless steel cut into a three-foot length, for Item AT801xxx, green vinyl coated. Padlock shall be solid brass body, corrosion resistant and ideal for harsh environments. Padlock dimensions shall be 2-inch shackle, 2-inch wide and 3/4-inch thick. Padlocks shall be keyed to match existing Airport padlock system (Best Access). The Contractor shall coordinate the furnishing of these padlocks with the Airport Owner.

CONSTRUCTION METHODS

801036-3.1 CONTRACTOR QUALIFICATIONS.

The Contractor responsible for installing the electric driveway gates shall be certified by the manufacturer. The Contractor must have attended training and obtained certification directly from the gate manufacturer. The Contractor shall have at a minimum of five (5) years related experience installing electric driveway gates.

801036-3.2 AIRPORT SECURITY.

The Contractor will place temporary fencing (minimum height to match existing fence) across the gate opening whenever the proposed gate cannot be closed at the end of the construction day. Security at the Airport shall be maintained at all times and coordinated with the Airport Manager.

801036-3.3 SPLICES.

Splices, where allowed, shall be the resin encapsulating type, suitable for direct burial, and be as manufactured by 3 M, Burndy, or equal.

801036-3.4 MATERIALS FURNISHED BY THE CONTRACTOR.

All material used in the work shall meet the requirements of the respective Specifications, and no material shall be used until it has been approved by the Project Engineer by means of shop drawings. All material not otherwise specifically indicated shall be furnished by the Contractor. All material furnished by the Contractor shall be new.

801036-3.5 STORAGE OF MATERIALS.

Material shall be so stored as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and they shall be placed under cover. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the Owner or lessee.

801036-3.6 LOCATE EXISTING UTILITIES.

The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment where required.

In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility. Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123. Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA.

Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

801036-3.7 MANUFACTURER'S DIRECTIONS.

Manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer unless herein specified to the contrary. Any installations which void the UL listing, ETL listing, (or other third-party listing), and/or the manufacturer's warranty of a device will not be permitted.

801036-3.8 CUTTING AND PATCHING.

The Contractor shall do all necessary cutting and patching of the pavement that may be required by the drawings and Specifications to complete the structure. He shall restore all such cut or patched areas as directed by the Resident Engineer. Cutting of existing structures that may endanger the work, adjacent property, workmen or the public shall not be done unless approved by the Owner and under his direction.

801036-3.9 CLEAN UP.

The Contractor shall remove from the Owner's property and from all public and private property, all temporary structures, rubbish, and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials, leaving the site smooth, clean, and true to line and grade.

801036-3.10 WARRANTY PERIOD.

Neither the final certificate of payment nor any provision in the Contract, not partial or entire use of the improvement embraced in this Contract by the Owner, or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay any damage to other work resulting there from which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner shall give notice of defective materials and work with reasonable promptness. The warranty applies to equipment furnished, as well as to all other work and materials. The gate operator shall include a 5-year limited warranty against all defects in materials or workmanship. Defective material shall be replaced with the same or comparable materials furnished by the gate operator manufacturer, at no cost to the Owner.

801036-3.11 ELECTRIC SLIDING GATE CONSTRUCTION.

The Contractor shall install the electric sliding gate as detailed on the Construction Plans and in accordance with the manufacturer's directions. The Contractor will be responsible for the construction of any and all concrete bases for the proposed gate operator, card reader, and associated equipment.

801036-3.12 GATE CONTROL EQUIPMENT.

Installation of all electrical equipment and all gate control equipment shall be in conformance with the requirements of the NFPA 70 National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and in strict accordance with the requirements of all local authorities having jurisdiction. All control power transformers, power supplies, receptacles, loop detector amplifiers, secondary safety device equipment, and any other associated controls shall be installed either inside the gate operator control panel or inside a separate NEMA 4 stainless steel control panel enclosure. Where the control equipment is to be installed inside the gate operator control panel the Contractor shall coordinate this with the gate operator manufacturer and the respective gate operator equipment supplier. Locating these controls outside of gate operator control panel but within the gate operator housing will not meet this requirement. All card stations, push button stations, operators, and controllers shall be grounded to prevent shock. All concrete work required, and the precise locations for the installation

of the gate controller/operator, gate card reader, and induction loops, shall be coordinated with the manufacturer's shop drawings.

801036-3.13 INSTALLATION OF DETECTOR LOOPS.

New loop detector wiring shall be as specified by the manufacturer furnishing the detector amplifiers. The induction loops shall be equipped with appropriate equipment to operate properly for large trucks and not activate closure of the gate onto vehicles parked in the gate opening. Induction loops shall be installed in saw-cut grooves created by the Contractor in the road surface; such grooves of length, width, and depth as required by the manufacturer of the loop control equipment. Loop wires shall be held in place in the bituminous/concrete pavement by completely backfilling and covering slot with a sealer such as #E707 by Bondo, #491 HP by Euclid Chemical Company, or an approved equal. Sealer shall conform to the requirements Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Section 1079 DETECTOR LOOP.

801036-3.14 PROTECTIVE ELECTRICAL GROUND.

Continuous fence shall be grounded at intervals not exceeding 500 ft. There shall be a ground within 100 ft of gates in each section of the fence adjacent to the gate. Fence under a power line shall be grounded by three grounds: one directly under the crossing and one on each side 25 ft to 50 ft away. A single ground shall be located directly under each telephone wire or cable crossing. The counterpoise ground shall be used only where it is impossible to drive a ground rod. The ground wire shall be connected to the fabric and tension wire with UL listed grounding connectors of cast bronze body and bronze or stainless-steel bolts and washers. Grounding connectors shall be sized and suitable for the respective application. Connections to ground rods shall be with UL listed grounding connectors suitable for direct burial in earth or exothermic weld type connectors, Cadweld by Erico Products, Inc., Solon, Ohio, (Phone 1-800-248-9353), Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (Phone 918-663-1440), Ultraweld by Harger, Grayslake, Illinois (Phone 1-800-842-7437), or approved equal. Exothermic weld connections shall be installed in conformance with the respective manufacturer's directions using molds suitable for each respective application. Ground rods shall be 5/8-in. diameter by 8 ft long (minimum), UL-listed, Copper-clad. The ground wire used to bond the fence fabric and tension wire to the ground rod shall be #6 AWG bare solid Copper conductor.

801036-3.15 ELECTRICAL GENERAL.

The Contractor shall furnish and install all electrical materials necessary for complete and operational installation of the gate operator, as stipulated in the respective item and as shown on the Plans. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the NFPA 70-National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and all other applicable local codes, laws, ordinances, and requirements in force. Electrical equipment shall be installed in conformance with the respective manufacturer's directions and recommendations for the respective application. Any installations which void the UL listing, ETL listing, (or other third-party listing), and/or the manufacturer's warranty of a device will not be permitted.

- A. The Contractor should examine the proposed site to evaluate the complexity of the work.

- B. Contractor shall keep a copy of the latest NEC in force on site at all times during construction for use as a reference.
- C. Contractor shall keep a copy of the Plans, Special Provision Specifications including any addenda, and copies of any change orders on site at all times during construction.
- D. Per NEC 511 the garage areas of the Maintenance Building might be classified as a Class I, Division 2, Group D hazardous location for a level of 18 in. above the floor. All electrical installations shall conform to the applicable sections of NEC 500, 501, and 511 in addition to the other applicable sections of NEC. Where electrical equipment is installed in a classified hazardous location, it shall be suitable for use in the respective classified hazardous location. Where possible, avoid installation of electrical equipment, raceways, and wiring in the classified hazardous areas of the facility.
- E. Contractor shall coordinate work and any power outages to buildings located on the airport with the Airport Director/Manager and/or the respective building personnel. Any shutdown of existing systems shall be scheduled with and approved by the Airport Manager prior to shut down. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures, including, but not limited to, 29 CFR Section 1910.147 The Control of Hazardous Energy (lockout/tagout).
- F. Contractor shall comply with the requirements of FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- G. Contractor shall comply with the applicable requirements of NFPA 70E - Standard for Electrical Safety in the Workplace.
- H. Contractor shall confirm that the power to each gate operator rated for 240 VAC, single-phase is 240 VAC, single-phase, 2-wire with ground and that each phase to ground is 120 VAC. Contractor shall confirm that the power to each gate operator rated for 208 VAC, single-phase is 208 VAC, single-phase, 2-wire with ground and that each phase to ground is 120 VAC. Where shown on the Plans or where required to accommodate control power a neutral conductor shall be included with the power circuit to provide 120/240 VAC or 120/208 VAC single-phase, 3-wire with ground to power the gate operator and associated control systems. Do not connect a high leg of a 240/120 VAC, 3-phase, 4-wire system to a gate operator that is rated for 240 VAC, single-phase power.
- I. Splices in conductors will be allowed only within the specified junction boxes or splice cans. Only splices between loop lead in wires and the Twin Twisted Shielded conductors are approved. Circuit conductors for power wiring shall be continuous from source of power to connected device (from the respective panelboard or load center to the safety switch at the gate operator).

The Contractor shall be responsible for furnishing and setting all anchor bolts required to install his equipment.

- J. Where concrete mounting pads are required for equipment mounting, the Contractor shall furnish all concreting and form work necessary to complete the installation.
- K. Where electrical equipment is located on damp or wet walls or locations as directed, it shall be "stand-off" mounted ½ inch from the wall in a manner so that the rear of the equipment is freely exposed to the surrounding air. The Resident Engineer shall approve the method of mounting before equipment is mounted.

801036-3.16 INSTALLATION OF BRANCH CIRCUIT BREAKERS.

Install circuit breakers in panelboards and/or load centers in conformance with the respective manufacturer's directions. Connect only one wire/cable to each breaker terminal. Load centers and panelboards shall be thoroughly inspected for physical damage, proper alignment, anchorage, and grounding. Inspections shall be made for proper installation and tightness of connections for circuit breakers. Load centers and/or panelboards shall be thoroughly tested after installation and connection to respective loads. Update circuit directory to identify the respective device fed by each new circuit breaker.

801036-3.17 INSTALLATION OF SAFETY SWITCHES.

All safety switches shall be provided with appropriate mounting hardware and strut support. Strut support shall be stainless steel strut support, Unistrut P-1000-SS, or approved equal. All hardware shall be corrosion resistant. Mount safety switches securely in accordance with the manufacturer's recommendations/instructions and as required for the respective application. Inspect all safety switches for proper operation, tight and secure connections, and correctness. All safety switch enclosures shall be bonded to ground with a ground lug or bar and ground wire. Field cut holes in safety switch enclosures to accommodate conduit entrances. Where safety switches are provided with concentric knockouts, and the respective conduit does not use the largest knockout, install a grounding bushing with ground wire connections between the bushing and the ground bus. Do not use safety switch enclosures for a splice box or for a pull box. Do not route control wires or other circuit wiring through a safety switch. Where splices are required or other control circuit wires are installed in the respective conduit to a safety switch, provide a separate junction box to accommodate the splices and/or other circuit conductors. Provide NEMA 4 hubs for all conduit entries into safety switch enclosures that are rated NEMA 4, 4X to maintain NEMA 4, 4X rating. Provide weatherproof abrasion resistant, engraved legend plates for each safety switch noting the device served, the power source, and the voltage system.

801036-3.18 CONDUIT INSTALLATION.

Cable in unit duct and/or conduit for the gate operator power shall be direct bury 24 in. minimum below finished grade. Cable in conduit below roadways and walks shall be minimum 24 in. deep. Installation of cable in unit duct and/or conduit shall conform to Item 108. Installation of conduit shall conform to Item 110, as detailed on the Plans, and as specified herein.

- A. All conduit(s) under walks shall be pushed.
- B. Conduit size and fill requirements shall comply with Appendix C, conduit fill tables, of the NEC. It should be noted these are minimum requirements and larger conduit sizes or smaller fill requirements shall be used whenever specified or detailed on the drawings.
- C. Liquid tight flexible conduit shall be provided as a connection between each motor junction box (or any other piece of equipment subject to movement or vibration) and the rigid conduit system.
- D. Ream conduits only after threads are cut. Cut joints square to butt solidly into couplings. Where necessary to join two pieces of conduit, and it is impossible to use standard couplings, use 3-piece malleable iron conduit coupling. The use of running thread is prohibited. This applies to all rigid conduit installations, underground or otherwise.
- E. Make all joints in steel underground conduit watertight with approved joint compound. Temporarily plug conduit openings to exclude water, concrete, or any foreign materials during construction. Clean conduit runs before pulling in conductors.
- F. A run of conduit between outlet and outlet, between fitting and fitting, or between outlet and fitting shall not contain more than the equivalent of four quarter bends, including bends immediately at an outlet or fitting.
- G. Where conduits enter a box or fitting, provide a steel locknut and an insulated metallic bushing. Use this method to terminate conduit in panels, pull boxes, safety switches, etc.
- H. Provide NEMA four hubs for all conduit entries into enclosures rated NEMA 4, 4X to maintain NEMA 4, 4X rating.
- I. Do not run conduit below or adjacent to water piping.
- J. Run exposed conduits parallel with walls and at right angles to the building lines, not diagonally. Make bends and turns will pull boxes or cadmium plated or hot dipped galvanized malleable iron fittings and covers.

801036-3.19 INSTALLATION OF JUNCTION AND PULL BOXES.

Use only screws, bolts, washers, etc. fabricated from rust resisting metals for the supporting of boxes. Install pull boxes in runs of conduit such that a total of 360 degrees in bends is not exceeded. Junction boxes shall be installed at all points in conduit runs where taps or splices are located. Boxes required by code or need which are not detailed on the plans shall be considered incidental to the respective work item and will not be paid for separately.

801036-3.20 GROUNDING REQUIREMENTS.

Grounding shall conform to the following as applicable: The Contractor shall furnish and install all grounding shown on the Plans and/or as may be necessary or required to make a

complete grounding system as required by the latest National Electrical Code (NFPA 70) in force. The reliability of the grounding system is dependent on careful, proper installation and choice of materials. Improper preparation of surfaces to be joined to make an electrical path, loose joints, or corrosion can introduce impedance that will seriously impair the ability of the ground path to protect personnel and equipment and to absorb transients that can cause noise in communications circuits. The following functions are particularly important to ensure a reliable ground system:

- A. All products associated with the grounding system shall be UL listed and labeled.
- B. All bolted or mechanical connections shall be coated with a corrosion preventative, conductive grease and lubricant suitable for electrical connections and grounding connections, before joining; Sanchem Inc. "NO OX ID "A Special" compound; Burndy Penetrox E, or approved equal.
- C. Metallic surfaces to be joined shall be prepared by the removal of all non-conductive material, per 2011 National Electrical Code Article 250.12.
- D. Raceway fittings shall be made up tight to provide a permanent low impedance path for all circuits. Metal conduit terminations in enclosures shall be bonded to the enclosure with UL listed fittings suitable for grounding. Provide grounding bushings with bonding jumpers (from bushing to the respective ground connection/enclosure frame) for all metal conduits entering service equipment (meter bases, CT cabinet, service disconnects, service panelboards, main service breaker enclosure, etc.). Provide grounding bushings with bonding jumpers for all metal conduits entering an enclosure through concentric or eccentric knockouts that are punched or otherwise formed so as to impair the electrical connection to ground. Standard locknuts or bushings shall not be the sole means for bonding where a conduit enters an enclosure through a concentric or eccentric knockout.
- E. Furnish and install ground rods at all locations where shown on the Plans or specified herein. Ground rods for electrical installations shall be 3/4-inch diameter, 10 feet long, UL listed, copper clad with 10 mil minimum copper coating. Ground rods for fence grounding shall be 5/8-inch diameter, 8 feet long, UL listed, copper clad with 10 mil minimum copper coating. Top of ground rods shall be a minimum of 30 inches below finish grade unless otherwise noted on the plans. Ground rods shall be spaced as detailed on the Plans and in no case spaced less than one rod length apart.

All connections to ground rods and/or ground rings shall be made with exothermic weld type connectors: Cadweld by Erico Products, Inc., Solon, Ohio, (Phone 1-800-248-9353); Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (Phone 918-663-1440); Ultraweld by Harger, Grayslake, Illinois (Phone 1-800-842-7437), or approved equal. Exothermic weld connections shall be installed in conformance with the respective manufacturer's directions using molds as required for each respective application. Bolted connections will not be permitted at ground rods or at buried grounding electrode conductors. Grounding electrode conductors shall be bare stranded copper sized as detailed on the Plans.

- F. All connections, located above grade, between the different types of grounding conductors shall be made using UL listed double compression crimp type connectors or UL listed bolted ground connectors. For ground connections to enclosures, cases and frames of electrical equipment not supplied with ground lugs the Contractor shall drill required holes for mounting a bolted ground connector. All bolted ground connectors shall be Burndy, Thomas and Betts, Penn-Union, or approved equal. Tighten connections to comply with tightening torques in UL Standard 486A to assure permanent and effective grounding.
- G. All metal equipment enclosures, conduits, cabinets, boxes, receptacles, motors, etc. shall be bonded to the respective grounding system. Provide grounding bushings at all conduits entering service entrance equipment (meter bases, service disconnects, service panelboards, etc.) and distribution panels or load centers and ground wire from bushing to ground bus in the respective service entrance equipment or distribution panel.
- H. The equipment ground wire from equipment shall not be smaller than allowed by 2011 NEC Table 250.122 "Minimum Size Conductors or Grounding Raceway and Equipment." When conductors are adjusted in size to compensate for voltage drop, equipment grounding conductors shall be adjusted proportionately according to circular mil area. All equipment ground wires shall be copper either bare or insulated green in color. Where the equipment grounding conductors are insulated, they shall be identified by the color green and shall be the same insulation type as the phase conductors.
- I. Bond the main electrical service neutral to ground at the main service disconnect. Bond the service neutral to ground at one location only per the National Electrical Code. A grounding connection shall not be made to any neutral circuit conductor on the load side of the service disconnecting means, except as permitted by 2011 NEC 250.24.
- J. All exterior metal conduit, where not electrically continuous because of manholes, handholes, non-metallic junction boxes, etc., shall be bonded to all other metal conduit in the respective duct run, and at each end, with a copper bonding jumper sized in conformance with 2011 NEC 250.102. Where metal conduits terminate in an enclosure (such as a motor control center, switchboard, etc.) where there is not electrical continuity with the conduit and the respective enclosure, provide a bonding jumper from the respective enclosure ground bus to the conduit sized per 2011 NEC 250.102.
- K. Install grounding electrode conductors and/or individual ground conductors in Schedule 40 or Schedule 80 PVC conduit. Where grounding electrode conductors or individual ground conductors are run in PVC conduit, Do Not completely encircle conduit with ferrous and/or magnetic materials. Use non-metallic reinforced fiberglass strut support. Where metal conduit clamps are installed, use nylon bolts, nuts, washers, and spacers to interrupt a complete metallic path from encircling the conduit.

801036-3.21 TESTING.

The Contractor shall make at his own expense any tests of equipment, wiring, or insulation deemed necessary by any inspection department or by the Contractor Officer and shall

provide all apparatus, meters, materials, and labor required to make such tests. Contractor shall engage a factory authorized service technician to provide start-up, testing, adjustments, calibration, and checkout for each electrically operated gate. This shall be scheduled while the Contractor is still on-site and be coordinated such that all of the gates for the project are commissioned on a single site visit to reduce costs. All tests shall be conducted in the presence of the Owner and the Resident Engineer.

The Contractor shall test and demonstrate to the satisfaction of the Resident Engineer the following:

- A. That all power and control circuits are continuous and free from short circuits.
- B. That all circuits are free from unspecified grounds.
- C. That the insulation resistance to ground of all ungrounded conductors of multiple circuits is not less than 50 megohms.
- D. That all circuits are properly connected in accordance with applicable wiring diagrams.
- E. Test and adjust gate operator, controls, safety devices/features, hardware, and other operable components. Confirm that all circuits operate properly.
- F. Verify ground rod is installed at electric gate operator (per manufacturer requirements).
- G. Verify metal conduits terminated at gate operator are bonded to the gate operator housing.
- H. Verify ground rods are installed at each side of the gate.
- I. Verify card reader/keypad access control unit includes a ground wire to it. Record size and type.
- J. Verify Operation and Maintenance Manuals were furnished with equipment.
- K. Verify roller assembly has full contact with the drive rail on the gate.
- L. Verify the drive rail on the gate is level.
- M. Verify the gate is level.
- N. Where the drive rail has a splice, verify it is the proper type.
- O. Observe the drive rail and check to see if it has unusual wear.
- P. Release the gate operator braking mechanism and open and close the gate to confirm smooth and free operation over the full length of travel.
- Q. Verify the proximity sensor and the trip plate are installed properly and do not have an interference.

- R. Verify the gate operator beeper works properly and activates at upon gate operation.
- S. Interrupt power to the gate operator and confirm that the gate does not open upon restoration of power. The gate operator shall not activate for a power interruption as it does for a keypad access control unit signal input.
- T. Test gate and verify proper operation.
- U. Test remote transmitters and receiver and conform proper operation.
- V. Check operation of safety loops. Does gate remain open if vehicle stays on the exit loop?
- W. Check operation of free exit.
- X. Check to see if gate stops if an obstruction is detected.
- Z. Train the designated owner's personnel on procedures for operation, starting, stopping, troubleshooting, servicing, and maintaining equipment.
- AA. All tests shall be recorded, stating the test results, date, and field conditions.

METHOD OF MEASUREMENT

801036-4.1 The quantity of this item to be furnished and installed shall be measured for payment as a unit price per each for the electric slide gate operator and shall include all materials, equipment, detector loops, cable in unit duct or conduit, ducts, directional boring, grounding, labor, coordination, tools, connections, and other incidentals as required to perform the specified work and testing the units for satisfactory operation.

The quantity of sliding gates shall be paid under Item 162.

The quantity of power wiring and conduit from the respective power source to the safety switch at the gate operator will be paid for under Item 108.

All other wiring and conduit associated with the respective gate operator system shall be incidental to the respective item of work for which it is being installed and no additional compensation will be made.

BASIS OF PAYMENT

801036-5.1 Payment will be made at the Contract unit price per each for the electric sliding gate operator compensation for all materials, labor, and equipment required to perform the specified work and testing the units for satisfactory operation, and no additional compensation will be allowed.

Payment will be made under:

Item AR801036	Electric Gate Operator – Complete - per each.
Item AS801036	Electric Gate Operator – Complete - per each.

ITEM 80103X

COATING UPGRADE TO VINYL

DESCRIPTION

80103X-1.1 This item shall consist of the applying vinyl coating (green) over galvanized/coated for the fence and gate items such as fabric, ties, tension wires, gate posts, and all other related materials to fence and gates.

MATERIALS

80103X-1.2 Material shall conform with Item 162 of the Standard Specifications. Material shall be Type IV, Class B (polyvinyl chloride (PVC)-coated steel). When vinyl-coated fabric is used, the posts, fence framework, gates, tension wire, fabric ties, and fittings shall be vinyl-coated according to the same requirements as the coating of the fabric. All non-aluminum material shall be galvanized prior to vinyl coating. Vinyl coating shall be green.

METHOD OF MEASUREMENT

80103X-2.1 This item shall be paid for under the Lump Sum of FENCE COATING UPGRADE TO VINYL and GATE COATING UPGRADE TO VINYL

BASIS OF PAYMENT

80103X-3.1 Payments for under

Item AT801037 Fence Coating Upgrade to Vinyl - per lump sum.
Item AT801038 Gate Coating Upgrade to Vinyl - per lump sum.

PART 10

FENCING

ITEM 162

CHAIN-LINK FENCE

DESCRIPTION

162-1.1 Add to this Section:

"Install a new 6-foot chain link fence with a top rail as shown on the Plans.

"Install new manual slide gates with associated electric gate operators, power control equipment, and signs as shown on the Plans

"Install new vehicle and pedestrian walkway swing gates as shown on the Plans.

"Remove existing chain link fence and gates and shown on the Plans.

"If Additive Alternate No. 2 is awarded with associated AT pay items, fence shall include a vinyl-coated (green) update to the fence and gates."

MATERIALS

ADD: "For Additive Alternate No. 2 (AT pay items), material associated with the fence and gates including but not limited to the fabric and posts, shall be vinyl-coated (green) over galvanized/coated steel."

162-2.2 Barbed Wire – Delete this Section

162-2.3 Posts, rails, and brace – Add:

"Top rail shall be installed as shown in the Plans."

162-2.4 Gates. Revise Section title to read: "Swing Gates".

Add:

"Vehicle and pedestrian swing gates shall be as specified in Section 162-2.4. See Section 162-2.12 for sliding gates."

Add:

162-2.12 Sliding Gates.

Gate shall be suitable for the respective application and in accordance with the respective gate manufacturer's recommendation for the respective application. Gate construction shall comply with ASTM F 1184 05 for Type II Cantilever Slide, Class 2 steel frame and

aluminum frame gates using internal rollers. Metal pipe and tubing used in the gate construction shall be aluminum complying with ASTM F1043 for materials and protective coatings. The gate shall conform to ASTM F2200 Standard for Automated Vehicular Gate Construction. The gate shall be metal framed manufactured of aluminum, with cross bracing, sliding gate, cantilever type, capable of spanning the prescribed clear opening, 6 feet in height and have an enclosed roller assembly to be protected from freezing rain and snow. Gate shall have double tracks supported by gate posts on each side of the gate (interior and exterior). The gate frame shall be supported from the tracks by four, self-aligning, 4 wheeled, sealed lubricant, ball bearing truck assemblies.

The gate shall be covered with chain link fence fabric; 2-inch diamond mesh steel wire, interwoven, minimum 9-gauge thick, top selvage knuckle end closed, bottom selvage twisted tight barbed, or knuckle end closed. Fittings, sleeves, bands, clips, rail ends, tension bars, fasteners, and additional miscellaneous fittings shall be galvanized steel. Drive rail shall be galvanized steel (or as recommended by the respective gate operator manufacturer) properly sized, designed, and suitable for use with the respective gate operator and in accordance with the respective gate operator's recommendation. All portions of the gate, frame, fabric, posts, braces, fasteners, and miscellaneous items shall be galvanized. For Item AT801038, the fabric, gate posts, and related materials shall be vinyl-coated (green) over galvanized/coated in accordance with Item 162.

Gate posts shall be fabricated from round galvanized steel pipe with outside dimensions and minimum weight according to ASTM F 1184 for Type II Gate Opening Width: Over 12 feet but not over 30 feet. Gate posts shall be minimum 4-inch O. D. (round) Schedule 40 weighing 9.11 lbs/foot. Gate shall be a Fortress Structural Slide Gate as manufactured by Tymetal Corporation, Schuylerville, NY, Phone: 1-800-328-4283 or 518-692-9930, Fax: 518-692-9404, or approved equal.

Slide gates installed with an electric gate operator system shall include electric gate operators, power, and control equipment and shown in the Plans and as specified in Section 801036 Electric Operator – Complete, paid under Item AR801036 and AS801036.

Slide gates shall include warning signs and be furnished as shown in the Plans."

Add:

162-2.13 Security Chain and Padlock

The Contractor shall furnish a new security chain and padlock for each slide gate (whether electric or manual) and every vehicle and pedestrian swing gate. Chain shall be 5/16-inch stainless steel cut into a three-foot length, for Item AT801038, green vinyl coated. Padlock shall be solid brass body, corrosion resistant and ideal for harsh environments. Padlock dimensions shall be 2-inch shackle, 2-inch wide and 3/4-inch thick. Padlocks shall be keyed to match existing Airport padlock system (Best Access). The Contractor shall coordinate the furnishing of these padlocks with the Airport Owner."

CONSTRUCTION

162-3.2 Clearing the Fence Line – Add this Section:

"All new fence shall be placed along a level, smooth, finished grade. The Contractor shall correct any irregularities in the ground's surface prior to installation of the fence where the

irregular surface is located outside the grading limits shown on the Plans. Also, the Contractor shall re-grade the existing ground where indicated on the Construction Plans to furnish the specified maximum elevation. The cost for this grading shall be paid under Item 152. The grading shall not be limited to but shall be in addition to, the grading shown on the Plans or elsewhere specified."

162-3.3 Installing Posts – Add this Section:

"In paved areas, the post hole digging shall be completed to minimize any damage to pavements. Prior to pouring of concrete for posts, the pavement shall be neatly saw cut to the depth of the asphalt or concrete pavement as shown in the Plans. Saw-cutting, pavement protection, and concrete required for posts shall not be measured for payment but shall be included in the Contract unit price for fence. Any damaged pavement shall be replaced by the Contractor to the satisfaction of the Resident Engineer and at no additional costs to the Contract."

162-3.7 Installing gates. Add the following:

"See Section 162-3.13 for installation of sliding gates."

162-3.9 Existing Fence Connections – Add this Section:

"The furnishing and installing of new, additional or replacement terminal posts, line posts, end posts, fabric and brace spans and any other incidental modifications needed to provide an acceptable connection of the new fence to any existing fence, regardless of type of existing fence, as shown in the Plans or as directed by the Resident Engineer, shall not be paid separately, but shall be included in the Contract unit price for new fence."

162-3.11 Fence and Gate Relocation – Delete this Section.

Add:

162-3.13 Sliding gate construction.

The Contractor shall install the sliding gate as detailed on the Construction Plans and in accordance with the manufacturer's directions. The Contractor will be responsible for the construction of any and all concrete bases for the proposed gate operator, card reader, and associated equipment, to be paid separately under Pay Items AR801036 and AS801036.

162-3.14 Locate Existing Utilities-

The location, size, and type of material of existing underground and/or aboveground utilities that may be indicated on the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for

removal or adjustment where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility.

Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123. Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also, contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also, coordinate work with all aboveground utilities."

METHOD OF MEASUREMENT

162.4.1 Remove references to relocated fence.

Add:

"Class E Fence, 6' shall be measured by the unit of (linear) foot. Remove Class E Fence shall be measured by the unit of (linear) foot."

162.4.2 Remove references to relocated gates.

Add:

"Pay items for Class E Manual Slide Gate-30', Walkway Gates, Class E (5'), Class E Gate – 30', and Remove Gate shall be measured by the unit of each."

BASIS OF PAYMENT

162-5.1 Add:

Payment will be made under:

AR162230	Class E Manual Slide Gate -30' - per each.
AR162506	Class E Fence, 6' - per foot.
AR162530	Walkway Gates, Class E (5') - per each.
AR162630	Class E Gate – 30' - per each.
AR162900	Remove Class E Fence - per foot.
AR162905	Remove Gate - per each.

PART 11

DRAINAGE

ITEM 701

PIPE FOR STORM DRAINS AND CULVERTS

701-1.1 Add to this Section:

"Pipe shall be the type and diameter indicated on the plans and details."

METHOD OF MEASUREMENT

701-4.2 Delete this Section.

BASIS OF PAYMENT

Add:

"701-5.1 Payment will be made under:

"Item AR701524 24" RCP, Class IV - per foot.
Item AR701530 30" RCP, Class IV - per foot.
Item AR701536 36" RCP, Class IV - per foot."

ITEM 705

PIPE UNDERDRAINS FOR AIRPORTS

Revise Item 705 of the Standard Specifications as follows:

705-1.1 DESCRIPTION. Add the following:

"This item shall include the construction of infiltration basin to include perforated, Schedule 80 PVC piping with fabric sock, fine and coarse aggregate backfill material, separation fabric, and trench fabric envelope, at the locations shown in the Plans and as detailed in the Plans, and as directed by the Resident Engineer."

MATERIALS

705-2.1 General. Delete this Section.

705-2.2 Pipe. Delete this entire Section and replace with the following:

"705-2.2 Perforated PVC Pipe for Infiltration Basin.

"All pipe for Infiltration Basin shall be 12-inch diameter, Schedule 80 PVC, conforming to ASTM D-1785, manufactured from a PVC compound with a cell class 12454-B as defined in ASTM D-1784, with perforations meeting AASHTO M 278, Highway Underdrain Specifications.

"In accordance with FAA Buy American Preferences, required under this Project, all materials used for this item shall be made in USA from raw materials manufactured in the USA. The Contractor shall furnish a certification attesting to adherence to the Buy American Preferences Act."

705-2.5 Backfill. Delete this Section.

Add:

705-2.7 FABRIC SOCK FOR INFILTRATION TRENCH PIPE.

The sock for the infiltration pipe shall meet the requirements in Section 705-2.6 a. Type 1, in the Standard Specifications. The fabric sock shall not be measured separately but shall be included in the Contract unit price for infiltration basin.

In accordance with FAA Buy American Preferences, required under this Project, all materials used for this item shall be made in USA from raw materials manufactured in the USA. The Contractor shall furnish a certification attesting to adherence to the Buy American Preferences Act.

Add:

705-2.8 INFILTRATION TRENCH AND BASIN ENVELOPE.

The trench envelope for the pipe and aggregate material for the Infiltration Basin shall be wrapped in a nonwoven filter fabric envelope meeting the requirements of Section 705-2.6 b. Type 2, in the Standard Specifications. This fabric shall also be installed under the widened basin area located above the pipe trench. The filter fabric envelope shall not be measured separately but shall be included in the Contract unit price for infiltration basin.

In accordance with FAA Buy American Preferences, required under this Project, all materials used for this item shall be made in USA from raw materials manufactured in the USA. The Contractor shall furnish a certification attesting to adherence to the Buy American Preferences Act.

705-2.9 COARSE AGGREGATE BACKFILL FOR INFILTRATION BASIN.

Coarse aggregate backfill material shall be separate courses of CA-16 and CA-1, as detailed in the Plans, and shall conform to the requirements for IDOT Specifications. The aggregate backfill courses shall not be measured separately but shall be included in the Contract unit price for infiltration trench.

705-2.10 FINE AGGREGATE BACKFILL FOR INFILTRATION BASIN.

Fine aggregate backfill material shall be FA-2 and shall conform to the requirements for IDOT Specifications. The aggregate backfill courses shall not be measured separately but shall be included in the Contract unit price for infiltration trench.

CONSTRUCTION METHODS

Add this Section:

705-3.11 Infiltration Basin. The infiltration basin shall be constructed as detailed in the Construction Plans, and as specified for Item 705 of the Standard Specifications and these Special Provisions.

METHOD OF MEASUREMENT

705-4.1 Delete and revise this section the following:

"The area of Infiltration Basin to be measured shall be the area in square yards of the entire infiltration basin system which includes the PVC pipe and sock, and surrounding fine and coarse aggregate and fabric envelop, and the widened area with coarse aggregate, in place, completed, and approved by the Resident Engineer. Excavation for construction of infiltration basin shall be measured and paid for separately under item 152 Unclassified Excavation.

BASIS OF PAYMENT

705-5.1

In the first Paragraph, add:

"The Infiltration Basin shall be paid by the square yard of the entire system as at the contract unit price as specified in Section 705-4.1. No payment for PVC pipe and sock and surrounding fine and coarse aggregate and fabric envelop shall be made separately but be paid for in the contract unit price of Infiltration Basin.

"Payment will be made under:

"Item AR801006 Infiltration Basin - per square yard."

ITEM 751

MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES

Revise Item 751 of the Standard Specifications as follows:

DESCRIPTION

751-1.1 Add the following to the first paragraph:

"This item shall also meet IDOT Specifications and AASHTO M 199 (ASTM C-478) for pre-cast drainage structures. Fabrication shall also include pre-cast cutouts for storm sewer connections, as indicated in the Construction Plans, AND shall include pre-cast, "scored" blockouts for future field tile connections, as indicated in the Construction Plans and details. The Contractor shall submit dimensioned, plant fabrication shop drawings to the Project Engineer for review prior to any fabrication."

Add the following:

"Each new and adjusted manhole/inlet shall be furnished with a cast-in-place concrete collar of the size and dimensions, and with steel reinforcement, as shown on the Construction Plans."

MATERIALS

751-2.6 FRAMES, COVERS AND GRATES. Add the following:

"The new frames and grates for inlets and manholes shall be of the size and type specified and shall be paid under Item AR751567. Bolts and washers for bolted frame and lid/grate assemblies shall be stainless steel."

"In accordance with FAA Buy American Preferences, required under this Project, all materials used for this item shall be made in USA from raw materials manufactured in the USA. The Contractor shall furnish a certification attesting to adherence to the Buy American Preferences Act."

CONSTRUCTION METHODS

Add:

751-3.12 CONCRETE COLLAR AROUND MANHOLE/INLET. The concrete collar shall be constructed in accordance with Item 610. The forms for the concrete collar shall be straight and true. The concrete collar shall not be measured for payment but shall be included in the Contract unit price for Item 751.

METHOD OF MEASUREMENT

751-4.1 Add the following:

"Connections to proposed storm drains shall not be measured for payment separately but shall be included in the contract unit price of the structure pay item."

BASIS OF PAYMENT

751-5.1 Add the following:

"The number of manholes shall be paid at the Contract unit price per each, complete and accepted. These prices shall be full compensation for furnishing all materials and all preparation, excavation, backfilling, placing, and adjusting of the materials; furnishing and installation of such specials and connections to pipes and other structures as may be required to complete the item as shown in the Plans, and; for all labor, equipment, tools and incidentals necessary to complete the item.

"Payment will be made under:

Item AR751567 Manhole 7' - per each.

ITEM 752

CONCRETE CULVERTS, HEADWALLS, AND MISCELLANEOUS DRAINAGE STRUCTURES

Revise Item 752 of the Standard Specifications as follows:

DESCRIPTION

752-1.1 Add the following:

"This item shall also consist of the grating for end sections as detailed in the Construction Plans. The Contractor shall coordinate the grating dimensions - including bolt hole locations - shown in the Plans with the construction of the flared end section.

"This item shall also include the removal of existing flared end sections, at the locations shown on the Construction Plans or as directed by the Resident Engineer."

MATERIALS

Add:

752-2.7 GRATING FOR FLARED END SECTION. Grating dimensions shall be as shown in the Plans. Structural steel shall conform to Section 1006.04 of the IDOT Specifications. Galvanized steel pipe shall conform to Section 1006.27 (b) of the IDOT Specifications. Nuts, bolts, and washers shall be in accordance with Section 1006.27 (f) of the IDOT Specifications. All fabrication shall be completed prior to galvanizing. The Contractor shall coordinate the grating dimensions including bolt hole locations - shown in the Plans with the construction of the flared end section. In accordance with FAA Buy American Preferences, required under this Project, all materials used for this item shall be made in USA from raw materials manufactured in the USA. The Contractor shall furnish a certification attesting to adherence to the Buy American Preferences Act.

CONSTRUCTION METHODS

Add:

752-3.6 REMOVE END SECTION. Existing flared end section to be removed shall be removed and disposed of by the Contractor off-site. The open excavation shall be backfilled in accordance with Item 152. Measurement of this backfill and haul and disposal off-site shall not be made but shall be included in the Contract unit price for remove end section.

METHOD OF MEASUREMENT

Add the following:

752-4.1 "Gratings for FES shall be measured separately for payment by size of FES. "The quantity of Remove End Section to be paid for shall be the number of end sections removed completed, measured as each, and accepted by the Resident Engineer."

BASIS OF PAYMENT

752-5.1

Add the following:

"Payment will be made under:

Item AR752430	Precast Reinforced Conc. FES 30" - per each.
Item AR752436	Precast Reinforced Conc. FES 36" - per each.
Item AR752530	Grating for Conc. FES 30" - per each.
Item AR752536	Grating for Conc. FES 36" - per each.
Item AR752900	Remove End Section - per each."

PART 12

TURFING

ITEM 901

SEEDING

Revise Item 901 of the Standard Specifications as follows:

MATERIALS

901-2.1 SEED. Delete the seed mixture listed in the table and replace with the following:

<u>"Minimum Amount of Common Name</u>	<u>Pure Live Seed per Acre</u>
Shadow II Chewings Fescue - <i>Festuca commutate</i>	53 Pounds
Quattro Sheep Fescue - <i>Festuca ovina</i>	53 Pounds
Rhino Hard Fescue - <i>Festuca brevipila (F. longifolia)</i>	26 Pounds
Henry Hard Fescue - <i>Festuca brevipila (F. longifolia)</i>	26 Pounds
Sea Fire Slender Creeping Red Fescue - <i>Festuca rubra</i>	26 Pounds
Kent Creeping Red Fescue - <i>Festuca rubra, subsp. rubra</i>	26 Pounds
Gulf Annual Rye Grass - <i>Lolium multiflorum</i>	<u>10 Pounds</u>
Total	220 Pounds per Acre"

Delete the third and fourth Paragraphs.

Add the following:

"Planting times shall be between August 20 and October 20. If fall planting is not possible, the mixture may be planted between April 1 and June 1. Seeding of permanent grass between June 1 and August 20 will not be permitted. If planted in the spring, the Contractor shall furnish additional measures beyond that otherwise required in these Special Provisions to prevent weed growth as recommended by a registered nurseryman at no additional cost to the Contract.

"A sample of selected seed species shall be made available on request to the Resident Engineer for viability testing by the tetrazolium trichloride method, not less than 21 calendar days prior to planting.

"Seed mixtures shall contain the proportion of seed of individual species indicated in the planting design. Changes in seed mixtures must be approved by the Project Engineer.

"All seeds shall be guaranteed by the Contractor to be true to name. All seeds shall have the proper pre-planting treatments, including stratification, scarification and/or inoculation to promote good germination and growth, prior to any seeding.

"All seedings shall be planted at the specified rates, utilizing the specified species unless otherwise authorized by the Project Engineer."

901-2.2 LIME. Replace this Section with the following:

"901-2.2 SOIL MODIFICATION. Based upon the Project Engineer's testing for the on-site topsoil, the Contractor shall introduce the following new elements into the soil when preparing the topsoil layer furnished in Item 905:

- "❶ Elemental Sulfur shall be added at the rate of thirty (30.0) pounds per 1,000 square feet of topsoiled area.
- "❷ Gypsum shall be added at the rate of fifty (50.0) pounds per 1,000 square feet of topsoiled area.
- "❸ Ammonium Phosphorus 11-52-0 shall be added at the rate of two (2.0) pounds per 1,000 square feet of topsoiled area.
- "❹ Sulfate of Potash 0-0-50 shall be added at the rate of five (5.0) pounds per 1,000 square feet of topsoiled area.

"These elements shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. The elements shall be provided in a suitable form and shall be incorporated to a minimum depth of three (3.0) inches, prior to placement of fertilizer and seed.

"All granular elements that are applied to an existing turf must be watered-in immediately and thoroughly unless they are applied on a rainy day. All watering shall be incidental to seeding.

"All soil modification shall be incidental to seeding."

901-2.3 FERTILIZER. Delete the last Paragraph and the nutrient ratio table in this Section and replace with the following:

"The Contractor shall apply a slow-release Nitrogen (N) fertilizer at the following ratio:

- "❑ Slow-release Nitrogen (N) at four (4.0) pounds per 1,000 square feet of topsoiled area.

"All granular fertilizers that are applied to an existing turf must be watered-in immediately and thoroughly unless they are applied on a rainy day. All watering shall be incidental to seeding.

"All fertilizer shall be incidental to seeding."

CONSTRUCTION METHODS

901-3.1 ADVANCE PREPARATION AND CLEANUP. Add the following as the first Paragraph:

"ALL perennial weeds and spontaneous vegetation shall be eliminated within the seedbed prior to seeding, using mowing/raking and herbicide. Herbicides used for weed removal shall be as recommended by the seed producer. Based upon actual conditions, it may be necessary for this weed removal to begin up to eight weeks before planting. When all

vegetation is dead, the soil shall be tilled and otherwise prepared for planting as specified herein. Weed removal prior to acceptance of the lawn shall be incidental to the Contract."

Add the following sentence to the second Paragraph:

"Soil shall be prepared to have clods no more than 1 ½ inches on any side to ensure adequate seed-soil contact."

Add the following paragraphs:

"Seed shall not be placed on ground that is frozen or in any way in a condition that is detrimental to the seed.

"Areas shall be de-watered if necessary to accomplish any specified plantings. The method of de-watering shall be approved by the Resident Engineer.

"Final grading and site preparation must be inspected and approved by the Resident Engineer prior to any planting.

"Seedbed preparation shall commence as soon as practicable prior to planting. After preparation, these areas shall be protected from erosion.

"The proposed seeding method shall be stated by the Contractor. The seeding method shall result in a uniform distribution and complete coverage of the entire area to be seeded. If seed drilling is proposed, the seeder shall have an adjustable gate opening provided uniform flow and shall drop the seed directly into place on the prepared seed bed. If the broadcast method is used, within eight hours of seeding, all seeded areas should be rolled at right angles to the slope with a roller, cultipacker or hand tamped to compact the seedbed. Any areas broadcasted shall be sufficiently rolled or tamped to assist proper germination. All seeding equipment shall be calibrated to ensure the proper flow of seeds to deliver the specified quantities. The Contractor shall use only seeding equipment that is designed to plant grasses.

"All seeding shall be provided within the planting seasons stated in Section 901-2.1, unless season mixes are prior approved by the Project Engineer and conditions are acceptable for seeding as noted in Section 901-2.1.

"Measures to protect planted materials from grazing damage by wildlife shall be recommended and provided by the Contractor.

"Installation and maintenance of erosion control measures pertinent to seeding shall be the responsibility of the Contractor. Erosion control measures which may be damaged and/or removed by the Contractor during planting and related work shall be replaced by the Contractor.

"If on-site conditions change or are otherwise altered due to circumstances beyond the control of the Contractor, the Owner, and/or the Project Engineer, such that the Specifications and/or drawings are no longer valid, the Contractor shall notify the Resident Engineer so that remedial measures may be undertaken."

901-3.4 MAINTENANCE OF SEEDED AREAS. Add the following:

"It is essential that the seeds planted herein are watered for one to two months after planting to increase germination rates and seedling survival. The Contractor shall regularly water the seedlings to promote proper germination. It is the Contractor's responsibility to regularly inspect the growth and furnish watering when required. All inspection and watering shall be incidental to seeding."

BASIS OF PAYMENT

901-5.1 Add the following:

"Payment will be made under:

"Item AR901510 Seeding - per acre."

ITEM 905

TOPSOILING

Revise Item 905 of the Standard Specifications as follows:

DESCRIPTION

905-1.1 Add the following:

"Topsoil shall be from off-site or from on-site and created by stripping of topsoil from within the grading limits shown in the Plans and placed in its final position or stockpiled for re-distribution at locations designated by the Contractor and approved by the Resident Engineer. No separate payment will be made for furnishing off-site material. Stripping of the topsoil and placing in-place and/or in temporary stockpiles shall be paid under Item AR152410, Unclassified Excavation. Any loading and haul or re-distribution of topsoil material within the overall Project, will not be measured for payment, but shall be incidental to the Contract unit prices for Unclassified Excavation.

MATERIALS

905-2.1 TOPSOIL.

Add the following to the first paragraph:

"As specified in Item 901, the acceptable pH range is 5.5 to 6.5. See Item 901 for additional topsoil specifications, including modification of existing soils used as topsoil."

Replace the last sentence of the first Paragraph with the following:

"At least 90 percent of the material shall pass the No. 10 sieve."

CONSTRUCTION REQUIREMENTS

905-3.4 PLACING TOPSOIL. Delete the first sentence of the first Paragraph and replace with the following:

"The topsoil shall be spread on the prepared areas to receive seeding. The resulting topsoil layer shall be at least four (4) inches in depth; at the outer limits the 4-inch depth can include the existing topsoil layer not disturbed by the construction."

METHOD OF MEASUREMENT

905-4.1 Revise this section:

"Topsoiling shall be measured for payment in square yards for a 4-inch thickness of topsoil placed and accepted by the Engineer. No separate measurement will be made regarding the soil source (whether on-site or off-site)."

905-4.2 Delete this Section.

BASIS OF PAYMENT

905-5.1 Add the following:

"Payment will be made under:

"Item AR905530 Topsoiling - per square yard."

ITEM 908

MULCHING

DESCRIPTION

908-1.1 Add the following:

"Mulch shall be straw erosion control blanket as specified herein."

MATERIALS

908-2.1 Revise this Section as follows:

Delete subparagraphs a, b, c., d, and e.

Add the following:

"f. Mulch shall be Erosion Control Blanket as follows:

Knitted Straw Mat

Straw mat shall be made of a 100% straw-fiber matrix stitched with photodegradable thread between lightweight, photodegradable polypropylene top and bottom nets. Material shall not contain any weed seed or chemical additives. Straw mat shall be North American Green EroNet S150, or American Excelsior Company Curlex II CL, or approved equal. The manufacturer shall furnish a certification with each shipment of blanket stating the number of rolls furnished and that the material complies with the requirements of this Special Provision and all Contract requirements for materials, including the Buy American Preferences Act (49 U.S.C. § 50101).

Stakes for Erosion Blanket

The mat shall be secured with biodegradable stakes acceptable to the Engineer. Metal staples will not be allowed. Separate measurement of the stakes shall not be made but shall be incidental to the erosion blanket."

CONSTRUCTION METHODS

908-3.1 Mulching. Add the following:

"Blanket shall be securing using biodegradable stakes as specified, at the spacing recommended by the blanket manufacturer."

BASIS OF PAYMENT

908-5.1 Add the following:

"Payment will be made under:

"Item AR908516 Mulching - per square yard."

PART 13

LIGHTING INSTALLATION

ITEM 108

INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

Revise Item 108 of the Standard Specifications as follows:

108-1.1 DESCRIPTION. Add the following:

"This Item of work shall consist of the installation (plowing, trenching, directional-boring, or installing in ducts or raceways) of cable for electric gate operators at the locations shown on the Plans and in accordance with these Specifications. This item shall include cable in unit duct and cable in galvanized rigid steel conduit where noted on the Plans and specified herein.

"In areas where there is a congestion of buried cable or where the proposed cable crosses an existing cable, the Contractor will be required to trench the proposed cable into place. In all other areas, the Contractor has the option to either trench or plow the proposed cable in unit duct into place.

"When crossing existing circuits, the Contractor will be required to hand dig the trenches for the proposed cable."

Add:

108-1.2 REFERENCES.

- A. ASTM Specification B3 - Standard Specification for Soft or Annealed Copper Wire.
- B. ASTM Specification B8 - Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft.
- C. FAA Advisory Circular 150/5345 7E, (or latest edition) "SPECIFICATIONS FOR L 824 UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS.
- D. FAA AC No. 150/5345-53D "AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM" (most current issue) and AC150/5345-53D, AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM Appendix 3 Addendum.
- E. FAA AC No. 150/5370-2F (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
- F. Federal Specification A-A-59544 Cable and Wire, Electrical (Power, Fixed Installation).
- G. NFPA 70 - National Electrical Code (most current issue in force).
- H. NFPA 70E - Standard for Electrical Safety in the Workplace.

- I. OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures.
- J. UL Standard 44 - Thermoset-Insulated Wires and Cables.
- K. UL Standard 83 - Thermoplastic-Insulated Wires and Cables. L. UL Standard 854 - Service Entrance Cables.

Add:

108-1.3

SHOP DRAWINGS. The Contractor shall furnish shop drawings for approval before ordering equipment and/or materials. Shop drawings are required for each wire, conductor, and/or cable type to be used on the project. Note: Shop drawings that are submitted that do not include all of the following listed requirements will be rejected and will require resubmittal. Contractor shall use the following as a check list and shall verify all information noted below is included with the respective gate shop drawing prior to submitting the shop drawing for review. Shop drawings shall be clear and legible. Copies that are illegible will be rejected. Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus four (4) copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. Certification of compliance with the AIP (Airport Improvement Program) Buy American Preferences for all materials and equipment. Do not submit ARRA (American Recovery and Reinvestment Act) certification as a substitute for certification of compliance with the AIP Buy American Preferences. Shop drawings submitted without certification of compliance with the Airport Improvement Program Buy American Preferences or without certification of manufacture in the United States of America in accordance with the AIP Buy American Requirements will be rejected. See the FAA website at: http://www.faa.gov/airports/aip/buy_american/ for more information on the Airport Improvement Program Buy American Preferences requirements.
- B. In order to expedite the shop drawing review, inspection and/or testing of materials, the Contractor shall furnish complete statements to the Project Engineer as to the origin, composition, and manufacturer of all material 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.
- C. Indicate the pay item number for each respective cable, cable in unit duct, cable in duct, and/or cable in conduit.
- D. Shop drawings shall include wire/conductor/cable cut sheets with type, size, specifications, ETL or UL listing, manufacturer, and catalog or part number.
- E. Shop drawings for cable in unit duct items shall include cut sheets with type, size, specifications, ETL or UL listing, manufacturer, and catalog or part number.
- F. Where cable is required to have color-coded insulation, provide information on the color coding for the respective conductors.

EQUIPMENT AND MATERIALS

108-2.1 GENERAL. Add the following:

"All cable shall be FAA approved or UL-listed as suitable for installed application. Cable furnished on this project shall comply with the requirements of the "AIP Buy American Preferences". All conductors shall be copper."

108-2.2 CABLE. Revise this Section to read as follows:

"XLP-USE Wire: Cable shall comply with UL Standard 44, UL Standard 854, and Federal Specification A-A- 59544. Conductor shall be concentric-strand, soft Copper, conforming to ASTM B8 and Underwriters' Laboratories Standard UL44 for Rubber Insulated Wires. Insulation shall be rated for 600-Volt. Insulation shall be cross-linked polyethylene conforming to Underwriters Laboratories Requirements for Type USE-2 insulation. Cable shall be UL-listed and marked USE-2. Cable shall be manufactured in the United States of America to comply with the Airport Improvement Program Buy American Requirement.

"Item AR108051: Power Cable in Unit Duct shall consist of 4-1/C #8 AWG, XLP-USE, 600-Volt cables in 1.25-inch (minimum) Schedule 40 PVC conduit or Schedule 40 HDPE Conduit. Conductor insulation for 120/208 VAC, single phase, 3-wire with ground circuits shall be color-coded: Phase A – Black, Phase B – Red, Neutral – White, and Ground – Green. Schedule 40 PVC or Schedule 40 HDPE Conduits shall conform to the requirements of Item 110 but shall be included with Item AR108051.

"Item AR108052: Power Cable in Conduit shall consist of 4-1/C #8 AWG, XLP-USE, 600-Volt cables in 1.5 inch (minimum) Galvanized Rigid Steel Conduit. Conductor insulation for 120/240 VAC, single phase, 3-wire with ground circuits shall be color-coded: Phase A – Black, Phase B – Red, Neutral – White, and Ground – Green. Galvanized Rigid Steel Conduit shall conform to the requirements of Item 110 but shall be included with Item AR108052.

"Color-coding: Color-code phase and neutral conductor insulation for No. 6 AWG or smaller. Provide colored marking tape or colored insulation for phase and neutral conductors for No. 4 AWG and larger. Insulated ground conductors shall have green colored insulation for all conductor sizes (AWG and/or KCMIL) to comply with NEC 250.119. Neutral conductors shall have white colored insulation for No. 6 AWG and smaller to meet the requirements of NEC 200.6. Standard colors for power wiring and branch circuits for 120/240 VAC, 1-Phase, 3-Wire system shall be Phase A – Black, Phase B – Red, Neutral – White, and Ground – Green. Standard colors for power wiring and branch circuits for 208/120 VAC, 3-Phase, 4-Wire system shall be Phase A – Black, Phase B – Red, Phase C – Blue, Neutral – White, and Ground – Green."

108-2.3 BARE COPPER WIRE (COUNTERPOISE). Revise this section to read:

"Bare copper counterpoise wire will not be required on this project under Item 108."

108-2.4 CABLE CONNECTIONS. Add the following to this Section:

"The Contractor shall use a cable stripper/penciler whenever cable connections are made.

"All breaks in the unit duct shall be sealed by shrink kits.

"All below grade splices shall be installed in splice cans, handholes, or manholes. Splice cans shall be L-867, Class IA, Size B (12 in. diameter), 24 in. deep, with 3/8 in. thick, galvanized steel cover and stainless-steel bolts. Larger size splice cans shall be provided, as applicable, for specific equipment applications or manufacturer's recommendations, and/or where detailed on the Plans. Splice cans located in areas subject to heavy aircraft or vehicle loading shall be L-868 type. The Engineer shall approve all splice locations before work commences. The furnishing and installing of splice cans for new homerun cables shall be incidental to the respective cable pay item, and no additional compensation will be allowed."

108-2.12 LINE MARKING TAPE. Add the following:

"Line marking tape shall be furnished as specified."

108-2.14 UNIT DUCT. Add the following:

"Standard sizes of smooth wall polyethylene duct shall conform to the dimensional requirements specified below:

Nominal Duct Size	Nominal Inside Diameter	Nominal Standard Wall	Nominal Outside Diameter *
3/4"	0.910"	0.070"	1.050"
1"	1.145"	0.085"	1.315"
1-1/4"	1.440"	0.110"	1.660"
1-1/2"	1.650"	0.125"	1.900"
2"	2.065"	0.155"	2.375"
2-1/2"	2.449"	0.213"	2.875"
3"	3.048"	0.226"	3.500"
4"	4.000"	0.250"	4.500"

* Dimensions include allowance for duct eccentricity."

CONSTRUCTION REQUIREMENTS

108-3.1 GENERAL. Add the following to this Section:

"The cable quantities as shown on the Construction plans are based on straight-line measurement. All vertical lengths and other cable lengths that are specified or are required by the installation, such as slack or waste, will not be measured for payment.

"If the Contractor wishes to lay cable on a line other than that shown on the Plans, he shall obtain approval of the Resident Engineer/Resident Project Representative before doing so. Any additional cable needed because of such change will be at the Contractor's expense.

"Only cable in unit duct may be plowed or directional-bored.

"The Contractor shall identify all existing underground utilities located within the area where the proposed cables are being installed and will take all precautions to protect these utilities from damage. Care shall be taken so as not to damage any existing circuits. Any existing circuits damaged shall be immediately repaired to the satisfaction of the Engineer and/or the respective utility or owner where applicable. Any underground utility damaged will be repaired or replaced at the Contractor's own expense. Any repairs of existing cables

will be considered incidental to the contract, and no additional compensation will be allowed.

"Contractor shall coordinate work and any power outages with the Airport Director or respective Airport personnel. Any shutdown of existing systems shall be scheduled with and approved by the Airport Director prior to shut down. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow U.S. Department of Labor Occupational Safety & Health Administration (OSHA) 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures, including, but not limited to, 29 CFR Section 1910.147 The Control of Hazardous Energy (lockout/tagout).

"Contractor shall comply with the requirements of FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".

"Contractor shall comply with the applicable requirements of NFPA 70E - Standard for Electrical Safety in the Workplace.

"All temporary installations shall comply with National Electrical Code Article 590 - "Temporary Installations". The contractor shall secure, identify, and place temporary exposed wiring in conduit, duct, or unit duct to prevent electrocution and fire ignition sources in conformance with the requirements of FAA AC 150/5370-2F, Part 218, Paragraph C.

"All cables installed by the Contractor shall be properly labeled and tagged at all points of access (handholes, manholes, terminal panels, control panels, and the respective wireway in the vault).

"All changes to the airfield lighting system shall be documented by the Contractor and provided to the Resident Engineer.

"The existing cables associated with airfield lighting and/or equipment removals, relocations, and/or cable or duct replacements shall be abandoned in place unless it conflicts with the installation of the airfield light, sign, duct, cable, handhole, manhole, site work, pavement, fencing, or other work, then it shall be disconnected, removed, and disposed of off the site at no additional cost to the Contract. Contractor may remove abandoned cables at no additional cost to the Contract and shall have the salvage rights to abandoned cables."

108-3.2 INSTALLATION IN DUCT OR CONDUIT. Add the following to this Section:

"The unit duct will be run continuous through all ducts and conduits unless noted otherwise on the Plans for a specific application.

"Where cable in unit duct enters a handhole or manhole with a continuous duct bank system to the termination point (such as from a handhole to the vault or between handholes and/or manholes) the unit duct will not be required for the respective cable."

108-3.3 INSTALLATION OF DIRCT-BURIED CABLES IN TRENCHES.

a. Trenching- Add the following to this Subsection:

" Cable installed in cultivated fields shall be installed a minimum of 42 inches below grade. "

"Any and all trenches and disturbed areas will be backfilled to a smooth grade to the satisfaction of the Resident Engineer. All trench settlement shall be corrected for a period of one year. In turf areas, the top 4-inches of backfill shall be topsoil. Where noted in the Plans, the top 6-inches of the trench shall be backfilled with IDOT CA-6 crushed aggregate, compacted to the satisfaction of the Resident Engineer, and furnished as an incidental cost to Item 108. Restoration, grading, and seeding of areas disturbed during the installation of the proposed cable will be incidental to the respective 108 Pay Item."

108-3.4 CABLE MARKERS. Add the following as the first sentence: "Cable, cable in duct, and cable in unit duct installed under this item shall be marked with concrete cable markers as specified in these Specifications."

108-3.5 SPLICING. Add the following:

"In-line connections for existing cables cut during construction shall be repaired with the cast splice kit. The Contractor shall have a minimum of two splice kits on the job site at all times for emergency repairs. Cast splice kits shall be specified in paragraph (a) of Item 108-2.4. Splice cans shall be provided for existing cables cut and repaired for each splice in cables not to be abandoned. Where a splice can is not readily available at the time of the cable damage, splice markers shall be temporarily installed over each splice in cables not to be abandoned, then these splices shall later be replaced with new splices in an L-867 splice can.

"The Contractor shall use a cable stripper/penciller whenever cable connections are made. All splices and connections will be considered incidental to the respective cable."

Add:

108-3.12 SEPARATION OF HIGH-VOLTAGE AND LOW-VOLTAGE WIRING.

Low-voltage wiring shall maintain separation from high-voltage wiring. Low-voltage wiring and high-voltage wiring shall not be installed in the same raceway, duct, handhole, manhole, or junction box. Where necessary provide split flexible duct around low voltage cables located in a handhole with high voltage cables, to isolate the cables from possible contact with each other.

Add:

108-3.13 IDENTIFICATION OF CABLES. At electrical handholes and manholes, identify and label each cable originating in the vault with respect to the system or device served. Provide identification tags rated suitable for the respective locations with permanent markings.

METHOD OF MEASUREMENT

Add:

108-4.3 Revise this section to read as follows:

"The footage of cable installed in unit duct, duct, conduit, and/or raceway to be paid for shall be the number of (linear) feet of cable installed in unit duct, duct, conduit, or raceway measured in place by direct measurement, completed, ready for operation and accepted as satisfactory with no allowance being made for overrun due to slack, turns, splices, etc. Measurement of vertical runs shall not be measured but included in the Contract unit price for cable in duct. Slack cable required to perform cable splices outside of the respective splice cans, handholes, or manholes, shall be incidental to the respective cable pay item and no additional measurement for payment will be made. Cable will be measured for payment from the respective power source to the respective safety switch at the gate operator or termination point in the field. Galvanized rigid steel conduit and fittings associated with the transition of below grade duct to above grade conduit will be considered incidental to Item AR108051 and no additional compensation will be allowed. Galvanized rigid steel conduit and fittings associated with Item AR108052 will be included with the unit price for Item AR108052 and no additional compensation will be allowed."

BASIS OF PAYMENT

108-5.1 Add the following:

"Payment will be made at the Contract unit price per (linear) foot of cable in unit duct, duct and/or conduit completed and accepted by the Engineer. This price shall be full compensation for furnishing all materials, and for all preparation, assembly, and installation of these materials; for all splices and connections; for all plowing, trenching, directional-boring, coring of manholes or handholes, installation in ducts, raceways, conduits, splice cans, handholes, or manholes, and for all excavation and backfilling; for all site restoration (topsoiling, grading, seeding, mulching) and pavement restoration; and for all labor, equipment, tools, and incidentals necessary to complete this Item.

"Payment will be made under:

"Item AR108051	Power Cable in Unit Duct - per foot.
Item AR108052	Power Cable in Conduit - per foot."

ITEM 110

INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT

Revise Item 110 of the Standard Specifications as follows:

DESCRIPTION

110-1.1 Add the following:

"This item of work shall consist of the installation of all proposed conduits and ducts as shown on the Construction Plans."

Add:

110-1.2 SHOP DRAWINGS.

The Contractor shall furnish shop drawings for approval before ordering equipment and/or materials. Shop drawings are required for each type of conduit or duct to be used on the project. Note: Shop drawings that are submitted that do not include all of the following listed requirements will be rejected and will require resubmittal. Contractor shall use the following as a check list and shall verify all information noted below is included with the respective gate shop drawing prior to submitting the shop drawing for review. Shop drawings shall be clear and legible. Copies that are illegible will be rejected. Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus four (4) copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. Certification of compliance with the Airport Improvement Program Buy American Requirement and the Buy American Act for all materials and equipment.
- B. In order to expedite the shop drawing review, inspection and/or testing of materials and equipment, the Contractor shall furnish complete statements to the Project Engineer as to the origin and manufacturer of all materials and equipment 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 and equipment.
- C. Indicate the pay item number for each respective conduit or duct.
- D. Shop drawings shall include conduit and/or duct cut sheets with type, size, specifications, UL listing, manufacturer, and catalog or part number.
- E. Provide certification that the respective steel conduits used on this project are manufactured from 100 Percent domestic steel.

EQUIPMENT AND MATERIALS

110-2.2 STEEL CONDUIT. Replace this Section with the following:

"Rigid Steel Conduit and fittings shall be hot-dipped, galvanized, UL-listed, and produced in accordance with UL Standard 6 - Rigid Metal Conduit and ANSI C80.1 - Rigid Steel Conduit, Zinc Coated. Couplings, connectors, and fittings for rigid steel conduit shall be threaded,

galvanized steel or galvanized, malleable iron, specifically designed and manufactured for the purpose. Fittings shall conform to ANSI C80.4 - Fittings Rigid Metal Conduit and EMT and UL 514B - Conduit, Tubing, and Cable Fittings. Set screw type fittings are not acceptable. Steel used to manufacture conduits shall be 100 percent domestic steel. Contractor shall provide certification that the respective steel conduits used on this project are manufactured from 100 percent domestic steel.

"Miscellaneous Fittings. Fittings shall be suitable for use with conduits and ducts supplied. All fittings for use with rigid metal conduit shall be threaded. Set screw-type fittings are not acceptable. All conduit bodies, fittings, and boxes installed in classified hazardous locations (Class I, Division 1 or 2, Group D) shall be suitable for use in Class I, Division 1, and Group D locations. Fittings shall be as manufactured by Appleton, Crouse-Hinds, Hubbell-Killark, O-Z/Gedney, or approved equal."

110-2.3 PLASTIC CONDUIT. Add the following to this Section:

"Conduits shall be suitable for underground applications encased in concrete or direct burial, and suitable for exposed applications aboveground.

- A. Conduits for directional boring shall be Schedule 40 PVC or Schedule 80 PVC conduit, UL-listed, rated for 90/C cable-conforming to NEMA Standard TC-2 and UL 651 and suitable for directional boring installation, Schedule 40 HDPE or Schedule 80 HDPE conduit, UL-listed, conforming to NEMA Standard TC-7 and UL 651B and suitable for directional boring installation, or Wall Type SDR 9, SDR 11, or SDR 13.5 HDPE conduit manufactured in accordance with ASTM D-3350 (Specification of Polyethylene Plastics Pipe and Fittings Materials) and ASTM F2160 (Standard Specification for Solid Wall, High-Density Polyethylene Conduit Based on Controlled Outside Diameter), and suitable for directional boring installation. Per NEC 300.5 (K), raceways installed using directional boring equipment shall be approved for the purpose. Provide manufacturer's literature confirming the respective duct is suitable for directional boring with the respective Shop Drawing submittal.
- B. Conduits for direct burial in earth shall be PVC Schedule 40 (minimum wall thickness), UL-listed, rated for 90/C cable-conforming to NEMA Standard TC-2 and UL 651, listed suitable for direct burial in earth, or HDPE Schedule 40 (minimum wall thickness), conforming to NEMA Standard TC-7 and UL 651B, or HDPE SDR 13.5 (minimum wall thickness) manufactured in accordance with ASTM D-3350 (Specification of Polyethylene Plastics Pipe and Fittings Materials) and ASTM F2160 (Standard Specification for Solid Wall, High-Density Polyethylene Conduit Based on Controlled Outside Diameter). Conduits shall be suitable for direct burial in earth and/or concrete encasement."

CONSTRUCTION METHODS

110-3.1 GENERAL. Add to this Section:

"The proposed conduits and ducts shall be constructed at the locations and in accordance with the details shown on the Construction Plans. Ducts shall be installed 24 inch minimum below grade. Ducts located in area subject to farming shall be 42 inch minimum below grade. Where detailed on the Plans or where required to avoid obstructions, ducts shall be buried deeper.

"The Contractor will determine if there is a conflict between the installation of the proposed electrical ducts and any existing utilities. He will make all necessary adjustments in depth of installation to avoid any and all proposed underground improvements."

110-3.7 RESTORATION. Add the following to this Section:

"Any and all trenches and disturbed areas will be backfilled and restored to a smooth grade and seeded to the satisfaction of the Engineer. All trench settlement shall be corrected for a period of one year. Restoration, grading, and seeding of areas disturbed during the installation of the proposed ducts will be incidental to the respective pay item for which the duct is installed. The fertilizing and seeding will be completed in accordance with Items 901 and 908 but will be incidental to the respective pay item for which the duct is installed."

Add:

110-3.8 LOCATING EXISTING UNDERGROUND UTILITIES AND CABLES.

The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment, where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility. Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123. Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

Contractor shall locate and mark all existing cables within ten (10) feet of proposed excavating/trenching area. Any cables found interfering with proposed excavation or cable/trenching shall be hand dug and exposed. Any damaged cables shall be immediately repaired to the satisfaction of the Resident Engineer at the Contractor's expense. The Resident Engineer and Owner shall be notified immediately if any cables are damaged.

Payment for locating and marking underground utilities and cables will not be paid for separately but shall be considered incidental to the respective duct installation.

METHOD OF MEASUREMENT

110-4.1 Delete this Section.

Add:

110-4.2 The quantity of conduit and/or duct associated with Items AR108051 and AR108052 shall not be measured for payment under this item. Conduit/duct for power cables shall be incidental and/or included with the respective Item 108 pay item.

Add:

110-4.3 The quantity of conduit and/or duct for the gate operators shall not be measured for payment. This shall be incidental to the respective item of work for which it is installed, including Electric Gate Operator – Complete.

BASIS OF PAYMENT

110-5.1 Delete this Section in its entirety and replace with the following:

“All costs for furnishing all materials and for all preparation, assembly, and installation of these materials; for all sawing and pavement removal; for all excavation and backfilling with aggregate backfill, earth backfill, topsoil; and for all labor, equipment, tools, and incidentals necessary to complete this item is considered incidental to the item of work for which the duct is being installed. Payment for the furnishing and installation of conduit and/or duct for the gate operators shall not be measured for payment and shall be incidental to the respective item of work for which it is installed (including, but not limited to, Item AR108051 Power Cable in Unit Duct, Item AR108052 Power Cable in Conduit, Item AR801036 and AS801036 Electric Gate Operator – Complete.”

REFERENCES

Add:

- A. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
- B. ANSI C80.4 - Fittings Rigid Metal Conduit and EMT.
- C. ASTM D3350 - Specification of Polyethylene Plastics Pipe and Fittings Materials.
- D. ASTM F2160 - Standard Specification for Solid Wall, High-Density Polyethylene Conduit Based on Controlled Outside Diameter.
- E. NEMA TC-2 - Electrical Plastic Tubing and Conduit.
- F. NEMA TC-3 - Fittings Rigid PVC Conduit and Tubing.
- G. NEMA Specification TC-7 - Smooth-Wall Coilable Polyethylene Electrical Plastic Conduit.
- H. NFPA 70 - National Electrical Code (NEC), most current issue in force.
- I. UL Standard 6 - Rigid Metal Conduit.
- J. UL Standard 514B - Conduit, Tubing and Cable Fittings.
- K. UL Standard 651 - Schedule 40 and 80 Rigid PVC Conduit.
- L. UL Standard 651B - Standard for Continuous Length High-Density Polyethylene (HDPE) Conduit.

{End of Special Provisions}



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