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Letting March 8, 2024

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. WA076
Waukegan National Airport
Waukegan, Illinois
Lake County
Illinois Project No. UGN-4848
SBG Project No. 3-17-SBGP-XX**



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 March 8, 2024, 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. WA076
Waukegan National Airport
Waukegan, Illinois
Lake County
Illinois Project No. UGN-4848
SBG Project No. 3-17-SBGP-XX**

Construct Wildlife Fencing - Phase 5 (Northwest Area)

For engineering information, please contact Craig Loudon, P.E. of Crawford, Murphy & Tilly, Inc. at 630.907.7050.

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 11.0%.

- 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 January 12, 2024, and the Construction Plans dated January 12, 2024 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: 50 calendar days; Additive Alternate #1: 9 additional calendar days; Additive Alternate #2: 7 additional calendar days; Additive Alternate #3: 7 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 11.0% 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.DBEP@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 2, 2023

STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee's social security number). 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: 50 calendar days; Additive Alternate #1: 9 additional calendar days; Additive Alternate #2: 7 additional calendar days; Additive Alternate #3: 7 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 Waukegan, Illinois; Lake 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

CONSTRUCT PERIMETER FENCE – PHASE 5 (NORTHWEST AREA)

**ILLINOIS PROJECT: UGN-4848
S.B.G. PROJECT: 3-17-SBGP-XX**

At

WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, LAKE COUNTY, ILLINOIS

January 12, 2024

Prepared By:

CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
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19022602.00



1/12/2024
Expires 11/30/2025

GENERAL

These Special Provisions, together with applicable Standard Specifications, 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, Division of Aeronautics for the construction of the subject project at the Waukegan National Airport, Waukegan, Illinois.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The “Standard Specifications for Construction of Airports”, State of Illinois Department of Transportation, Division of Aeronautics, adopted March 22, 2023; shall govern the project except as otherwise noted in these Special Provisions. In cases of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

Specifications may be obtained at <https://idot.illinois.gov/doing-business/procurements/engineering-architectural-professional-services/consultant-resources/standard-specifications.html>

Where referenced within the Special Provisions, the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction adopted January 1, 2022 shall apply.

INDEX TO SPECIAL PROVISIONS

PART 1 – GENERAL CONTRACT PROVISIONS 1

SECTION 40 – SCOPE OF WORK1

SECTION 50 – CONTROL OF WORK4

SECTION 60 – CONTROL OF MATERIALS7

SECTION 70 – LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC8

SECTION 80 – PROSECUTION AND PROGRESS10

PART 2 – GENERAL CONSTRUCTION ITEMS 12

ITEM 102 – TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL 12

ITEM 105 – MOBILIZATION17

ITEM 150 – RESIDENT ENGINEER FIELD OFFICE18

PART 3 – SITEWORK 19

ITEM 101 – PREPARATION/REMOVAL OF EXISTING PAVEMENTS19

ITEM 151 – CLEARING AND GRUBBING20

ITEM 152 – EXCAVATION, SUBGRADE AND EMBANKMENT22

PART 4 - BASE COURSES 24

ITEM 208 – AGGREGATE BASE COURSE24

PART 6 FLEXIBLE PAVEMENTS 26

ITEM 401 – ASPHALT MIX PAVEMENT SURFACE COURSE26

ITEM 403 – ASPHALT MIX PAVEMENT BASE COURSE28

PART 9 - MISCELLANEOUS	30
ITEM 602 – EMULSIFIED ASPHALT PRIME COAT	30
ITEM 603 – EMULSIFIED ASPHALT TACK COAT	31
ITEM 610 – CONCRETE FOR MISCELLANEOUS PAVEMENTS.....	32
ITEM 620 – RUNWAY AND TAXIWAY MARKING	33
ITEM 910 – ROADWAY SIGNAGE.....	34
 PART 10 – FENCING	 36
ITEM 161 – WIRE FENCE WITH STEEL POSTS (CLASS C AND D FENCE).....	36
ITEM 162 – CHAIN-LINK FENCE	38
 PART 11 – DRAINAGE	 46
ITEM 754 – CONCRETE GUTTERS, DITCHES AND FLUMES.....	46
 PART 12 – TURFING	 47
ITEM 901 – SEEDING.....	47
ITEM 905 – TOPSOIL	50
ITEM 908 – MULCHING.....	52
 PART 13 – LIGHTING INSTALLATION	 53
ITEM 108 – INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS.....	53
ITEM 110 –AIRPORT UNDERGROUND ELECTRICAL DUCT BANKS AND CONDUIT	61
ITEM 800017 – ROADWAY LIGHTING	63
ITEM 800188 – GATE ACCESS CONTROL SYSTEM	66
 APPENDIX A A	
IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA.....	A
22-2 OBTAINING APPROVED AGGREGATES COMPLYING WITH 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS	
87-2 DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS	
87-4 DETERMINATION OF BULK SPECIFIC GRAVITY (d) OF COMPACTED BITUMINOUS MIXES	
96-1A ITEM 610, STRUCTURAL PORTLAND CEMENT CONCRETE: JOB MIX FORMULA APPROVAL & PRODUCTION TESTING	
96-3 REQUIREMENTS FOR QUALITY ASSURANCE ON PROJECTS WITH BITUMINOUS CONCRETE PAVING	
97-2 PAVEMENT MARKING PAINT ACCEPTANCE	
2003-1 REQUIREMENTS FOR LABORATORY, TESTING, QUALITY CONTROL, AND PAVING OF SUPERPAVE BITUMINOUS CONCRETE MIXTURES FOR AIRPORTS	

PART 1 – GENERAL CONTRACT PROVISIONS

SECTION 40 – SCOPE OF WORK

40-05 MAINTENANCE OF TRAFFIC

ADD:

h. To maintain airport operations and to facilitate the construction of the proposed work, the project has been divided into separate phases in accordance with Advisory Circular 150/5370-2G Operational Safety on Airports During Construction. References to Construction Safety and Phasing Plans (CSPP) in that document shall be interpreted to mean the phase limits, barricade locations, access points and notes shown on the construction activity plan sheets included in the as-bid contract documents. When “safety” is used or referred to in the contract documents and in the advisory circular(s) it shall be redefined by this contract as meaning “operational safety”. The Construction Operational Safety and Phasing Plan (CSPP) establishes the airport and project specific requirements, supplementing the requirements in the AC, that are to be included in the contractor’s bid for maintaining operational safety during construction.

i. The Construction Safety and Phasing Plan (CSPP) contained herein has been approved by both the Airport and the FAA. The contractor shall be required to divide the overall work into separate phases in substantial conformance with the CSPP shown in the plans, except as allowed by the contract documents and approved by the Division on behalf of the FAA. Durations specified for individual phases shall become requirements of the contract and shall be subject to liquidated damages.

j. The contractor’s activity on the airfield shall be limited to the limits of construction as identified on the construction activity plan drawings. Beyond the limits of construction, the contractor shall not have access to any part of the active airfield pavement with any equipment or personnel without the approval of Airport Management.

k. Maintenance of Airport Systems are critical to the operation of the Airport and the safety and/or security of the traveling public. Prior to beginning work the contractor shall investigate existing systems which may be located within the work area and locate all existing utilities. The contractor may seek assistance from the JULIE, Engineer, Resident Engineer, Airport and FAA with locating utilities but the final responsibility for all utility locates lies solely with the contractor. If the Contractor’s investigation reveals that a utility must be relocated to allow for the performance of the work in the plans, the contractor shall immediately notify the Resident Engineer and remain clear of the utility until resolution has been determined by the Division and the Airport. Any system, including but not limited to systems associated with security, air navigation, weather, airfield lighting damaged by the Contractor’s operations shall be immediately repaired to the satisfaction of the owner. No delay shall be taken in the repair of the damaged facility. The Contractor shall not be allowed to finish work for the day until the utility has been repaired.

l. The contractor shall provide his own radio capable of transmitting and receiving on the Unicom frequencies noted in the plans.

m. The Contractor shall provide and maintain construction entrance signage on all public use roads intended to be used by his operations as required by the Illinois Department of Transportation, or the jurisdictional agency of the road. The Contractor shall be responsible for coordinating all hauling and access on State, City, Township or County roads with the agency responsible for the roadway.

n. If it is found the fully loaded delivery trucks are excessively damaging the Airport or local roadway pavement, the Contractor shall limit the weight of the material being hauled onto the site. The Resident

Engineer shall determine what is considered excessive damage. No payments will be made for additional hauling that may be required due to load restrictions.

o. The Contractor shall be required to provide a 24-hour phone number for emergency barricades and barricade lighting maintenance.

40-09 SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)

REVISE: The first sentence of the first paragraph to read:

10 days prior to the preconstruction conference, the Contractor shall submit a SPCD to the Airport describing how he will comply with the requirements of the FAA Advisory Circular plus the CSPP and supplying any details that could not be determined before contract award.

40-10 BARRICADES, WARNING SIGNS AND HAZARD MARKINGS.

ADD:

The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area shall be a maximum of 18 inches high. Unless otherwise specified, barricades shall be spaced not more than 10 feet apart.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights, and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office).

Any cost for signage or traffic control shall be borne by the Contractor.

Barricades, as approved by the FAA, shall be provided per the details in the plan sheets. The barricades shall be lighted with steady burn omni-directional red lights supplemented with a 20" x 20" orange flag.

Barricades shall be placed as shown in the plans or as directed by the Resident Engineer or Airport.

The Contractor shall be responsible for supplying, maintaining and any moving of all barricades. Lights shall be maintained in proper working order. No separate payment will be made for supplying, maintaining and moving barricades but shall be considered incidental to the contract.

When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and associated lighting conforming to the requirements of FAA Advisory Circular 150/5340-1 (latest revision), Standards for Airport Markings.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stockpiles, and his/her parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to FAA Advisory Circular 150/5370-2 (latest revision), Operational Safety on Airports During Construction.

The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to FAA Advisory Circular 150/5370-2 (latest revision).

Mark and identify vehicles in accordance with AC 150/5210-5 (latest revision) Painting, Marking and Lighting of Vehicles Used on an Airport. When any vehicle is required to travel over any portion of the aircraft movement area (within the existing perimeter fence) and runway approach area, the vehicle shall be properly identified to operate in the area or provided with a flag on a staff attached to the vehicle so that the flag will be readily visible. The flag should be not less than 3-feet square consisting of a checkered pattern of international orange and white squares of not less than one foot on each side and displayed in full view above the vehicle. A flag or escort vehicle is not required for vehicles which have been painted, marked and lighted for routine use on aircraft movement areas. Any vehicle operating on the movement area during the hours of darkness should be equipped with an amber flashing dome-type light, in accordance with local and/or state codes.

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards prior to commencing work which requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their dismantling is directed by the Resident Engineer.

Open-flame type lights shall not be permitted within the air operations areas of the airport.

SECTION 50 – CONTROL OF WORK

50-05 COOPERATION BETWEEN CONTRACTORS

REVISE: The first sentence of the second paragraph to read:

The contractor shall plan and conduct his/her work so as not to interfere or hinder the progress of work being performed by other contractors or Airport personnel.

50-06 CONSTRUCTION LAYOUT AND STAKES

DELETE: The first paragraph.

ADD: As the first paragraph:

The Contractor will be required to furnish and place construction layout stakes for this project. The establishment of survey control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor.

DELETE: The second paragraph.

ADD: As the second paragraph:

The Resident Engineer will locate and reference three (3) control points and will establish benchmarks along the line of the improvement outside construction limits. The Contractor shall locate and reference the centerline of survey, which shall also consist of locating and referencing control points such as point of curvature, points of tangent, and sufficient points on tangent to provide a line of sight. Control points set by the Resident Engineer shall be identified in the field to the Contractor, and the field notes shall be kept in the office of the Resident Engineer.

ADD:

Benchmarks will be established along the project outside of construction lines.

It is not the responsibility of the Resident Engineer to check the correctness of the Contractor's stakes or forms, except as provided herein; however, any errors that are apparent shall be immediately called to the Contractor's attention, and he shall be required to make the necessary correction before the stakes are used for construction purposes.

The Contractor shall immediately notify the Resident Engineer of conflicts or discrepancies with the established control points.

50-08 INSPECTION OF WORK

ADD:

The Contractor shall provide portable flood lighting for nighttime construction. Sufficient units shall be provided so that work areas are illuminated to a level of five horizontal foot candles. The lighting levels shall be calculated and measured in accordance with the current standards of the Illumination Engineering Society. Lights shall be positioned so as not to interfere with Airport operations.

50-10 LOAD RESTRICTIONS

ADD:

Access to the construction work area is limited to the haul routes as shown on the construction activity plan drawings. The use of existing airfield pavements by contractor construction traffic, including all haul trucks is prohibited unless previously approved by the Airport Management. Any damage to existing Airport pavement due to construction traffic operating beyond the approved work limits, hauling outside of the approved haul/access routes and construction traffic operating in prohibited areas shall be repaired by the Contractor at his own expense to the satisfaction of the owner.

Contractor's use of existing airfield and perimeter pavements by equipment and loaded trucks shall be minimized. The Contractor shall be responsible for damage to any airfield pavement or public road caused by his construction operations. **Any damage to existing airfield, landside and perimeter pavements shall be repaired by the Contractor at his own expense to the satisfaction of the Owner. The contractor shall obtain written permission from the Airport Owner to use any airfield pavements.**

The Contractor shall not be allowed to use FAA access roads at any time.

50-11 MAINTENANCE DURING CONSTRUCTION

ADD:

The contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize the ponding of water. In areas where the contractor is required to core out or remove pavements the contractor shall cut temporary ditches or swales to maintain positive drainage. At locations where temporary ditches are not feasible, the contractor shall excavate storm water storage areas adjacent to but at a lower elevation than the bottom of the work and utilize mechanical pumps to promptly remove storm water from the excavations. All existing pavement areas that are to remain open to aircraft traffic shall be kept clean to the satisfaction of Airport Manager and the Resident Engineer. At the request of the Resident Engineer or of the Airport, the Contractor shall provide a self-propelled, vacuum or regenerative (recirculating) air pavement sweeper, a pavement blower or tractor mounted "sweeper box". At a minimum, a pavement blower shall be kept on site at all times.

Material tracked onto public streets shall be removed continuously during the work.

No material capable of being blown onto airfield pavement will be allowed to be stored uncovered anywhere within the fence line, at any time during construction.

50-14 FINAL ACCEPTANCE

DELETE: The first sentence of the first paragraph.

ADD: As the first sentence of the first paragraph.

Upon due notice to the Resident Engineer from the Contractor of presumptive completion of the entire project, the charging of Contract Time shall be suspended, and the Engineer and Owner will make an inspection.

50-16 PLANS AND WORK DRAWINGS

REVISE: The second sentence of the eleventh (11th) paragraph to read as follows:

Such review will not relieve the Contractor of the responsibility for complying with the contract document requirements or for any error that may exist in the submittal. The Contractor is responsible for the dimensions and designs of adequate connections, detail and satisfactory construction of all work.

REVISE: The 15th paragraph to read:

Shop drawing submittals that do not include the information below will be rejected and returned to the Contractor. Information to be included on shop drawing submittals shall conform to the following:

PROJECT LOCATION: Waukegan National Airport
PROJECT TITLE: Construct Perimeter Fence – Phase 5
PROJECT NUMBERS: Illinois Project No.: UGN-4848
AIP Project No.: 3-17-SBGP-TBD
CONTRACT ITEM: (i.e. AR603510 Bituminous Tack Coat)
SPECIFICATION: Section in the Specifications (i.e. 603-2.1 Asphalt Materials)
SUBMITTED BY: (Contractor/Subcontractor Name)
DATE: (Date of Submittal)

ADD: To the end of the 18th paragraph:

d. "Rejected": Submittal shall not be used at the project site.

SECTION 60 – CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

REVISE: The third paragraph to read:

As a minimum, the Contractor shall provide, prior to delivery, statements (shipment tickets, source, certificate of analysis (COA), sample, etc.) as required by the current Illinois Department of Transportation, Bureau of Airport Engineering Manual for Documentation of Airport Materials or as requested by the Engineer of Airport Construction and Materials.

REVISE: The eleventh paragraph to read:

The Contractor shall furnish airport lighting equipment that meets the requirements of the specifications; and is listed in the current Federal Aviation Administration Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program and Addendum, that is in effect on the date of advertisement; and meets “Buy America” requirements.

60-03 CERTIFICATION OF COMPLIANCE/ANALYSIS (COC/COA)

ADD: After the sixth (8th) paragraph:

The Contractor shall certify all materials contained in the contract. Certification and documentation shall be submitted to the Resident Engineer and Project Engineer. It shall be the sole responsibility of the Contractor to ensure the delivery of adequate and accurate documentation prior to the delivery of materials. Materials incorporated into this project without approved certification and documentation will not be recommended for payment by the Resident Engineer. It shall be the sole responsibility of the Contractor to provide certification that ALL materials to be used on the project meet the “Buy American” requirements.

The certification shall be submitted as part of the shop drawing submittal.

SECTION 70 – LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

70-08 PUBLIC CONVENIENCE AND SAFETY

ADD: at end of the Section:

The contractor shall provide, install, and maintain any warning signs (trucks entering highway, etc.) as required by the County Division of Transportation and the City of Waukegan/Village of Beach Park and/or the responsible agency that maintains the roadway. The cost to the warning signage as required by the agency responsible for the roadway for the duration of the contract shall be at no additional cost to the contract.

70-16 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS

REVISE: The second paragraph as follows:

“ . . . , the approximate locations and owners have been indicated on the plans.”

ADD: After the eight (8th) paragraph:

WAUKEGAN NATIONAL AIRPORT

<u>Utility Service or Facility</u>	<u>Contact (Person)</u>	<u>Contact (Phone)</u>
AT&T – Telephone Cables	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
ComEd - Electric Cables	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
Northshore - Gas Lines	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
Comcast - Communication	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
FAA Control and Communication Cables	FAA Sector Office	1-630-587-7803

REPLACE: paragraph eleven (11) with;

If, in the Contractor's opinion, additional assistance is needed to locate the utility service or facility, the contractor shall enlist the assistance of a qualified technician or professional utility location firm to accurately locate underground utilities or facilities prior to excavation. Prior to commencing this detailed location work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such owner of his/her plan of operation and request the presence of a representative of the owner to observe the work. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer.

Only after the investigation has been made should the contractor begin excavation operations. Upon beginning these operations, the contractor shall use extreme caution in the methods utilized. The contractor shall utilize exploratory trenching or small tool excavation practices when beginning

operations in critical areas to verify that the utilities are clear of the area of interest or to verify the location and depth of these facilities.

Any utility damaged by the Contractor shall be repaired by the Contractor to the satisfaction of the Owner and shall be at the cost of the Contractor. In the event that an existing utility is damaged during construction, all other work on the project shall be suspended until the utility is repaired. No additional time will be awarded to the Contractor for delays in the project due to damaged utilities. It is a high priority to the airport that all existing Airport utilities, unless otherwise noted in the plans, remain in good working condition throughout the duration of the project.

Special care shall be taken on all operations and particularly near pavement edges to avoid damage to edge lights and all underground electrical cable on the airport. The approximate location of existing underground cable is shown on drawings. Any airfield lights or cable that are broken and require replacement because of the Contractor's operations will be replaced by the Contractor at his/her own expense.

Any airfield cable repairs or replacement to any part of the electrical system made necessary by the Contractor's operations will be made by him/her in the manner specified in Sections 108 and 125 at no cost to the Airport. Cost of replacement to be borne by the Contractor shall include any expense incurred in locating as well as repairing or replacing damaged parts of the system by the owning agency.

70-25 CONTRACTOR'S RESPONSIBILITY FOR SAFETY DURING CONSTRUCTION

ADD:

- e. Review the requirements in AC 150/5370-2 (current edition) and comply with items listed as contractor's responsibility.
- f. Implement a CSPP and SPCD as required in AC 150/5370-2 (current edition) and ensure that construction personnel are familiar with operational safety procedures and regulations on the Airport.
- g. Provide a 24-hour point of contact that will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the Airport.
- h. Provide a safety officer/construction inspector(s) trained in airport safety to maintain the CSPP and SPCD and to monitor all construction activities.
- i. Restrict movement of construction vehicles to construction areas as flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate.
- j. Ensure that no construction employees, employees of subcontractors or suppliers, or other persons enter any part of the aircraft operations area from construction site unless authorized.

SECTION 80 – PROSECUTION AND PROGRESS

80-05 LIMITATION OF OPERATIONS

ADD: After the fourth (4th) paragraph:

A minimum distance shall be maintained between construction operations and the centerline of all active taxiways, taxilanes and runways as noted on the Construction Safety and Phasing Plan. It is intended to plan, conduct, and complete the work in these critical traffic areas in such a manner that the length and amount of interruption to aircraft traffic at the Airport is minimized.

The Contractor shall comply with Federal Aviation Regulations and with all rules and regulations of the Airport, including, but not limited to, control and access to the airfield by Contractor's, employees, and agents. In the event the Authority is assessed a fine by the FAA for breach of security resulting from actions of Contractor's employees and agents, the Contractor shall fully reimburse the Authority for the amount of such fine in the form of additional rents.

Work within a Runway Safety Area (RSA), Runway Obstacle Free Zone (ROFZ), and Taxiway Object Free Area (TOFA) will require closure of the Runway or Taxiway as shown in the Construction Safety and Phasing Plan. Runway closure markers shall be placed prior to initiating work. The Contractor shall place barricades at all locations shown on the plans. Any cable or unit duct protruding from the ground shall be secured flat using sandbags or other methods approved by the Resident Engineer.

80-08 DETERMINATION AND EXTENSION OF CONTRACT TIME

ADD: After the fourth paragraph:

The Engineer will make charges against Contract Time after the presumptive completion of the entire project as provided for in Section 50-16, Final Inspection.

ADD: After the last paragraph of this section:

For this project, the following number of calendar days available for work per month has been assumed to be:

<u>Month</u>	<u>Workable Calendar Days</u>
January	0
February	0
March	0
April	0
May	15
June	17
July	17
August	17
September	16
October	16
November	14
December	0

For an extension of contract time due to inclement weather to be considered, the actual total number of calendar days available for work on controlling items must be less than the total number of workable calendar days assumed for the duration of the contract.

Requests for extension of contract time on calendar day projects caused by inclement weather, shall, as a minimum, be supported with National Weather Bureau data and project diaries. Requests for extension of contract time due to inclement weather will not be considered until after final acceptance.

As part of the request for contract time extension review, consideration may be given to how timely the Contractor prosecuted the work up to the point of the delays and the efforts by the Contractor to get back on schedule including the addition of labor or equipment and the extension of work hours and workdays.

No allowance will be made for anticipated profits.

80-14 CONTRACTOR'S ACCESS TO AIRFIELD

The Contractor shall not have access to any part of the active airfield pavements (runways, aprons, or taxiways, and associated safety areas) for any equipment or personnel without the approval of the Airport Manager. All access to active runway and taxiway pavements shall be coordinated with the Airport Manager. *Access to the referenced pavements without the Airport Manager's approval may result in a determination of an airfield incursion with associated fines.*

The location of an area for parking by the Contractor's employees shall be as shown on the plans or as agreed to by the Airport.

Use of personal vehicles beyond the airport perimeter fence line will not be allowed.

When not in use, the Contractor's vehicles and equipment shall park in the location shown on the plans or in an area outside the Runway Safety Areas (RSAs), Runway Object Free Zones (ROFZs), and Object Free Area (OFAs). The Contractor's vehicles and equipment shall not be parked on a closed taxiway or runway. Parking equipment shall not obstruct any runway visual aids, signs or navigational aids or penetrate Part 77 surfaces.

80-15 SECURITY DURING CONSTRUCTION

As a minimum, the Contractor shall be responsible for security during construction as follows:

1. Visibly delineate his construction zone by placing a line of barricades or flagging around the entire work zone.
2. Keep construction personnel inside the work area delineated by barricades.
3. Ensure that construction personnel are familiar with security procedures and regulations on the Airport.
4. Restrict movement of construction vehicles to construction areas as flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate or as shown in plans.
5. The Contractor shall be required to maintain security on the Airport as specified or as directed by the Airport.
6. The Contractor shall provide a complete list of personnel that will be employed while on site and update the list as needed. The contractor shall limit access to the AOA. The Contractor shall be responsible for monitoring the access gate during work hours. If the Contractor chooses to leave the gate open, then he shall monitor the gate to prevent unauthorized entries. Unattended construction access and unauthorized access to the airfield shall be fined in accordance with the fines noted in the plans in the construction phasing notes.
7. The contractor shall provide his own padlock to secure the gate used for access.

PART 2 – GENERAL CONSTRUCTION ITEMS

ITEM 102 – TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL

MATERIALS

156-2.2 MULCHES

ADD:

Temporary mulch shall be light-duty hydraulic mulch.

102-2.5 SILT FENCE

Revise the Section to the following:

Silt fence shall consist of a continuous barrier. The barrier shall be constructed with one of the following:

- A. SILT FILTER FENCE. This fence shall either be a prefabricated silt fence or fabricated onsite meeting the dimensional requirements and details shown in the plans. The fabric for silt filter fence shall be a woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence with less than 50 percent geotextile elongation.
- B. ROLLED EXCELSIOR. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. The fiber density shall be a minimum of 1.24 lb/cu ft based on a moisture content of 22 percent at manufacturing. The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in.
- C. URETHANE FOAM/GEOTEXTILE. Urethane foam/geotextile shall be triangular shaped having a minimum eight of 10 in in the center with equal sides and a minimum 20 in. base. The triangular shaped inner material shall be a low density urethane foam. The outer cover shall be a woven geotextile fabric placed around the inner material and allowed to extend beyond both sides of the triangle a minimum of 18 in.

(1) The geotextile shall meet the following properties:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Grab Tensile Strength lb	124 min.	ASTM D 4632
Grab Elongation @ break (%)	15 min.	ASTM D 4632
Burst Strength psi	280 min.	ASTM D3786
AOS (Sieve No.)	30 min.	ASTM D 4751
UV Resistance (500 Hours) (%)	80 min.	ASTM D 4355

(2) The urethane foam shall meet the following properties:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Density, lb/cu ft	0.9 – 1.1	ASTM D 3574

Tensile Strength, psi	10 min.	ASTM D 3574
Elongation, %	125 min.	ASTM D 3574
Tear resistance, lb/in.	1.25.	ASTM D 3574

102-2.13 EXCELSIOR BLANKETS

- (a) Excelsior Blanket. Excelsior blanket shall consist of a machine produced mat of wood excelsior of 80 percent, 6 in. (150 mm) or longer fiber length. The wood from which the excelsior blanket is cut shall be properly cured to achieve adequately curled and barbed fibers.

The blanket shall be of consistent thickness, with the fiber evenly distributed over the entire area of the blanket. The excelsior blanket shall be covered on the top side with a 90-day biodegradable extruded plastic mesh netting having an approximate minimum opening of 5/8 x 5/8 in. (16 x 16 mm) to an approximate maximum opening of 2 x 1 in. (50 x 25 mm). The netting shall be substantially adhered to the excelsior blanket by a knitting process using biodegradable thread or by an applied degradable adhesive. The netting shall also be entwined with the excelsior blanket for maximum strength and ease of handling.

The excelsior blanket shall also be according to the following:

<u>Parameter</u>	<u>Value</u>
Minimum Width	24 ± 1 in. (600 ± 25 mm)
Weight (Mass)	0.63 lb/sq yd (0.34 kg/sq m) ± 10 %

The excelsior blanket shall be smolder resistant and shall withstand the following test. The excelsior blanket specimen shall not flame or smolder for more than a distance of 12 in. (300 mm) from a spot where a lighted cigarette is placed on the surface of the blanket.

The manufacturer shall furnish a certification with each shipment of excelsior blanket stating the number of rolls furnished and that the material complies with these requirements.

- (b) Wire Staples are not allowed for use on the project.
- (c) Wood Stakes. Hardwood blanket anchors shall be approximately 7 in. (180 mm) long from neck of hook to tip of anchor. The wood shall not break during installation. The anchor shall have a 1/2 in. (13 mm) curving hook to hold the blanket in place.

CONSTRUCTION METHODS

102-3.7 TEMPORARY EROSION CONTROL

ADD:

- b. Inlet and Pipe Protection.** Inlet filter sediment traps shall be placed in all proposed and existing inlets and catch basins as shown on the plans or as directed by the Resident Engineer

ADD:

- f. Erosion Control Blanket.** Erosion control blanket may be placed using either excelsior blanket or knitted straw blanket. Within 24 hours of seed placement, blanket shall be placed on the areas specified. Prior to placing the blanket, the areas to be covered shall be relatively free of rocks or clods over 1 1/2 in. (40 mm) in diameter, and sticks or other foreign material which will prevent the close contact of the blanket with the seed bed. If, as a result of rain, the prepared seed bed

becomes crusted or eroded, or if eroded places, ruts, or depressions exist for any reason, the Contractor shall rework the soil until it is smooth and reseed such areas which are reworked.

After the area has been properly shaped, fertilized, and seeded, the blanket shall be laid out flat, evenly, and smoothly, without stretching the material. The excelsior and knitted straw blankets shall be placed so that the netting is on the top and the fibers are in contact with the soil. The heavy-duty blankets shall be placed so that the heavy duty extruded plastic mesh is on the bottom.

For placement in ditches, the erosion control blanket shall be applied parallel to the centerline of the ditch so that there are no longitudinal seams within 2 ft (600 mm) of the bottom centerline of the ditch. The blanket shall be toed in on the upslope edge and shingled or overlapped with the flow.

On slopes, the blanket shall be applied either horizontally or vertically to the contour, toed in on the upslope edge, and shingled or overlapped with the flow.

When placed adjacent to pavements, blankets shall be toed in along the edge of shoulder.

Anchoring the blankets shall be according to the manufacturer's specifications.

102-3.11

ADD:

In the event that temporary erosion and pollution control measures are ordered by the Engineer due to the Contractor's negligence or carelessness, the work shall be performed by the Contractor at no additional cost to the Owner.

METHOD OF MEASUREMENT

102-4.1

REVISE: This section to read:

The quantity of temporary seeding shall be measured for payment by the number of acres as specified, completed and accepted by the Resident Engineer. Temporary Mulching shall not be measured for payment, but shall be considered incidental to the contract.

102-4.2

DELETE: This section.

102-4.3

DELETE: This section.

102-4.4

DELETE: This section.

102-4.6

DELETE: This section.

102-4.7

DELETE: This section

102-4.9

DELETE: This section

102-4.10

DELETE: This section

102-4.12

ADD:

Erosion Control Blanket to be paid for shall be the number of square yards measured in place and accepted by the Resident Engineer.

102-4.13

ADD:

The Concrete Washout shall not be measured for payment but shall be considered incidental to the project.

BASIS OF PAYMENT

102-5.1

REVISE: This section to read:

Payment will be made at the contract unit price per square yard for Erosion Control Blanket. This price shall be full compensation for furnishing all materials for all preparation and installation of these materials, including excavation, placement, tie-down stakes, staples, maintenance, and removal and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made at the contract unit price per each for Inlet Protection. This price shall be full compensation for furnishing all materials for all preparation and installation of these materials, including excavation, placement, tie-down stakes, staples, maintenance, and removal and for all labor, equipment, tools, and incidentals necessary to complete this item.

The temporary seed pay item shall be used and paid for if a winter shutdown or extended shutdown period (3 months or more) is necessary to complete the project.

Temporary mulching shall not be measured for payment. It shall be considered incidental to the contract.

Payment will be made under:

BASE BID:

ITEM AR156510	SILT FENCE	PER FOOT
ITEM AR156520	INLET PROTECTION	PER EACH
ITEM AR156530	TEMPORARY SEEDING	PER ACRE
ITEM AR156531	EROSION CONTROL BLANKET	PER SQUARE YARD

ADDITIVE ALTERNATE NO.1:

ITEM AS156530	TEMPORARY SEEDING	PER ACRE
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ADDITIVE ALTERNATE NO.2:

ITEM AT156530	TEMPORARY SEEDING	PER ACRE
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ADDITIVE ALTERNATE NO.3:

ITEM AU156530	TEMPORARY SEEDING	PER ACRE
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ITEM 105 – MOBILIZATION

BASIS OF PAYMENT

150-3.1

REVISE:

Paragraph (C) to the following:

- B. When fifty percent of the original contract is earned, an additional 20 percent of the pay item will be paid.

ADD:

- C. When 90 percent of the adjusted contract value is earned, an additional 15 percent of the pay item will be paid along with any bid amount in excess of six percent of the original contract amount up to 95% of the pay item.
- D. The remaining 5 percent of the pay item will be paid upon final acceptance of the project by the Engineer. Final acceptance includes satisfactory completion of all punch list items in accordance with written instruction from the engineer as well as acceptance of all final documentation.

Payment will be made under:

ITEM AR150520 MOBILIZATION

PER LUMP SUM

ITEM 150 – RESIDENT ENGINEER FIELD OFFICE

CONSTRUCTION METHODS

150-2.1

REVISE:

Paragraph (g) to the following:

(g) . One (1) telephone, with touch tone, where available or a cellular telephone, for exclusive use by the Resident Engineer or his/her representative. One (1) internet Wi-Fi hotspot with service for use by the Resident Engineer with a minimum advertised download speed of up to 5 Mbps and a minimum advertised upload speed of up to 2 Mbps. The type of internet access device chosen by the Contractor shall allow a minimum of six (6) simultaneous Wi-Fi enabled devices use of the internet connection.

Paragraph (h) to the following:

(h) One (1) plain paper all-in-one wireless color multifunction printer (including maintenance and operating supplies) capable of reproducing prints up to 11 x 17 in. with an automatic feed tray. Separate paper trays for letter size and 11 x 17 in. paper shall be provided, including maintenance and operating supplies. The wireless printer shall also be equipped to copy and scan documents in color.

ADD:

(n) One first-aid cabinet fully equipped.

(o) One (1) 800 Watt, 0.8 cubic foot microwave

(p) One (1) Coffee Maker

(q) Solid waste disposal consisting of two (2) 28-quart waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

BASIS OF PAYMENT

150-3.1

REVISE the second sentence of the second paragraph to the following:

Communication equipment and service charges will be included in 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 or buildings, equipment, and furniture which remain the property of the Contractor after release by the Engineer, except the Project Engineer's firm will pay that portion of the monthly communication costs, when combined, exceed \$250.

Payment will be made under:

ITEM AR150510 ENGINEER'S FIELD OFFICE

PER LUMP SUM

PART 3 – SITEWORK

ITEM 101 – PREPARATION/REMOVAL OF EXISTING PAVEMENTS

DESCRIPTION

101-1.1

ADD:

The type of material to be removed along with approximate typical pavement section is shown on the plans. Pavement structure information was taken from airport records, data supplied by airport personnel and soil borings. The Contractor shall verify the type and thickness of material to be removed. **No extra compensation will be allowed for any variations in the pavement sections actually encountered.**

EQUIPMENT AND MATERIALS

101-2.1

ADD:

Any damage to the pavement beyond the limits as shown on the plans shall be removed and replaced by the Contractor at his expense. These areas shall be saw cut to a uniform width.

CONSTRUCTION

101-3.17

The existing pavement that is removed shall be disposed of off Airport property. No additional compensation will be made for hauling and disposal of any of the removed material.

METHOD OF MEASUREMENT

101-4.1

ADD:

If pavement or subgrade material is removed due to negligence on the part of the Contractor, the additional quantity of pavement removal and replacement of subgrade material will not be measured for payment.

DELETE: Sections 101-4.2, 101-4.3, 101-4.4, 101-4.5, 101-4.6 and 101-4.7.

BASIS OF PAYMENT

101-5.1

ADD:

Payment will be made under:

ITEM AR401900 REMOVE BITUMINOUS PAVEMENT

PER SQUARE YARD

ITEM 151 – CLEARING AND GRUBBING

CONSTRUCTION METHODS

151-2.1 GENERAL

REVISE Paragraph 1 to read:

The areas to be cleared and grubbed under this item shall be staked on the ground by the Contractor and approved by the Resident Engineer prior to beginning work. The clearing and grubbing shall be done at a satisfactory distance in advance of the grading operations. Unless otherwise specified, no cutting or trimming of trees shall occur between April 1 and September 30, both days inclusive, due to potential impact to the Indiana Bat and Northern Long-Eared Bat, which is protected by the Endangered Species Act of 1973. If otherwise specified, the Contractor shall verify that the required permits have been obtained prior to the commencement of tree cutting or trimming operations.

ADD:

Clearing and grubbing of trees, when so designated, shall consist of the cutting and removal of isolated single trees, stumps or isolated groups of trees. The cutting of all the trees of this classification shall be in accordance with the requirements for the particular area being cleared, or as shown on the plans, or as directed by the Engineer.

151-2.2 DISPOSAL

ADD:

Burning of cleared trees and other materials shall not be allowed on Airport property.

151-2.4 CLEARING

REVISE Paragraph 1 to read:

The Contractor shall clear the staked or indicated area of all objectionable materials. Trees unavoidably falling outside the specified limits must be cut up, removed, and disposed of in satisfactory manner. In order to minimize damage to trees that are to be left standing, trees shall be felled toward the center of area being cleared. The Contractor shall preserve and protect from injury all trees not to be removed. The trees, stumps, and brush shall be cut flush with the original ground surface to accommodate temporary crossing mat requirements. The grubbing of stumps and roots will not be required. Heavy equipment, which can damage the ground surface which leaves ruts larger than 3-inches shall not be used in clearing operations.

151-2.5 CLEARING AND GRUBBING

REVISE 1st Sentence of Paragraph 1 to read:

In areas proposed by the Contractor and approved by the Resident Engineer to be cleared and grubbed, all stumps, roots, buried logs, brush and other unsatisfactory materials shall be removed.

ADD:

Subgrade materials required to fill holes and level areas at the completion of clearing and grubbing shall be provided by the Contractor at no additional cost to the contract. These materials shall be compacted in a manner acceptable to the Resident Engineer.

METHOD OF MEASUREMENT

151-3.1

ADD:

Isolated bushes and trees having a butt diameter of 6-inches or less, measured at a point 4.5 feet above the ground level at the tree, will be considered a sapling and will not be measured for payment. Clearing of the saplings and isolated bushes will be incidental to the contract.

BASIS OF PAYMENT

151-4.1

ADD:

Payment shall be made at the contract unit price for clearing and grubbing of isolated trees. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

ADD:

Payment will be made under:

BASE BID:

ITEM AR151420	CLEARING TREES 0-2.5' BUTT. DIA.	PER EACH
ITEM AR151450	CLEARING AND GRUBBING	PER ACRE

ADDITIVE ALTERNATE NO.1:

ITEM AS151450	CLEARING AND GRUBBING	PER ACRE
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ADDITIVE ALTERNATE NO.1:

ITEM AT151420	CLEARING TREES 0'-2.5' BUTT. DIA.	PER EACH
ITEM AT151450	CLEARING AND GRUBBING	PER ACRE

ADDITIVE ALTERNATE NO.3:

ITEM AU151450	CLEARING AND GRUBBING	PER ACRE
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ITEM 152 – EXCAVATION, SUBGRADE AND EMBANKMENT

DESCRIPTION

152-1.1

ADD:

When the volume of the excavation exceeds that required to construct the embankments to the grades indicated, the excess excavation shall be stockpiled on Airport property at the locations directed by Airport staff at no additional cost to the contract. When the volume of excavation is not sufficient for constructing the fill to the grades indicated, the deficiency shall be supplied from borrow sources at locations within the airport or other authorized areas.

152-1.3 CLASSIFICATION

DELETE the following Sections:

- b. Rock excavation
- c. Muck excavation
- d. Drainage excavation

CONSTRUCTION METHODS

152-3.10 Compaction Requirements

DELETE entire section and replace with the following:

Compaction in all cut and fill areas shall be to the satisfaction of the Resident Engineer.

METHOD OF MEASUREMENT

152-4.1a Unclassified, rock, muck or drainage excavation

Revise: the section as follows;

Excavation required for fence and gate post foundations, buried fence, gate pads, electrical improvements, removals and regrading of the groundline adjacent to the fence, removal areas or electrical improvements shall not be measured for payment but shall be considered incidental to its associated pay item.

Excavation necessary for construction of pavement improvements shall be measured for payment per cubic yard as Unclassified Excavation.

Topsoil Stripping shall be measured and paid for as Unclassified Excavation.

Shoulder fill, embankment fill and all other miscellaneous fills shall not be measured for payment but shall be incidental to the Unclassified Excavation pay item.

Excess unclassified excavation from all contract work shall be kept on airport property and hauled as directed by Airport staff. The hauling, stockpiling on airport property, and grading shall not be measured for payment but shall be incidental to the Unclassified excavation pay item.

152-4.1b, 4.1c and 4.1 d

DELETE: These Sections.

BASIS OF PAYMENT

152-5.1

ADD:

Payment will be made under:

BASE BID:		
ITEM AR152410	UNCLASSIFIED EXCAVATION	PER CUBIC YARD

PART 4 - BASE COURSES

ITEM 208 – AGGREGATE BASE COURSE

DESCRIPTION

208-1.1

REVISE: The first paragraph to read:

This item shall consist of 6” aggregate base course and porous granular embankment composed of coarse aggregate as specified. It shall be constructed on a prepared subgrade underlying course in accordance with these specifications and shall conform to the dimensions and typical cross section and to the lines and grades as shown on the Plans.

MATERIALS

208-2.3 GRADATION REQUIREMENTS

ADD:

Gradation for aggregate base course shall be either IDOT CM-6 or CA-10 as outlined in Table 1.

Gradation for Porous Granular Embankment shall be one of the following gradations:

Sieve Size	Gradation Percent Passing		
	CA-1	CA-3	CS-01
	3” maximum	2 ½” maximum	8” maximum
8”			100
6”			94-100
4”			80-100
3 inch	100		
2 ½ inch	90-100	100	
2 inch	45-75	86-100	20-70
1 ½ inch	0-30	35-75	
1 inch	0-6	0-16	
½ inch		0-6	
#4			0-40
IDOT Gradation	CA-1	CA-3	CS-01

CONSTRUCTION METHODS

208-3.1 CONTROL STRIP

DELETE: This Entire Section.

208-3.4 PLACEMENT

ADD:

The porous granular embankment shall be placed in lifts no greater than one (1) foot thick or as directed by the Resident Engineer.

208-3.9 ACCEPTANCE SAMPLING AND TESTING

ADD Paragraph a. Density:

The aggregate base course shall be rolled and compacted to not less than 95% density (AASHTO T 99).

The porous granular embankment shall be compacted until adequate keying and interlocking has been obtained. Additional lifts shall not proceed until the Resident Engineer has verified satisfactory keying and interlocking has occurred

METHOD OF MEASUREMENT

208-4.1

ADD:

The quantity of Porous Granular Embankment shall be the number of cubic yards as measured by the Engineer at the specified thickness of the material placed. If required, the thickness of PGE measured for payment will include the thickness of the capping stone.

The porous granular embankment shall be used as shown and as field conditions warrant at the time of construction. No adjustment in unit price will be allowed for an increase or decrease in quantities.

The Contractor shall furnish approved duplicate load tickets upon which is recorded the net weight of the aggregates in each truck. The Contractor shall submit one (1) load ticket to the Resident Engineer, or his/her duly authorized representative, at the job site when the truck load is incorporated into the base.

BASIS OF PAYMENT

208-5.1

ADD:

Porous granular embankment shall be paid for at the contract unit price per cubic yard, of which price shall be full compensation for the two (2) inch capping stone (if necessary), furnishing, spreading, compacting, watering and all incidentals related to equipment, labor and tools necessary to complete this work.

Payment will be made under:

ITEM AR208515	POROUS GRANULAR EMBANKMENT	PER CUBIC YARD
ITEM AR208606	6" AGGREGATE BASE COURSE	PER SQUARE YARD

PART 6 FLEXIBLE PAVEMENTS

ITEM 401 – ASPHALT MIX PAVEMENT SURFACE COURSE

(Central Plant Hot Mix)

DESCRIPTION

401-1.1

ADD: The following after the third paragraph of this section:

This project shall utilize Method I for the production, placement and acceptance of the bituminous surface course.

At the Contractor's option, an IDOT Division of Highways surface mix may be submitted for approval by the Engineer. The surface mix shall be in accordance with Section 406 Hot-Mix Asphalt Binder and Surface Course of the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction". The mix shall be a production mix from the current construction season meeting Mixture Composition:

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, MIX TYPE IL-9.5 mm.

COMPOSITION

401-3.3 JOB MIX FORMULA

ADD:

Per the Asphalt Design Criteria Table, the traffic mix shall meet the requirements of Automobile (Roadways/Parking Lots)

CONSTRUCTION METHODS

401-4.12 JOINTS

ADD: The following as the sixth paragraph of this section:

If at any time during the surface course paving operation, it becomes necessary to end a paving lane at a location other than the new finished pavement edge because of ending a day's paving, machinery breakdown, etc., the lane end will be sawed back a sufficient distance to provide a smooth, neat appearing joint from which to resume paving. The sawed face will be painted with a tack coat and this work shall be considered incidental to Item 401, Bituminous Surface Course, and no additional compensation will be allowed.

401-4.14 SHAPING EDGES

ADD: The following as the second paragraph for this section:

All pavement edges, including the pavement ends, must be left in proper alignment, as shown on the plans. This may be accomplished by a trimming method, or, at the Contractor's option, by sawing after

the paving has been completed. No additional compensation will be made if the sawing method is used.

401-4.15 ACCEPTANCE TESTING OF HMA MIXES FOR DENSITY

DELETE: All references to Method II for quantities over 2,500 tons.

BASIS OF PAYMENT

401-6.1

Payment will be made under:

ITEM AR401613	BIT. SURF. CSE. – METHOD I, SUPERPAVE	PER TON
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ITEM 403 – ASPHALT MIX PAVEMENT BASE COURSE

(CENTRAL PLANT HOT MIX)

DESCRIPTION

403-1.1

ADD:

This project shall utilize Method I for the production, placement and acceptance of the bituminous base course.

Bituminous base course shall be per Section 403 or at the Contractor's option, an IDOT Division of Highways surface mix may be submitted for approval by the Engineer. The surface mix shall be in accordance with Section 406 Hot-Mix Asphalt Binder and Surface Course of the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction". The mix shall be a production mix from the current construction season meeting Mixture Composition:

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50

COMPOSITION

403-3.3 JOB MIX FORMULA (JMF)

ADD:

Per the Asphalt Design Criteria Table, the traffic mix shall meet the requirements of Automobile (Roadways/Parking Lots)

CONSTRUCTION METHODS

403-4.10 JOINTS

Add the following paragraph to this section:

At any time during the base course paving operation it becomes necessary to end a paving lane at a location other than the proposed finished pavement edge because of ending a day's paving, machinery breakdown, etc.; the lane end will be sawed back a sufficient distance to provide a smooth, neat appearing joint from which to resume paving. The sawed face will be painted with a tack coat and this work shall be considered incidental to Item 403 Bituminous Base Course, and no additional compensation will be allowed.

403-4.15 SHAPING EDGES

ADD:

All pavement edges, including the pavement ends, must be left in proper alignment as shown on the plans. This may be accomplished by a trimming method or at the Contractor's option by sawing after the paving has been completed. No additional compensation will be made if the sawing method is used.

MATERIAL ACCEPTANCE

403-6.1 ACCEPTANCE SAMPLING AND TESTING

DELETE: All references to Method II for quantities over 2,500 tons.

BASIS OF PAYMENT

403-6.1

Payment will be made under:

ITEM AR403613	BIT. BASE CSE. – METHOD I, SUPERPAVE	PER TON
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PART 9 - MISCELLANEOUS

ITEM 602 – EMULSIFIED ASPHALT PRIME COAT

CONSTRUCTION METHODS

602-3.4 APPLICATION OF EMULSIFIED ASPHALT MATERIAL

ADD: :

Areas worn from hauling operations shall be re-tacked at no additional cost to the Contract.

BASIS OF PAYMENT

602-5.1

ADD:

Payment will be made under:

ITEM AR602510 BITUMINOUS PRIME COAT

PER GALLON

ITEM 603 – EMULSIFIED ASPHALT TACK COAT

MATERIALS

603-2.1 ASPHALT MATERIALS

ADD:

At the Contractor's option, Non-Tracking Emulsified Asphalt (NTEA) may be used. The use of NTEA shall be as outlined in the Standard Specifications for Road and Bridge Construction, Section 406 and Article 1032.06 (f).

CONSTRUCTION METHODS

603-3.4 SPRAYING APPLICATION

ADD

NTEA shall be applied between 160 °F - 180°F .

603-3.4 APPLICATION OF EMULSIFIED ASPHALT MATERIAL

ADD: The following to the second paragraph:

Areas worn from hauling operations shall be re-tacked at no additional cost to the Contract.

BASIS OF PAYMENT

603-5.1

ADD:

Payment will be made under:

ITEM AR603510 BITUMINOUS TACK COAT

PER GALLON

ITEM 610 – CONCRETE FOR MISCELLANEOUS PAVEMENTS

DESCRIPTION

610-1.1

ADD:

This item shall consist of furnishing and installing structural concrete for fence and gate post foundations, wildlife deterrent pad, or for any other item requiring concrete shown in the plans.

METHOD OF MEASUREMENT

610-5.1

ADD:

Excavation required for the installation of the fence, gate post foundations, curb and gutter, light pole foundations, wildlife deterrent pad or any other incidental concrete construction shall not be measured for payment but shall be considered incidental to the associated pay items. Excess materials shall be disposed of in accordance with ITEM 152 at no additional cost to the contract. Backfilling along edges of exposed concrete shall be considered incidental.

BASIS OF PAYMENT

610-6.1

ADD:

No direct payment shall be made for excavation required for the placement of any Structural PC Concrete, be it excavation for fence and gate post foundations, or any other incidental concrete installation. Excavation and subgrade preparation shall be considered incidental to the contract unit prices for the respective pay items requiring excavation.

No direct payment shall be made for steel reinforcement or for joint sawing and sealing. Steel reinforcement shall be considered incidental to the associated pay items.

Structural PC concrete used for any other purpose on this project shall not be paid for, but shall be considered incidental to the associated pay items.

ITEM 620 – RUNWAY AND TAXIWAY MARKING

MATERIALS

620-2.2 MARKING MATERIALS

Delete the section and Replace with the following:

Markings shall be applied at 115 sq ft per gallon.

Beads shall be applied at 8 lb per 100 sq ft.

620-2.3 PAINT

DELETE Section and REPLACE with the follow:

All white and yellow paint shall be waterborne meeting the requirements outlined in the Illinois Standard Specifications for Road and Bridge Construction, Article 1095.02.

Red paint shall conform to Federal Specification TT-P-1952D, Type 1.

The paint shall contain no lead, chromium, cadmium or barium.

620-2.4 REFLECTIVE MEDIA

DELETE Section and REPLACE with the follow:

Reflective media shall be moisture resistant /silicone coated meeting the requirements outlined in the Illinois Standard Specifications for Road and Bridge Construction, Article 1095.07, Type B.

METHOD OF MEASUREMENT

620-4.1

ADD:

The quantity of permanent markings to be paid for shall be the number of square feet of painting with the specified material **measured only once to apply two coats** in conformance with the specifications and accepted by the Engineer. Quantities will not be distinguished between different colors of paint, except that black paint shall be paid separately and does not require reflective media. Only the top coat of paint shall require reflective media.

BASIS OF PAYMENT

ADD:

Payment will be made under:

ITEM AR620520	PAVEMENT MARKING-WATERBORNE	PER SQUARE FOOT
ITEM AR620900	PAVEMENT MARKING REMOVAL	PER SQUARE FOOT

ITEM 910 – ROADWAY SIGNAGE

DESCRIPTION

910-1.1

This work shall consist of furnishing sign panels complete with reflectorized sign faces, legend and supplemental panels and installing them on newly erected sign supports as detailed in the plans at the locations shown or as directed by the Resident Engineer.

Work shall be in accordance with Section 720 and Section 729 of the Standard Specifications for Road and Bridge Construction and with IDOT Standards 720001-01, 720011-01 and 729001-01

MATERIALS

910-2.1

Materials shall meet the requirements of Sections 720 and 729 of the Standard Specifications for Road and Bridge Construction. Sign panels shall be as detailed in the plans.

CONSTRUCTION METHODS

910-3.1

This work shall also consist of furnishing and installing metal posts of the size and type specified, utilizing the direct burial methods as detailed in the plans.

910-3.2

Materials shall meet the requirements of Article 729 of the Standard Specifications for Road and Bridge Construction. Unless otherwise specified, only frangible galvanized posts shall be used. The post shall be Type B as designated on Illinois Department of Transportation Highway Standard 720011-01 and 729001-01.

910-3.3

The metal posts may be driven by hand or mechanical means to a minimum depth of 4 feet (Type B) measured from the ground line or as shown in the plans. The post shall be protected by suitable driving cap and if required by the Engineer, the material around the post will be compacted after driving.

Care shall be taken to avoid scratching, chipping or other damage to polyester or enamel-coated posts during handling and installation. Chips and scratches may be recoated in the field by a method meeting the coating manufacturer's recommendations except that chips and scratches totaling more than 5% of the surface area of any one post and/or more than 5% of the surface area in any one-foot segment of any one post shall be cause for rejection of the post.

If the post specified is too long, the Contractor may choose to cut the post to the required length. Any post so cut shall be installed with the cut end at the bottom.

910-3.4

Existing signs and sign posts shall be completely removed and disposed of by the Contractor off Airport property. The excavations shall be backfilled and compacted per the requirement of Section 152.

Any salvageable materials shall be saved and remain the property of the Airport. The material shall be delivered to the Airport maintenance facility.

910-3.4

Existing signs to be relocated shall be carefully removed and reinstalled at the location(s) shown in the plans or as determined by the Engineer. Any excavations required for sign removal and relocation shall be backfilled and compacted per the requirement of Section 152.

METHOD OF MEASUREMENT

910-4.1

The quantity of traffic signs installed to be paid shall be the number, per each, sign satisfactorily installed in accordance with applicable specifications and accepted by the Engineer. Sign posts and supports shall be incidental to this item. No additional compensation shall be made for additional length of posts required.

Signs shall be measured and paid for as Roadway Sign on a per each basis, regardless of sign size.

The removal of roadway signs and posts shall not be measured for payment but shall be incidental to Item AR152410.

BASIS OF PAYMENT

910-5.1

Payment shall be made at the contract unit price per each roadway sign. This price shall be full compensation for all materials, erection of all signs at proposed locations and sign removals and relocations and for all materials, labor and equipment necessary to complete the work as described herein.

Payment will be made under:

ITEM AR910200	ROADWAY SIGN	PER EACH
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PART 10 – FENCING

ITEM 161 – WIRE FENCE WITH STEEL POSTS (CLASS C AND D FENCE)

CONSTRUCTION METHODS

161-3.10 FENCE AND GATE REMOVAL

REPLACE section with:

This work shall consist of the removal and disposal of the existing Class C perimeter fence. The fence shall be completely removed including fabric, posts, top rail, miscellaneous fittings and hardware, barbed wire, tension wire and concrete foundations.

The removed material shall become the property of the Airport, except the contractor shall remove all concrete posts foundations and dispose of the foundations off of Airport property at no additional costs to the contract. The materials shall be delivered, by the Contractor, to a location specified by Airport at no additional costs to the contract.

The fence posts in turf shall be pulled, including foundations, and not cut off.

All holes shall be filled and compacted with material generated as a part of the holes for the new fence post excavation. At the Contractor's option, offsite borrow material may be supplied at no additional cost to the contract. Areas disturbed in the removal process shall be graded to original conditions, seeded and mulched at no additional cost to the contract.

The fence removal shall include removal of all gates present in the fence line. Payment for removal of the gates shall be measured by the unit removed for each gate.

All gates shall be removed and turned over to the Airport at a location on Airport property at no additional cost to the contract.

Removal of the existing fence includes removal of all fence posts. No distinction of post diameter will be made for payment purposes. The Contractor shall examine the site prior to submitting a proposal.

161-3.13 CONTRACTOR'S RESPONSIBILITY FOR UTILITY LOCATING

The location of known underground utilities is presented on the plans.

It shall be the Contractor's responsibility to determine the actual location of all utilities, including service connections to underground utilities. Prior to construction, the Contractor shall contact JULIE, FAA and Airport Maintenance. Prior to construction, the Contractor shall notify all utility companies of his operational plans. The Contractor shall make arrangements for detailed information and assistance in locating utilities. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company, the Owner and the Resident Engineer. Any such mains and/or services disturbed by the Contractor's operations shall be restored immediately at his expense to the satisfaction of the Owner and the Engineer.

The Contractor shall be responsible for keeping the owner advised of this plan of operations. Prior to commencing work in the general vicinity of an existing utility service or facility, the Contractor shall notify the owner of his plan of operation.

BASIS OF PAYMENT

161-5.3

ADD:

No distinction will be made between heights of removed fence for payment purposes.

Payment will be made under:

BASE BID:

ITEM AR161900 REMOVE CLASS C FENCE PER FOOT

ADDITIVE ALTERNATE NO.1:

ITEM AS161900 REMOVE CLASS C FENCE PER FOOT

ADDITIVE ALTERNATE NO.2:

ITEM AT161900 REMOVE CLASS C FENCE PER FOOT

ADDITIVE ALTERNATE NO.3:

ITEM AU161900 REMOVE CLASS C FENCE PER FOOT

ITEM 162 – CHAIN-LINK FENCE

DESCRIPTION

162-1.1

ADD:

Install new 10-foot chain link fence with 3-strands of barbed wire and 2-foot of buried fabric at the locations noted in the plans.

Existing 8-foot and 6-foot fencing materials shall **not** be incorporated into the new installation.

Remove existing electric gate operators and associated equipment as shown on the plans.

Install temporary fencing for wetland and tree protection.

Install new 2 rail split fence at the location noted in the plans

Install new high speed electric gate operators and associated power and control equipment as shown on the plans.

MATERIALS

162-2.3 POSTS, RAILS, AND BRACES

DELETE Section and REPLACE with the following:

Metal posts, rail, braces, and gate frames shall be the shape and dimension as shown on the plans and shall meet the bending strength and dimension tolerance of AASHTO M 181.

Steel pipe, Type A shall meet ASTM F1083 schedule 40 pipe, high strength, hot-dip zinc-coated after fabrication with 1.8 ounces of zinc per square foot of coated surface area.

Line post shall be 2.875" OD and 5.80 lbs/ft.

Terminal, corner and pull posts shall be 3.5" OD and 7.58 lbs/ft.

Brace rails shall be 1.66" OD and 2.27 lbs/ft.

Intermediate rails, when required, shall be 1.66" OD and 2,27 lbs/ft

Gate posts shall be 4.0" OD and 9.12 lbs/ft

Steel pipe, Type B shall meet ASTM F1043 pipe Group IC, having a Type B external hot-dip zinc-coated with 0.9 ounces of zinc per square foot with a clear organic overcoat. Interior coating to be Type B hot-dip zinc-coating 0.9 ounces per square foot or Type D 81% zinc pigmented coating, minimum thickness of 0.3 mils be hot-dipped galvanized conforming to the requirements of ASTM F 1083.

Line post shall be 2.875" OD and 4.64 lbs/ft.

Terminal, corner and pull posts shall be 3.5" OD and 5.71 lbs/ft.

Brace rails shall be 1.66" OD and 1.84 lbs/ft.

Intermediate rails, when required, shall be 1.66" OD and 1.84 lbs/ft

Gate posts shall be 4.0" OD and 6.56 lbs/ft

162-2.4 GATES

ADD:

Slide Gates:

Two (2) Slide gates shall be fabricated for use as an electric gate at the locations as shown on the plans. Payment for these two (2) gates shall be as a manual slide gate and a separate pay item for electric gate operator. The other slide gates shall be manual slide gates.

Gates shall be sliding type, complete with latches, stops, keepers, hinges, rollers and roller tracks, and three strands of barbed wire above the fabric. Gate posts shall consist of galvanized steel pipe of the size recommended by the gate manufacturer. The fabric shall be of the same type material as used in the fence. The gates shall be to the dimensions as shown on the plans.

Cantilever slide gates shall be constructed so as to extend across the opening specified. The height of the gates shall be identical to the fence adjacent to the gate. Gates shall be as manufactured by Tymetal Corporation, Elite Fence, or approved equal. The sag and deflection of the slide gates shall not exceed the values presented in ASTM F 1184, Type II, Class 2.

The gate shall be fabricated from aluminum alloy extrusions. The gate frame shall be reinforced or post-tensioned with galvanized tubular steel running through the full length of the top and bottom primary members. The primary members shall be oversized rectangular members, top member nominally 3" by 5", bottom member nominally 2" by 5". Vertical members at the ends of the frame and at 2' centers, end to end, shall be square, not less than 1" by 1". Spacing of vertical members shall be no greater than half the height of the gate frame. Diagonal bracing shall be installed to further stabilize the gate frame. Gate frames shall be modular sections.

The gate frame shall have a separate semi-enclosed top track of extruded aluminum alloy, which becomes an integral part of, and forms a composite structure with, the top of the gate frame. This gate frame shall be supported by two self-aligning, 4-wheel, sealed lubricant, ball bearing truck assemblies riding in the semi-enclosed track. The bottom of the support posts shall be equipped with two pairs of rubber guide wheels.

The slide gates shall be equipped with a standard latch assembly consisting of post mount catcher and a frame-mounted yoke. A mating eyelet on the catcher yoke and the frame yoke intended for a padlock to secure the gate shall be included.

The rear of the gate shall be supported in the open position.

The electric gate operator shall be high speed with minimum of 2ft/sec travel speed in both directions. Gate operator shall operate on voltage as specified on plans.

162-2.12 SIGNS

ADD:

Signs attached to the existing fence and existing gates shall be removed and reinstalled, except gate Identification signs, Warning signs and Restricted Area signs, which shall be furnished new per the plan details.

162-2.13 STEEL REINFORCEMENT

ADD:

The steel reinforcement for the wildlife deterrent barrier pad shall conform to the specifications of Section 610.

162-2.12 TEMPORARY FENCING

ADD:

The temporary construction fencing shall be a minimum of 4-foot tall snow fence or “International Orange”, in color, polyethylene fence. Fence posts shall be either standard steel or wood posts with a minimum cross-sectional area of 3.0 square inches.

162-2.14 GATE OPERATOR

ADD:

Each gate operator shall include the following components:

1. Gates and components shall meet UL 325, Class III and/or IV
2. Minimum pump motor: one (1) hp, 3450 RPM, 56C, TEFC, operate on 208V, single phase.
3. Continuous duty cycle
4. Minimum two (2) feet per second rate of travel
5. Corrosion resistant #40 roller chain and steel gate mounting brackets, photo eye, 5-foot edge sensor and
6. Steel cover/chassis shall have a zinc rich primer and powder coated
7. All components shall have overload protection.
8. Electrical enclosure: Type 1, metal, with hinged lid gasketed for protection from intrusion of foreign objects.
9. Access interface controller board containing:
 - a. Inherent entrapment sensor.
 - b. Built in audible “warn before operate” system.
 - c. Built in timer to close.
 - d. 32 character OLED display for reporting of functions and codes.
 - e. Multiple programmable output relay options.
 - f. Anti-tailgate mode.
 - g. Built-in power surge/lightning strike protection.
 - h. Menu configuration, event logging and system diagnostics easily accessible with a PC and manufacturer’s analyzation and retrieval tool.
 - i. RS-232 port for connection to laptop or other computer peripheral and RS-485 connection for network interface.
 - j. Electromechanical and solid state relays.
 - k. Radio option outputs.
 - l. 21 inputs for site specific configurations.
10. Access interface controller board containing Transformer: 75 VA, non-jumpered taps, for all common voltages.
11. Control circuit: 24 VDC.
12. Vehicle detection input for card readers.
13. Gate edge sensors to be installed such that the gate will reverse in either direction upon sensing an obstruction.

CONSTRUCTION METHODS

162-3.7 GENERAL

DELETE the first paragraph and REPLACE with the following:

The fence shall be constructed in accordance with the details on the plans and as specified herein using new materials, and all work shall be performed in a workmanlike manner satisfactory to the Engineer. Prior to the beginning of the work the Contractor shall locate the position of the work by establishing and marking the property line or fence line. The Contractor may request of the Engineer a copy of the Airport's property boundary map. The Contractor shall span the opening below small natural or drainage ditches as detailed on the plans. The new fence shall be permanently tied to the terminals of existing fences. The finished fence shall be plumb, taut, true to line and ground contour, and complete in every detail. When directed, the Contractor shall be required to stake down the chain-link fence at several points between posts.

162-3.2 CLEARING FENCE LINE

ADD:

The area to be cleared and grubbed shall be delineated by the Contractor and approved by the Resident Engineer prior to commencing the work, in accordance with Item 151, Clearing and Grubbing.

162-3.3 INSTALLING POSTS

REVISE the first paragraph to the following:

All posts shall be spaced not more than 10 feet apart as shown on the plans. Terminal (end, corner, pull, and brace), line, and gate posts holes shall be augured a minimum of 70 inches below ground level. Posts shall be set in 46 inches concrete bases as shown on the plans. The remaining 24 inches above the concrete bases shall be backfilled slightly above the ground and sloped to drain

All posts shall be set to a minimum depth as noted on the construction plans.

162-3.6 INSTALLING FABRIC

ADD:

At terminal (end, corner, and pull) and gate posts the fabric shall be fastened with stretcher bars and bands. The stretcher bar and bands shall extend below the existing ground to secure the 2 feet of buried fence to the post.

All trenches that are constructed to allow the fabric installation 2 feet below the existing ground shall be backfilled and compacted to the Resident Engineer's satisfaction.

When utilities are encountered by the buried fabric, the dog house cut in the fabric shall be made to allow installation around the utility.

At locations of small natural swales or drainage ditches and where it is not practical to have the fence conform to the general contour of the ground surface, longer posts may be used and additional fence fabric as detailed on the construction plans.

The fastenings shall **not** be spaced more than 14 inches on centers for line posts.

162-3.7 INSTALLING GATES

ADD:

The Contractor shall install the proposed gates at the locations shown in the plans or as required by the Airport. Gates shall be installed to conform to manufacturer's recommendations and the details shown in the plans.

Gate installation shall include erection of the posts, fence, gate and warning and identifications signs required to provide a complete operating installation satisfactory to the owner. Signs on the existing gates other than gate identification and warning signs shall be removed from the existing gate and reinstalled on the new gate.

162-3.8 EXISTING FENCE CONNECTIONS

ADD:

Where new fence and existing fence meet, a new terminal or end post shall be installed and the new and existing fence shall be connected to the new corner post. A brace shall be required in both the new and existing fence. Connections between new and existing fence shall be considered incidental to the contract.

162-3.10 FENCE AND GATE REMOVAL

ADD:

This work shall consist of the removal and disposal of the existing 6-foot and 8-foot and Class E airport security perimeter fence. The fence shall be completely removed including fabric, posts, top rail, miscellaneous fittings and hardware, barbed wire, tension wire and concrete foundations.

The removed material shall become the property of the Airport, except the contractor shall remove all concrete posts foundations and dispose of the foundations off of Airport property at no additional costs to the contract. The materials shall be delivered, by the Contractor, to a location specified by Airport at no additional costs to the contract.

The fence posts in turf shall be pulled, including foundations, and not cut off.

All holes shall be filled and compacted with material generated as a part of the holes for the new fence post excavation. At the Contractor's option, offsite borrow material may be supplied at no additional cost to the contract.

The fence removal shall include removal of all gates present in the fence line. Payment for removal of the gates shall be measured by the unit removed for each gate.

All gates shall be removed and turned over to the Airport at a location on Airport property at no additional cost to the contract.

Removal of the existing chain link fence includes removal of all fence posts. No distinction of post diameter will be made for payment purposes. The Contractor shall examine the site prior to submitting a proposal.

162-3.13 BARBED WIRE

Three strands of barbed wire shall be installed above all fence and gates and shall be secured to the posts.

162-3.14 CONTRACTOR'S RESPONSIBILITY FOR UTILITY LOCATING

The location of known underground utilities is presented on the plans.

It shall be the Contractor's responsibility to determine the actual location of all utilities, including service connections to underground utilities. Prior to construction, the Contractor shall contact JULIE, FAA and Airport Maintenance. Prior to construction, the Contractor shall notify all utility companies of his operational plans. The Contractor shall make arrangements for detailed information and assistance in locating utilities. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company, the Owner and the Resident Engineer. Any such mains and/or services disturbed by the Contractor's operations shall be restored immediately at his expense to the satisfaction of the Owner and the Engineer.

The Contractor shall be responsible for keeping the owner advised of this plan of operations. Prior to commencing work in the general vicinity of an existing utility service or facility, the Contractor shall notify the owner of his plan of operation.

162-3.15 WILDLIFE DETERRENT BARRIER PAD

ADD:

Gate concrete pads shall be installed at each gate or as shown on the plans in lieu of buried fabric. The pads shall be constructed as detailed on the construction plans.

162-3.16 SECURITY AND MAINTAINING THE EXISTING AIRPORT PERIMETER FENCE LINE

ADD:

The Contractor shall also always maintain the existing electrical gates in service to allow access to the corporate west hangars. Contractor shall maintain barricades at all unsecured driveway gate locations or as noted in the plans.

METHOD OF MEASUREMENT

162-4.1

ADD:

Barbed wire shall not be measured separately but shall be included in the CLASS E FENCE 10' W/ 2' BURY pay item.

Temporary fence or other measures necessary to comply with Section 162-3.17 shall not be measured separately but shall be included in the CLASS E FENCE 10' W/ 2' BURY pay item.

162-4.2

ADD:

Class E Gate Removals shall be counted per each slide, swing and walkway gate removed, regardless of type, width or height of gate removed.

162-4.3

ADD:

Wildlife Deterrent Barrier – Pad shall be measured by the square foot, in-place and accepted by the Engineer.

162-4.4

ADD:

Electric Gate Operator for each gate shall be counted per each gate operator, including but not limited to concrete foundations, detector loops, detector loop cable/conduits, connection to existing or new electric service pedestal, all conduits/conductors for power and controls within the gate and all required termination, testing and labeling of all conductors. The underground power conductors and conduits are specified in and shall be paid under items 108 and 110, respectively.

162-4.5

ADD:

Temporary construction fence shall be measured from outside post to outside post and shall be the length of temporary fence actually constructed. Removal of temporary fence will not be measured for payment but will be incidental to the fence.

BASIS OF PAYMENT

162-5.1

DELETE entire Section and REPLACE with:

Payment for fence installed in turf or pavement will be made at the contract unit price per linear foot for CLASS E FENCE 10' W/ 2' BURY. This price shall be full compensation for furnishing all materials and for all preparation, erection, and installation of these materials, temporary fencing, restoration of fabric trenches, post holes, stockpiles, including grading, backfilling, seeding and mulching and for all labor, equipment, tools, and incidentals necessary to complete the item.

Barbed wire shall not be paid for separately but shall be included in the CLASS E FENCE 10' W/ 2' BURY pay item.

In addition to the bid unit price per linear foot for Class E Fence and per each for Class E Gates, fence and gates noted on the plans to be vinyl clad will have an additional payment made at the contract unit price per linear foot for VINYL FENCE UPGRADE and per each for VINYL GATE UPGRADE. The additional payment will be full compensation to include the difference in cost between Class E fence/gates with and without vinyl coating.

Payment for concrete deterrent barrier shall be made at the contract unit price per square foot for WILDLIFE DETERRENT BARRIER – PAD. This price shall be full compensation for furnishing all concrete, reinforcement, aggregate base, other miscellaneous materials and for all preparation, excavation, erection, backfill and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment shall be made at the contract unit price per each for REMOVE GATE, for slide, swing and pedestrian gates regardless width, height of gate or number of leaves removed at each gate opening.

This price shall be full compensation for all removals, restoration, including grading, backfilling, seeding and mulching, and disposal, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment shall be made at the contract unit price per each for ELECTRIC GATE OPERATOR, for electric slide gate regardless of size, voltage, horsepower of the gate operator This price shall be full compensation for furnishing and installation of all materials, including disconnects, circuit breakers, grounding, termination, testing and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment for temporary fence installed and removed will be made at the contract unit price per linear foot for TEMPORARY CONSTRUCTION FENCE. This price shall be full compensation for furnishing all materials and for all preparation, erection, and installation of these materials, removal, restoration of post holes, including grading, backfilling, seeding and mulching and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

BASE BID:

ITEM AR162216	CLASS E MANUAL SLIDE GATE-16'	PER EACH
ITEM AR162220	CLASS E MANUAL SLIDE GATE-20'	PER EACH
ITEM AR162228	CLASS E MANUAL SLIDE GATE-28'	PER EACH
ITEM AR162401	VINYL FENCE UPGRADE	PER FOOT
ITEM AR162402	VINYL GATE UPGRADE	PER EACH
ITEM AR162612	CLASS E GATE 12'	PER EACH
ITEM AR162810	CLASS E FENCE 10' W/ 2' BURY	PER FOOT
ITEM AR162900	REMOVE CLASS E FENCE	PER FOOT
ITEM AR162908	REMOVE ELECTRIC GATE	PER EACH
ITEM AR163000	TEMPORARY CONSTRUCTION FENCE	PER FOOT
ITEM AR800173	WILDLIFE DETERRENT BARRIER – PAD	PER SQUARE FOOT
ITEM AR800186	ELECTRIC GATE OPERATOR	PER EACH

ADDITIVE ALTERNATE NO.1:

ITEM AS162224	CLASS E MANUAL SLIDE GATE-24'	PER EACH
ITEM AS162810	CLASS E FENCE 10' W/ 2' BURY	PER FOOT
ITEM AS162908	REMOVE ELECTRIC GATE	PER EACH
ITEM AS800186	ELECTRIC GATE OPERATOR	PER EACH

ADDITIVE ALTERNATE NO.2:

ITEM AS162220	CLASS E MANUAL SLIDE GATE-20'	PER EACH
ITEM AS162810	CLASS E FENCE 10' W/ 2' BURY	PER FOOT
ITEM AS162905	REMOVE GATE	PER EACH
ITEM AS163000	TEMPORARY CONSTRUCTION FENCE	PER FOOT

ADDITIVE ALTERNATE NO.3:

ITEM AU162810	CLASS E FENCE 10' W/ 2' BURY	PER FOOT
ITEM AU163000	TEMPORARY CONSTRUCTION FENCE	PER FOOT

PART 11 – DRAINAGE

ITEM 754 – CONCRETE GUTTERS, DITCHES AND FLUMES

DESCRIPTION

754-1.1

ADD:

Combination curb and gutter shall be B6.12 in compliance with IDOT Standard 606001-07 and as shown on the plans.

METHOD OF MEASUREMENT

754-4.1

ADD:

Granular bedding, reinforcement, curing and protection for combination curb and gutters shall not be measured separately but shall be considered incidental to the proposed pay item.

BASIS OF PAYMENT

754-5.1

ADD:

Payment will be made under:

ITEM AR754410	COMB CONCRETE CURB & GUTTER	PER FOOT
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PART 12 – TURFING

ITEM 901 – SEEDING

DESCRIPTION

901-1.1

ADD:

In areas cleared and grubbed shown on the plans or as directed by the engineer, the final surface shall be smoothed, graded to drain, seeded and mulched or blanketed in accordance with these specifications. Areas disturbed by the Contractor's operations shall be restored by him at his expense.

MATERIALS

901-2.1 SEED

ADD:

IL DOT CLASS 4A Seed Mixture

SEED	APPLICATION RATE (LB/ACRE)
Little Blue Stem	5
Side-Oats Grama	5
Canada Wild Rye	1
Prairie Dropseed	0.5
Annual Ryegrass	25
Oats, Spring	25
Perennial Ryegrass	15

IL DOT Class 4A seed mixtures may be planted between May 15th to June 30th and October 15th to December 1st.

901-2.2 LIME

DELETE: Entire Section.

ADD:

The Contractor has the option to perform a soil test, at their expense, for the on-site or plan specified topsoil sources. If the Contractor proposes an application of lime, the proposal shall be approved by the Engineer. Lime, if used, shall be at no additional costs to the contract.

901-2.3 FERTILIZER

ADD:

The Contractor has the option to perform a soil test, at their expense, to validate that the fertilizer rate specified is suitable for the on-site or plan specified topsoil sources. If the Contractor proposes an alternate

mix ratio and weights, the proposal shall be approved by the Engineer. Alternate mix ratio and/or weights shall be at no additional costs to the contract.

CONSTRUCTION METHODS

901-3.2 DRY APPLICATION METHOD

ADD:

- e. Seeding Equipment: Seeding equipment shall meet the following requirements. Any other equipment deemed necessary shall be subject to the approval of the Engineer.
 - 1. Disc: Any disc new for the use shall be in a good state of repair with sound, unbroken blades. The disc shall be weighted if necessary to achieve the required tillage depth.
 - 2. No-Till Planters and Drills: Rangeland type drills and no-till planters shall be designed specifically for the seeding of native grasses and forbs with depth control bands set at 1/4" to 1/8".
- f. Seeding Methods: The Contractor shall submit for approval by the Engineer a schedule for seeding and/or planting at least two weeks prior to the scheduled commencement of work. Broadcast seeders will not be allowed. Seeder will be a drill type planter or slit seeder. The Engineer shall examine and then approve any equipment to be used. Prior to starting work, all seeding equipment shall be calibrated and adjusted to sow seeds at the proper seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified forty-eight (48) hours prior to beginning the seeding operations. Any gaps between areas of growth greater than eight square feet shall be resown or replanted.

901-3.3 WET APPLICATION METHOD

DELETE: Entire Section.

METHOD OF MEASUREMENT

901-4.1

ADD:

Areas of seeding not showing a uniform stand of grass in density and color shall not be approved for payment. Such areas shall be reseeded to the Owner's satisfaction at the Contractor's cost.

Only those areas cleared and grubbed, as shown on the plans or as directed by the engineer, shall be measured for payment. Other areas disturbed by the Contractor's operations shall be restored by him at his expense to the satisfaction of the Resident Engineer and Airport.

All permanent seeding, eligible for payment, shall be measured as *AR901510 Seeding* regardless of seed mixture or class.

BASIS OF PAYMENT

901-5.1

ADD:

Payment will be made under:

BASE BID:		
ITEM AR901510	SEEDING	PER ACRE
ADDITIVE ALTERNATE NO.1:		
ITEM AS901510	SEEDING	PER ACRE
ADDITIVE ALTERNATE NO.2:		
ITEM AT901510	SEEDING	PER ACRE
ADDITIVE ALTERNATE NO.3:		
ITEM AU901510	SEEDING	PER ACRE

ITEM 905 – TOPSOIL

DESCRIPTION

905-1.1

ADD:

This item shall consist of a minimum of 4” of topsoil placed in the areas shown in the plans. In addition, the surface of all disturbed areas shall be covered with a layer of topsoil, as needed, to facilitate drainage and the growth of turf.

Topsoil shall be supplied by the Contractor from outside the boundaries of the Airport property. It shall be the Contractor’s responsibility to locate and obtain the supply, subject to the approval of the Engineer.

MATERAILS

905-2.1 TOPSOIL

ADD:

At the Contractor’s option, an IDOT Division of Highways approved topsoil source may be submitted for approval by the Engineer. The source shall be in accordance with Article 1081.05(a) of the Illinois Department of Transportation “Standard Specifications for Road and Bridge Construction”.

CONSTRUCTION METHODS

905-3.4 PLACING TOPSOIL

DELETE the first sentence of the first paragraph.

ADD:

Final compacted thickness of the topsoil shall be as shown on the plans.

METHOD OF MEASUREMENT

905-4.1, 905-4.2

DELETE: This section.

ADD:

Topsoiling shall be measured in square yards completed and accepted by the Engineer.

Areas that required topsoiling due to the Contractor rutting and disturbing the areas outside of the limits shown on the plans, and within material storage/staging areas, access/haul roads, lighting and cabling/conduit areas will not be measured for payment, but shall be considered incidental to the contract.

BASIS OF PAYMENT

905-5.1

ADD:

Payment will be made at the contract unit price per square yard for topsoiling. This price shall be full compensation for furnishing and placing/grading all materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

ITEM AR905530 TOPSOILING PER SQUARE YARD.

ITEM 908 – MULCHING

DESCRIPTION

908-2.1 MULCH MATERIAL

REVISE: First sentence to read:

Material used for mulching shall be (D) Hydraulic Mulch, Light-Duty.

METHOD OF MEASUREMENT

908-4.1

ADD:

Only those areas shown on the plans or as directed by the engineer, shall be measured for payment. Other areas disturbed by the Contractor's operations shall be restored by him at his expense to the satisfaction of the Resident Engineer and Airport.

BASIS OF PAYMENT

908-5.1

ADD:

Payment will be made under:

BASE BID:

ITEM AR908514 LIGHT-DUTY HYDRAULIC MULCH PER ACRE

ADDITIVE ALTERNATE NO.1:

ITEM AS908514 LIGHT-DUTY HYDRAULIC MULCH PER ACRE

ADDITIVE ALTERNATE NO.2:

ITEM AT908514 LIGHT-DUTY HYDRAULIC MULCH PER ACRE

ADDITIVE ALTERNATE NO.3:

ITEM AU908514 LIGHT-DUTY HYDRAULIC MULCH PER ACRE

PART 13 – LIGHTING INSTALLATION

ITEM 108 – INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

DESCRIPTION

108-1.1

ADD:

This item shall consist of underground 600V cable and fiber optic cable furnished and installed in accordance with this specification at the locations and in accordance with the design, dimensions, and details shown in the plans. This item shall include the excavation and backfill of the trench, the installation of cable in trench, duct or conduit, splicing, cable marking, and testing of the installation, and all incidentals necessary to place the cable in operating condition as a completed unit to the satisfaction of the Engineer.

Installation of cable and cable in conduit as shown on the plans.

All installations shall be done at the locations shown on the plans and in accordance with these specifications. When crossing existing circuits or utilities, the Contractor will be required to hand dig the trenches for the proposed conduit, unless given approval by the Engineer.

The hand digging, trenching, or boring of conduit will be considered incidental to the contract unit price of the proposed cable and no additional compensation will be allowed.

EQUIPMENT AND MATERIALS

108-2.2 CABLE

A. Copper wire rated RHW-2/USE-2, 600V or less.

1. Cable shall be 600 Volt rated, sized as indicated on the drawings. Cable shall comply with Underwriters Laboratories Standard U.L. 44 (for Type RHW-2) and U.L. 854 (for Type USE-2) and shall pass the IEEE 383, 70,000 BTU/hr and VW-1 Flame Tests. Cable insulation shall be abrasion, moisture, heat and sunlight resistant black cross-linked polyethylene (XLP). Cables shall be rated for use at 90°C in both wet and dry locations and be suitable for use in conduit, underground service entrance cable and direct burial applications..
2. For power cable, conductor size shall not be smaller than No. 12 AWG. Control cable, conductor size shall not be less than No. 14 AWG. These limits on conductor sizes shall not apply to leads furnished by manufacturers of transformers and fixtures.
3. Cable size, number of conductors and service voltage shall be specified in the plans.

B. Fiber Optic Cable

1. 24-Strand Multi mode
2. Core Diameter:8.3 um nominal
3. Cladding Diameter:..... 125 +/- 1 um
4. Core/Clad Concentricity Error: < .5 um
5. Coating fiber diameter:245 +/- 10 um
6. Cladding Non-circularity: <1%
7. Coating/Cladding Concentricity Error:..... <12 um

- 8. Colored Fiber Diameter: 254 um
- 9. Effective Group Index of Ref. @1310 nm: 1.466
- 10. Effective Group Index of Ref. @1550 nm: 1.467
- 11. Point Discontinuities: 1 dB
- 12. Max. Fiber Loss @1310: 7 dB/km
- 13. Max. Fiber Loss @1550: 7 dB/km
- 14. NEC CMP rated
- 15. Nominal Operating Temperature -40°C to +85°C

108-2.3 Bare copper wire (counterpoise, bare copper wire ground and ground rods)

ADD:

Ground rods shall be UL listed, single-piece, 3/4" diameter by 10' long copper-clad steel with minimum 10 mil copper cladding.

All buried connections of grounding and bonding components shall be via exothermic weld only. Clamp or compression grounding connections below grade will be rejected and replaced at Contractor's expense.

Grounding conductors shall be 600 volt, same insulation type as used for phase conductors, green in color unless otherwise noted.

Grounding electrode conductors in contact to earth shall be bare, stranded, annealed copper. Grounding Electrode Conductors shall be the larger of that detailed on the project drawings, specified herein or as required by NEC.

108-2.13 600V CONDUCTORS

A. Color code conductor insulation for #10 AWG or smaller conductors. Color code conductors #8 AWG or larger with colored tape or colored insulation.

1. Standard colors:

	120/240V
	1 Phase
	<u>3W</u>
Phase A	Black
Phase B	Red
Phase C	N/A
Neutral	White
Ground	Green

2. Control wiring insulation color shall be red.

ii. Pulling lubricant shall be used for all cables pulled through conduit. Pulling lubricant shall be UL listed, water based, polymer solution. Lubricants containing waxes, soaps or combustible materials are not acceptable. Contractor shall verify the compatibility of the selected cable pulling lubricant and cable jacket materials proposed.

C. Splices and joints shall be as described below, or approved equivalent.

1. Note that below grade splices in manholes, handholes and vaults **will not** be allowed on this project unless specifically shown on drawings. Conductors are to be pulled continuous end-to-end unless otherwise noted or directed by the Engineer in writing.
 - a. #8 and smaller conductors:
 - i. Twist-on connectors pre-filled with silicone-based sealant to protect against moisture and corrosion. Units shall be UL 486D listed as weatherproof, waterproof and suitable for direct burial. .
 - b. #6 and larger conductors:
 - ii. NSI/Polaris ISRW Series "Blue", IIsco Series USPA, DBK, SSK or PDSS or approved equal.
 - iii. Electrical line marking tape shall be installed only if specifically noted on project drawings. Tape shall be minimum 5 mils thick constructed of aluminum foil encased in an impervious Mylar plastic coating. The minimum tensile strength determined in accordance with ASTM D882 is 15,000 PSI. The tape shall contain sufficient metal mass to provide detectability at depths up to 3 feet with a radio type metal locator. Tape shall be acid, alkali and corrosion resistant. Color shall be "RED", corresponding to the standard color for electrical lines, and shall additionally be printed with "WARNING-ELECTRICAL LINE BELOW" or similar text. Line marking tape shall be as manufactured by Pro-Line Safety Products of West Chicago, Illinois or equivalent. Unless otherwise indicated on the drawings, burial depth of tape shall be approximately 18" below finish grade.

108-2.14 FIBER OPTIC TERMINATIONS

A. Fiber Optic Connectors

1. Connectors shall be 'SC' duplex type.
2. Optical fiber cable connectors shall be capable of terminating optical fiber glass cables with outside diameters ranging from 125 through 900 microns. Fabricate connectors with optical fiber, self-centering, axial alignment mechanisms.
3. Connections shall be made via anaerobic adhesive or mechanical ("Unicam") fiber optic terminations.
4. The maximum optical attenuation per each mated field-installed connector pair shall not exceed 0.75dB. The total optical attenuation through the cross connect from any terminated optical fiber to any other terminated optical fiber shall not exceed 1.5dB. These measurements shall be performed at 5°C-23°C.
5. Connectors shall sustain a minimum of 500 mating cycles per ANSI/EIA/TIA-455-21 without violating specifications. These measurements shall be performed at 5°C- 23°C.
6. The connector shall have an optical axial pull strength of 2.2N (0.5lbf) at a 0 degree angle and an optical off axial pull strength of 2.2N (0.5lbf) at a 90 degree angle, with a maximum 0.5dB increase in attenuation for both tests when tested in accordance with ANSI/TIA/EIA-455-6B.

CONSTRUCTION METHODS

108-3.12 600V CABLE INSTALLATION

- A. Wire and cable shall be installed using accepted industry methods to prevent damage to conductors and insulation. Installation shall comply with all applicable sections of NEC regarding conduit fill.
- B. No splices shall be permitted in conduit bodies. All splices shall be made in junction boxes, control panels and cabinets provided for that purpose as detailed or required by need.
- C. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- D. Drawings are diagrammatic in showing circuitry routing between devices and equipment. Provide all phase conductors, neutrals, switched and unswitched legs, grounds, etc., as required for a complete and operational electrical system.
- E. All 120V circuits shall have individual neutral conductors. 120V circuits with "shared" neutral conductor shall not be permitted.
- G. All conductors shall be continuous without splices except at locations approved for the purposes of splicing.
- H. All wire sizes shall be stranded except where specifically approved otherwise.
- I. Intrinsically safe wiring shall be separated from non-intrinsically safe wiring in compliance with Article 504 of the NEC and ANSI/ISA Standard RP12.6. Intrinsically safe wiring insulation color shall be blue.
- J. All circuits shall be labeled in compliance with Section 16195 - Electrical Identification.
- K. Pulling eyes on conductors or a basket weave grip shall be used for pulling cable. Woven wire cable grips shall be used to pull all single conductor cable where pulling eyes are not available. Preferred method for pulling conductors is factory-installed eyes attached to conductors. All sharp points and edges on the hardware attaching the pulling rope to the cable shall be taped to prevent snagging or damaging the raceway.
- L. When a cable grip or pulling eye is used for pulling, the area of the cable covered by the grip or seal plus 6 inches shall be cut off, and discarded when the pull is completed. When pulling loops are used, the entire loop shall be cut off and discarded when the pull is completed.
- M. A non-binding type of swivel, or swivel connection shall be inserted between the pulling rope and the cable pulling eye, grip or loop to prevent twisting under strain and allow for free rotation of the cable during pulling.
- N. The pulling tension of any cable shall not exceed the maximum tension recommended by the cable manufacturer. Pulling mechanisms of both the manual and power types shall

have the rated capacity clearly marked on the equipment. Cable shall be installed using either hand-tension or by use of specially-designed "cable-tuggers". Any cable pulled through conduit using trucks, back-hoe's, earthmoving equipment or similar apparatus will be rejected and will be replaced with new cable at the Contractor's expense.

- O. Break-away shear-pins or other acceptable method of tension limitation shall be utilized on mechanical pulling equipment to prevent over-stressing cable during installation. To avoid insulation damage from excessive sidewall pressure at bends, the pulling tension, in pounds at a bend, shall not exceed 300 times the radius of the bend in feet.
- P. As soon as the cable is pulled into place, the pulling eyes, cable grips, or pulling loops shall be removed. On exterior pulls, the remaining cable ends shall be temporarily resealed with either a minimum of three (3) wraps of 2" Scotch #23 rubber splicing tape or heat-shrink caps. Exposed cable ends shall be wrapped in such a manner to prevent unintentional water entry. Cable ends or seals shall be installed prior to the end of the workday.
- Q. Cable shall not be bent to a radius of less than 4 times the overall diameter, including installation apparatus.
- R. Cable supports and securing devices shall be installed to provide adequate support without deformation of the cable jackets or insulation.
- S. Cables shall be routed within manholes and vaults such that adequate working space is provided within the structure for cable splicing and for the installation of future cables.
- T. All damaged or rejected cable shall be removed from the project site and replaced at no additional expense to the project.

108-3.13 FIBER OPTIC INSTALLATION

- A. All conduits, ducts, and manholes for FO cable systems shall be installed as shown on drawings.
- B. No splices shall be permitted unless the length of cable being installed exceeds the maximum standard cable length available from manufacturer.
- C. Splices shall be made using the method recommended by the cable manufacturer. Splices shall be housed in a splice enclosure and shall be encapsulated with an epoxy or ultraviolet light cured splice encapsulant. All FO splices shall be field tested at the time of splicing. Fusion splices shall have less than 0.2 dB loss, and mechanical splices shall not be used. There shall be no more than one (1) splice per kilometer in any of the FO cables excluding terminations. All field splices shall be located in cable boxes. Sufficient cable shall be provided in each splicing location to properly splice the cables, and to provide extra cable for additional splices. All cable ends shall be protected at all times with end caps except during actual splicing. During the splicing operations, means shall be provided to protect the unspliced portions of the cable from the intrusion of moisture and other foreign matter. All splices shall be done in hand holes provided and installed by the Contractor as required.
- D. For cable installed in ducts and conduit a cable lubricant compatible with the cable sheathing material shall be used on all cables pulled. Pulling fixtures shall be attached to the cable strength members. If indirect attachments are used, the grip diameter and length shall be matched to the cable diameter and characteristics. If indirect attachment is used on cables having only central strength members, the pulling forces shall be reduced to

ensure that the fibers are not damaged from forces being transmitted to the strength member. DURING PULLING THE CABLE PULL LINE TENSION SHALL BE CONTINUOUSLY MONITORED, AND SHALL NOT EXCEED THE MAXIMUM TENSION AS GIVEN BY THE CABLE MANUFACTURER. The mechanical stress placed upon a cable during installation shall be such that the cable is not twisted or stretched. A cable feeder guide shall be used between the cable reel and the face of the duct or conduit to protect the cable and guide it into the duct or conduit as it is played off the reel. As the cable is played off the reel, it shall be carefully inspected for jacket defects. Precautions shall be taken during installation to prevent the cable from being kinked or crushed and that the minimum bend radius of the cable is not exceeded at any time. Cable shall be hand fed and guided through each manhole and additional lubricant shall be applied at all intermediate manholes. When practicable, the center pulling technique shall be used to lower pulling tension. That is, the cable shall be pulled from the center point of the cable run towards the end termination points. The method may require the cable to be pulled in successive pulls. If the cable is pulled out of a junction box or manhole the cable shall be protected from dirt and moisture by laying the cable on a ground covering. Dynamometers or load-cell instruments shall be used to ensure that the pulling line tension does not exceed the installation tension value specified by the cable manufacturer. The mechanical stress place upon a cable during installation shall be such that the cable is not twisted or stretched.

108-3.14 600V CABLE TESTING

ADD:

- A. Inspect wiring for physical damage and proper connection.
- B. All wire and cable shall be tested for continuity and short circuits prior to energizing circuits. Verify proper phasing, adjust as required.
- C. After wires and cables are in place and connected to devices and equipment, the system shall be tested for short circuits, improper grounds, and other faults. When fault condition is present, the trouble shall be rectified, then re-tested. Where cable is found defective or damaged, it shall be removed and replaced in entirety; do not field repair. Cost for correction shall be considered incidental to the project.
- D. All wiring devices and electrical apparatus furnished under this contract, when ground or shorted on any integral "live" part, shall be removed and the trouble rectified by replacing all defective parts and materials. Cost of correction is considered incidental to the project.
- E. All feeder cables and other power distribution apparatus shall have a Megger resistance test conducted to determine that insulation resistance is not less than that recommended by the manufacturer, or as noted below.

Unless otherwise recommended by the manufacturer, insulation resistance testing shall meet or exceed the following on 600 Volt equipment utilizing 500 Volt resistance test instrument:

Conductors.....	50 Meg-Ohms
Motors.....	5 Meg-Ohms
Switchboards, MCC's and Panelboards	25 Meg-Ohms
Power Transformers	5 Meg-Ohms

- F. Contractor shall furnish all tests and shall provide all test equipment, meters, instruments, cable connections or apparatus necessary for performing tests as specified herein. All costs for testing shall be considered incidental to this item and will not be paid for separately.
- G. Examine connections to equipment for proper phase relationships. Rotate phase conductors as necessary in order to correct.
- H. All motors shall be tested under Article 16220. All motors shall be tested for correct direction of rotation. Run tests on all motors shall be tested for correct direction of rotation. Run tests on all motors and verify that proper overload devices have been installed. Coordinate this task with motor supplier.
- I. Testing of Ground System
 - 1. Each and all grounded cases and metal parts associated with electrical equipment shall be tested for continuity of connection with the ground bus system by the Contractor in the presence of the Engineer or his representative.
 - 2. All grounding electrode conductors brought in from the ground field shall be tested for satisfactory continuity and by resistance measurement between the electrical equipment ground bus and the ground field. The grounding path shall not exceed 0.010 ohms.
 - 3. Each Ground Field shall be tested for resistance to earth a "three-terminal" or "fall-of-potential" test as described in IEEE Standard #81. As an alternate, a specially designed clamp-on instrument such as AEMC Model 3710 (now superseded by Model 6416) or 3730 (now superseded by Model 6417) may be used if found acceptable to the engineer. Based upon measured field data, the Contractor shall calculate the ground field resistance and furnish record copies to the Engineer and Owner for record. In no case shall the ground field resistance exceed 25 ohms. If the resistance is found to be higher than 25 ohms, one additional rod shall be driven with a minimum separation equal to the length of the ground rod used and connected in parallel with the rod under test.
 - 4. Exterior ground field resistance testing shall not be measured during unusually wet weather and should be performed during normal weather and soil conditions. Any tests incorrectly performed or not performed to the satisfaction of the engineer will be repeated. Costs for all such re-testing shall be considered incidental to the project.
 - 5. All specified maximums and minimums of this specifications must be met. Complete test records of all tests shall be made and shall show resistance values obtained and calculations of same, showing method of test and calculation.

FIBER OPTIC TESTING

- A. An optical time domain reflectometer (TDR) test at 820 nanometers, of the FO cable on the reel prior to installation. The optical time domain reflectometer shall be calibrated to show anomalies of 0.2 dB as a minimum. Test data shall be recorded and furnished to the Engineer. Cable tested with losses exceeding manufacturer's acceptable levels for new cable shall be rejected.
- B. A second time domain reflectometer test at 820 nanometers shall be performed on the FO cable after it is installed. The optical time domain reflectometer shall be calibrated to show anomalies of 0.2 dB as a minimum. If the optical time domain reflectometer test results are unsatisfactory, the FO cable segment is unacceptable.
- C. The unsatisfactory segments of cable shall be replaced with a new segment of cable at no cost to the Owner. The new segment of cable shall then be tested to demonstrate acceptability

METHOD OF MEASUREMENT

108-4.1

ADD:

The removal of existing cables will not be measured for payment, it shall be included in the pay item for removal of the associated item.

108-4.2

ADD:

The quantity of 600V or fiber optic cable installed in trench, duct bank or conduit, including, connectors, splices grounding connectors and trench marking tape, shall be measured for payment by the number of linear feet as specified, completed, and accepted by the Resident Engineer.

BASIS OF PAYMENT

108-5.1 PAYMENT

ADD:

Payment will be made under:

BASE BID:

ITEM AR108404	1/C #4 600V UG CABLE	PER FOOT
ITEM AR108408	1/C #8 600V UG CABLE	PER FOOT
ITEM AR108410	1/C #10 600V UG CABLE	PER FOOT
ITEM AR108412	1/C #12 600V UG CABLE	PER FOOT
ITEM AR800178	FIBER OPTIC CABLE	PER FOOT

ADDITIVE ALTERNATE NO.1]:

ITEM AS108410	1/C #10 600V UG CABLE	PER FOOT
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ITEM 110 –AIRPORT UNDERGROUND ELECTRICAL DUCT BANKS AND CONDUIT

EQUIPMENT AND MATERIALS

110-2.3 PLASTIC CONDUIT

Revise paragraph **d.** to the following:

Type III –HDPE pipe, minimum standard dimensional ratio (SDR) 11 and Schedule 80 PVC, suitable for placement with directional boring under pavement.

110-2.11 PULL CORDS

Each empty conduit shown or described on the drawings shall be furnished with a pull cord to facilitate future conductor installation. Cord shall consist of non-deteriorating, non-metallic, non-cotton construction such as polyester or nylon material. Minimum tensile strength of all pull strings shall be 200#. Leave minimum of 12 inches slack at each termination or end. Any references on project drawings to “pull wire” shall be interpreted as a pull cord as described herein.

110-2.5 MOISTURE SEAL

- A. When electrical conduits are installed in sleeves, core-drilled holes or box outs, seal between conduit and penetration of perimeter walls, ceilings or floors to prevent entry of water.
- B. Seal conduit penetrations of roof with flashings compatible with roof design and approved by Roofing System Manufacturer and Engineer.
- C. Seal annular space between conductors and conduit wall of all conduit terminations where conduit enters a building from below grade in order to block moisture migration into electrical equipment. In addition seal conduits entering electrical equipment located either interior or exterior that once installed condensation is created in the electrical equipment due the electrical system being connected to areas with a different temperature. Conduit moisture barrier material shall not harden and be compatible with both wire insulation and conduit materials. Installed product shall be easily removed for maintenance or modifications, regardless of the length of time material has been installed. Conduit moisture seal material shall be Hydroblock by WaterGuard Technology Products, American Polywater Corporation Polywater Duct Sealant FST-250 Series, O-Z/Gedney Type DUX Water Sealing Compound or an approved equal.

CONSTRUCTION METHODS

110-3.8 DIRECTIONALLY BORED CONDUIT

- A. The directional boring equipment shall consist of a directional boring rig of sufficient capacity to perform the bore and pullback the pipe, a boring fluid mixing & delivery system of sufficient capacity to successfully complete the crossing, a guidance system to accurately guide boring operations and trained and competent personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of this project.
- B. The directional boring machine shall consist of a hydraulically powered system to rotate, push and pull hollow drill pipe into the ground at a variable angle while delivering a pressurized fluid mixture to a guidable drill (bore) head. The machine shall be anchored to the ground to withstand the pulling, pushing and rotating pressure required to complete the crossing. The hydraulic power system shall be self-contained with sufficient pressure and volume to power boring operations. Hydraulic system shall be free of leaks. Rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be grounded

- during boring and pull-back operations. Sufficient spares shall be kept on hand for any break-downs which can be reasonably anticipated.
- C. The bore head shall be steerable by changing its rotation and shall provide the necessary cutting surfaces and boring fluid jets.
 - D. The Guidance System shall be of a proven type and shall be setup and operated by personnel trained and experienced with this system. The Operator shall be aware of any magnetic anomalies and shall consider such influences in the operation of the guidance system if using a magnetic system.
 - E. Drilling fluid shall be composed of clean water and an appropriate additive. Water shall be from a clean source with a pH of 8.5 - 10.
 - F. The Guidance System shall be a conventional electromagnetic sound walkover system, Magnetic Guidance System (MGS) probe or proven gyroscopic probe and interface shall be used to provide a continuous and accurate determination of the location of the drill head during the drilling operation. The guidance shall be capable of tracking at the maximum depth required and in any soil condition, including hard rock. It shall enable the driller to guide the drill head by providing immediate information to the tool face, azimuth (horizontal direction), and inclination (vertical direction).

BASIS OF PAYMENT

110-5.1 PAYMENT

Payment will be made at the contract unit price per linear foot for each type and size of PVC conduit completed and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, aggregate backfill, backfill, compaction, sawcutting, replacement of pavement and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete these items. Topsoiling and seeding of the backfill and installation of pull string in spare conduits shall not be paid for separately but shall be considered incidental to the associated conduit.

Payment will be made under:

BASE BID:

ITEM AR110011 1" DIRECTIONAL BORE	PER FOOT
ITEM AR110117 1-1/2" PVC DUCT, DIRECT BURY	PER FOOT
ITEM AR110201 1" PVC DUCT, DIRECT BURY	PER FOOT
ITEM AR800020 1-1/2" DIRECTIONAL BORE	PER FOOT

ADDITIVE ALTERNATE NO. 1:

ITEM AS110011 1" DIRECTIONAL BORE	PER FOOT
ITEM AS110201 1" PVC DUCT, DIRECT BURY	PER FOOT

ITEM 800017 – ROADWAY LIGHTING

DESCRIPTION

800017-1.1

This item shall consist of removal of existing lighting units and furnishing and installing new area light poles, brackets, LED luminaires, foundations, internal wiring, fuses, vibration dampners, photocells and all accessories required, at the locations shown on the plans or as directed by the Engineer.

EQUIPMENT AND MATERIALS

800017-2.1 LIGHT FIXTURES

Luminaries shall be LED and shall operate with 120-277V, single phase power supply as indicated on the plans. The housing shall be constructed of heavy-gauge aluminum with no seams, weld beads or any other visible disturbances on the surface of the housing. All the internal and external hardware shall be stainless steel.

The lens shall be thermal and shock resistant glass and shall be sealed to the frame and secured with four retainer clips.

The optical distribution shall be Type III Medium (T3M). Fixture light output shall be between 18,000-20,000 lumens. Color temperature shall be 4000K. The BUG rating shall be B5-U0-G4.

The LED driver shall be rated to operate between -20°F to 120°F. LED driver shall operate at 150W or less.

The fixture shall be treated, primed, baked, covered with a high solids polyester finish and baked again. The final finish shall be as selected by the Airport or as directed by the Engineer.

910106-2.2 LIGHT POLES

The proposed poles shall be 30' tall round tapered aluminum poles fabricated from one piece aluminum with uniform wall thickness of .250". The material shall conform to ASTM A-500 grade B with minimum yield strength of 46,000 PSI. The weld shall be full length longitudinal weld. The anchor base shall be structural quality hot rolled carbon steel plate shall be welded to the shaft at top and bottom. The anchor bolts shall be provided by the pole manufacturer and shall be fabricated from commercial quality hot rolled carbon steel bar with minimum yield strength of 50,000 PSI. The top 8" of the anchor bolts shall be galvanized as detailed on the plans. The proposed poles shall be furnished with hand holes located above the base. Each pole shall be furnished with mounting hardware and vibration dampner and painted cast aluminum base covers as detailed on the plans and required by the manufacturer. The proposed poles shall be furnished with an inside and outside coating of red oxide I zinc chromate primer. The color shall be selected by the Owner.

All poles supplied shall be certified to be vibration free at all wind loads.

800017-2.3 LIGHT POLE FOUNDATIONS

Foundations for Light Pole shall be 24" diameter and extend 10' below finished grade. Reinforcing steel shall be installed as detailed on the plans.

Anchor bolts shall be supplied by the pole manufacturer and shall be installed according to his recommendations. Anchor bolts shall be "L" shaped and shall be minimum 1" diameter, 36" long with

7" "L" unless otherwise recommended by the pole manufacturer.

Foundations shall conform to the applicable sections of Item 610 of the Standard Specifications.

800017-2.4 INTERNAL WIRINGS

All fusing shall be accessible through the pole handhole for the light poles. Contractor shall provide the waterproof splices, breakaway fuse holders, fuses and other miscellaneous items necessary for a complete installation. The breakaway fuse holders and fuses shall be manufactured by Bussman or equal. All splicing of wiring from main power wiring to #10 XLP-USE wiring within pole shall be done inside the handhole at each pole. All fuses and lightning arrestors shall be within the light pole handhole.

800017-2.5 GROUND RODS

All light poles shall be furnished with a ground rod as detailed in the plans. The proposed ground rods shall be 3/4" diameter, 10' long copper clad. The top of the rod shall be buried min. 12" below finished grade. All the connections to the ground rod shall be buried min. 12" below finished grade. All the connections to the ground rods shall be one shot exothermic welding as manufactured by Cadweld or equal.

CONSTRUCTION METHODS

800017-3.1 POLES AND LUMINARIES

Poles and luminaries shall be assembled and wired on the ground, then lifted and bolted in place plumb. The pole shall be considered plumb when the center of the top is directly over the center of the base. Plumb is to be measured with a transit by the Resident Engineer.

Wiring run from luminaire to pole base shall have a strain relief clamp provided at the entry to the luminaire to prevent the wires from pulling loose from their terminals at the luminaire. Internal wiring of poles and luminaires including fuses and waterproof splices shall be incidental to this item. Poles and luminaires shall be set on their foundations such that the luminaires aim in the direction indicated on the plans.

All proposed poles shall be grounded to ground rods. Contractor shall use one shot exothermic weld by Cadweld or equal.

800017-3.2 LIGHT POLE FOUNDATIONS

The Contractor shall be responsible for the necessary concreting and formwork to install the foundations as detailed on the plans.

The Contractor is referred to Section 610 of the Standard Specifications, which covers the proper installation of the concrete.

Foundations shall extend for 10' below finished grade or pavement.

Anchor bolts shall be set according to the bolt circle requirements of the poles supplied. They shall be so arranged that when the pole and luminaire is erected, the luminaire will be properly aimed.

800017-3.3 POWER AND CONTROL

The location of power and control materials and work to be performed shall be as indicated in the plans. Electrical cable is covered in Section 108, The Contractor shall furnish and install identifying tags on all wires at the point where they connect to the breaker indicating which lights the wires serve. The Contractor shall stencil an identifying label on the control panel enclosure.

800017-3.4 RESTORATION

All areas disturbed by the light fixture installation storing of dirt and other work shall be restored to its original condition. The restoration shall include any necessary topsoiling, fertilizing, seeding or sodding and shall be performed in accordance with the associated specifications. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance.

800017-3.4 LIGHT POLE REMOVALS

Existing light poles and associated components shall be removed and salvaged. All salvaged items shall be turned over to the Airport. If Airport elects not to salvage all or some of the components, these components shall be disposed-of off-site by the Contractor at no additional cost to the Contract.

Existing light pole foundations shall be completely removed and backfilled by the Contractor at no additional cost to the Contract. The foundation void shall in turf areas shall be backfilled in accordance with Item 152 and areas under proposed pavement or within existing pavements shall be backfilled in accordance with Item 208.

METHOD OF MEASUREMENT

800017-4.1

The quantity of light poles to be paid for under this item shall be the number of units furnished and installed ready for operation. Each unit shall consist of the light pole, luminaire with photocell, brackets, fuses, circuit breakers, connections to distribution panel, internal wiring, ground rods, light pole foundation, anchor bolts, bolt cover, and any miscellaneous items and fittings required to make the unit operational.

The quantity of light poles to be removed shall be paid for under this item and shall be the number of units completely removed and transported to the Airport designated location. Each light pole removal shall include removal of the complete unit, including but not limited to luminaires, cabling, foundation and all other associated items.

BASIS OF PAYMENT

800017-5.1

Payment will be made at the contract unit price for each light pole removed and each light pole complete with LED Luminaire, photocell, electrical wiring, ground rods, circuit breaker in distribution panel, and foundation and any other accessories completed by the Contractor and accepted by the Engineer. These prices shall consist of full compensation for furnishing and material, backfilling and compacting trenches, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under

ITEM AR800017	LIGHT POLE WITH LED LUMANAIRE	PER EACH
ITEM AR910900	REMOVE ROADWAY LIGHT POLE	PER EACH

ITEM 800188 – GATE ACCESS CONTROL SYSTEM

DESCRIPTION

800188-1 SUMMARY

Work under this section is to provide an Access Control System for a vehicle gate as described herein and/or as detailed on the project drawings. Contractor shall coordinate with Airport's security system vendor for location of all equipment and termination of all conduits.

Work under this section includes furnishing and installation of power pedestal, power panel, disconnect, ACS enclosures, conduits with pull strings, gooseneck stands, and other equipment required by Airport's security system vendor and as detailed on the plans.

Gate ACS work shall also include the control wiring for new Automatic Slide Gate as detailed on the plans and specified herein, including wiring and connections to the ACS, card readers and gate operator. This work shall include miscellaneous material, equipment, and labor necessary for the work.

The contractor work shall include to furnish and install power cables to the ACS and gate operator, all conduit, one (1) digital keypad, mounting enclosures for (6) card readers, keypad and intercom with gooseneck stands and labor necessary to provide a complete system as detailed on the plans.

The contractor work shall also include to furnish and install multi-mode fiber optic cable from hangar to the ACS panel as shown on the plans. Contractor shall make all fiber optic terminations inside the hangar at new patch panels. The fiber optic cable shall be paid under pay item for fiber optic cable.

The contractor work shall also include to furnish and install NEMA 1 enclosure inside the existing hangar with fiber optic patch panel and network switch.

800188-2 SYSTEM DESCRIPTION

A. Equipment furnished and installed by Airport's security system vendor:

1. One (1) Fiber/POE Hardened switch
3. Six (6) Lenel x2210 Door Controllers
4. Six (6) Card Readers
5. One (1) Video Intercoms
6. Local Access Control cabling from the Hoffman Enclosure to the six (6) readers
7. Two (2) Avigion 360-degree Cameras Mounted on Poles
8. Two (2) Avigion 360-degree Camera Licenses
9. One (1) Local Avigilon Appliance to record video
10. Mounting Hardware for all equipment supplied by Airport's security system vendor
11. Communication cabling for gate operator, card readers, intercoms and cameras for a complete and operational ACS.

B. Equipment furnished and installed by the Contractor:

1. Fiber Optic cable from hangar to the gate
2. Power pedestal with ACS enclosure, enclosures for individual tenant access control, power panel, disconnect, TVSS
3. All above grade and underground conduit for ACS
4. NEMA 1 enclosure with patch panel and network switch inside existing hangar
5. All power conductors and conduits
6. One (1) digital key pad , wired for gate control
7. Intercom Enclosure
8. Card Reader Enclosure for (6) card readers
9. Card Reader Gooseneck Stand as detailed on the plans

10. Intercom Gooseneck Stand as detailed on the plans
11. Bollards as detailed on the plans
12. All Fiber Optic patch panels and terminations
13. Fiber optic cable building rider conduit and building entrance

800188-3 TYPICAL VEHICLE GATE INTERFACE

- A. The vehicle gate shall be card reader/intercom controlled for entering vehicles.
- B. The vehicle gate shall be detector loop controlled for exiting vehicles.
- C. Card reader/intercom/detector loop Control of Vehicle Gate
 1. When the vehicle gate is in the card reader control mode of operation the vehicle driver shall be required to hold an access card up to a card reader mounted on a pedestal outside the gate to enter. Upon a valid card read the security system shall signal the vehicle gate to open.
 2. Intercom shall be required on a pedestal outside the gate to contact personnel inside the airport if guest does not have an access card. Upon validating guest, airport personnel shall be able to signal the security system to open the vehicle gate.
- D. Entry and Exit Detector Loop Control of Vehicle Gate
 1. Detector loop exit (Free Exit)
 - a. A detector loop shall be provided by the gate contractor in the drive lane for free exit.
 - b. The gate contractor shall provide a pair of terminals connected to the detector loop such that when a vehicle is detected a maintained contact closure shall be placed across those terminals. When the vehicle is no longer detected the contact shall return to the open condition.
- E. Remote Control of Vehicle Gate
 1. The vehicle gate shall be remote controlled by the security system. Momentary gate open, maintained gate open and maintained gate close remote control shall be provided.
- F. System Interface
 1. To provide for vehicle gate / security system interface the gate contractor shall provide a terminal interface cabinet inside the ACS site enclosure. The terminal cabinet shall contain all terminals required to interface control of the vehicle gate to the security system.

800188-4 SUBMITTALS

- A. Shop Drawings:
 1. Submit in accordance with Section 50-18 of the Illinois Standard Specifications for Construction of Airports, current edition.
- B. Operation and Maintenance (O&M) Data:

1. Submit in accordance with Section 50-18 of the Illinois Standard Specifications for Construction of Airports, current edition.

MATERIALS

800188-2.1 CONDUIT AND CABLE

- A. Conduit shall be in accordance with Item 110 and shall be of the type shown on the plans.
- B. 600V power cables and fiber optic cable shall be in accordance with Item 108 and shall be of the type shown on the plans.

800188-2.2 CARD READERS/INTERCOM

- A. One (1) card reader and intercom to be furnished and installed by the contractor for airport personnel access.
- B. Contractor shall furnish 100 access cards to the airport.

800188-2.3 CARD READER PEDESTAL ASSEMBLY

- A. Contractor to furnish and install gooseneck assembly for 2ft x 2ft x 8in NEMA 4X enclosure for (6) card readers and (1) intercom with (1) digital keypad as detail on the plans.
- B. Contractor to furnish and install 2ft x 2ft x 8in (minimum or as required) NEMA 4X enclosure to house the six (6) card readers for gate access. Enclosure shall be mounted to goose neck assembly as detailed on the plans.
- C. Paint
 1. Exterior Primer. Primer used for covering exposed metal on the Intercom Pedestal Assembly shall be Polane® Primer-Sealer, gray (E65A4) in color, or an approved equal.
 2. Exterior Paint. Paint used for coating the existing Intercom Pedestal Assembly shall be POLANE® T Polyurethane Enamel with a texture coat, or an approved equal. Color shall be Bright Yellow L.F. (gloss) to match the existing pedestal assemblies.
- D. Contractor to furnish and installed bollards as detailed on the plans, to protect card reader assembly from vehicles.

800188-2.4 SITE ENCLOSURE

- A. General: The Site Enclosures shall be as required by the Airport's security system vendor. The following is required as a minimum:
 - 1) Enclosure: Enclosures shall be Stainless Steel NEMA 4X, minimum 24" x 24" x 12" and (6) 12" x 12" x 8" or as required to house equipment, Hinged Cover with stainless steel hinge pin, pad lockable, with quarter-turn slotted latch kits, Hoffman, or equivalent. Provide interior mounting panel, with white finish. Provide door-mounted interior light. Materials of construction shall be 16 or 14 gauge (depending on size) Type 304 stainless steel.
 - 2) Strut-type supports shall be 1-5/8" channel hot-dipped galvanized steel, Unistrut P1000-HG, or equivalent. Mounting hardware shall be stainless steel.

- 3) Provide Two Duplex GFCI Receptacles. Receptacles shall be rendered permanently inoperative at “end of useful life” (EOL) as defined in UL 943. All receptacles shall be rated 20 Amp with NEMA 5-20R receptacle configuration, and shall be Pass and Seymour 2095, or equivalent.
- 4) Loop Detectors shall be Peek 625X, or equivalent.
- 5) 12V Relays shall be IDEC RR2P-U-DC12V, or equivalent.
- 6) Surge Suppressors shall be:
 - (a) Card Reader: Ditek DTK-4LVPLCR, or equivalent.
- 7) Wire Management inside enclosure shall be Panduit, or equivalent.
- 8) Conduit shall be as specified in Item 108.
- 9) Directional bore shall be as specified in Item 110.

CONSTRUCTION METHODS

800188-3.1

- A. Install equipment in accordance with manufacturer’s written instructions and approved submittals.
- B. All Testing and Programming to be done by the Airport’s security system vendor.

METHOD OF MEASUREMENT

800188-4.1

- A. Work associated with the installation of the Gate Access Control System including all materials, equipment, labor, and incidentals shall be measured per lump sum. The Gate Access Control System pay item shall include but not limited to new card reader, access cards, gooseneck stand, access control enclosures, power pedestal, disconnect, power panel, power cables, programming, and testing.

BASIS OF PAYMENT

800188-5.1

Payment for the Gate Access Control System will be made at the contract unit price per lump sum. This work includes the, ACS controller, power supplies, ingress and egress control, bollards, card readers, enclosures, pedestals, programming and testing. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to provide a complete and functional system.

Payment will be made under:

ITEM AR800188	GATE ACCESS CONTROL SYSTEM	PER LUMP SUM
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APPENDIX A

IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA

POLICY MEMORANDUM

February 10, 2022

Springfield, Illinois

Number: 22-2

TO: CONSULTING ENGINEERS / CONTRACTORS

SUBJECT: OBTAINING APPROVED AGGREGATES COMPLYING WITH 2020
STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS

I. SCOPE

This Policy Memorandum addresses the additional aggregate quality requirements of the 2020 Illinois Standard Specifications for Construction of Airports, Special Provisions, and policies of IDOT Aeronautics. The airport quality requirements exceed those normally expected for similar IDOT highways pay items.

II. REQUIREMENTS

The contractor shall use these procedures to demonstrate aggregate compliance with the contract requirements.

A. Contractor Responsibility

1.) For Item 208 Aggregate Base and Item 209 Crushed Aggregate Base, the Contractor shall use aggregates with test requirements conforming to 2020 Standard Specifications for Construction of Airports, Coarse Aggregate Quality table, Section 208-2.2 and Section 209-2.2. Note: Item 208 and 209 Airport aggregates require B Quality coarse aggregates instead of the IDOT Highways allowed D Quality.

- a) Na₂SO₄ Soundness 5 Cycle, Illinois Modified AASHTO T 104, maximum percent loss = 15%.
- b) Los Angeles Abrasion, Illinois Modified AASHTO 96, maximum percent loss = 40%.
- c) Deleterious Materials, Illinois Testing Procedure 203, Deleterious Particles in Coarse Aggregate.
 - i. Shale, 2.0% maximum.
 - ii. Clay Lumps, 0.5% maximum.

- iii. Soft & Unsound Fragments, 6.0 % maximum.
- iv. Other Deleterious, 2.0% maximum.
- v. Total Deleterious, 6.0% maximum.

2.) For Item 401 HMA Mixtures, the Contractor shall use aggregates with quality testing requirements conforming to 2020 Standard Specifications for Construction of Airports, Coarse Aggregate Quality table, Section 401-2.1a(2) and Fine Aggregate Quality table, Section 401-2.1b(2). Note: Airport HMA mixtures require A Quality coarse and fine aggregates instead of the IDOT Highways allowed B Quality.

- a) Deleterious Materials, Illinois Testing Procedure 203, Deleterious Particles in Coarse Aggregate.
 - i. Shale, 1% max.
 - ii. Clay Lumps, 0.25% max
 - iii. Coal & Lignite, 0.25% max
 - iv. Soft & Unsound Fragments, 4.0 % max
 - v. Other Deleterious, 4.0% max
 - vi. Total Deleterious, 5.0% max

3.) For Item 501 PCC Mixtures, the Contractor shall use aggregates with quality testing requirements conforming to 2020 Standard Specifications for Construction of Airports, Coarse Aggregate Quality table, Section 501-2.3(b). It is noted that this A Quality table has been modified from the current IDOT Highways A Quality requirements. Aggregate testing procedures and acceptance are as follows.

- a) Total Deleterious Maximum % = 2.6% conforming to Illinois Testing Procedure 203 Deleterious Particles in Coarse Aggregate (ITP 203).
- b) Maximum Deleterious Chert % = 0.1% conforming to Illinois Modified AASHTO T 113, Standard Method of Test for Lightweight Pieces in Aggregate.

4.) Obtaining aggregates conforming to the requirements of the 2020 Standard Specifications for Construction of Airports.

- a) First, check with your aggregate source(s) to see if their product recently passed Aeronautics requirements. It is possible the aggregate source in questions has met the Aeronautics requirements, but the IDOT Bureau of Materials does not have the Aeronautics-approved product listed. For example: the B Quality aggregate 031CM16 at a particular source has been confirmed to also meet A Quality. Check with your aggregate source to confirm aggregate quality to be used in the above pay items. Check with IDOT Aeronautics for previously approved sources.
- b) If the aggregate source does not have recent tests to show it meets Aeronautics requirements, the Contractor shall ask the aggregate source to request the IDOT District Materials Engineer to test the aggregate for the required parameters.
- c) If the IDOT District is unable to perform the requested test(s) or the IDOT District schedule is not compatible with the Contractor's timetable, the Contractor shall have the aggregate tested by a third-party testing laboratory. The third-party laboratory shall be IDOT-approved or AASHTO-approved. AASHTO approval consists of accreditation in accordance with AASHTO Materials Reference Laboratory (AMRL).

- d) Additional expense incurred by the Contractor for third-party testing may be approved for payment by a Change Authorization in the amount of the actual testing cost. Confirm with the Aeronautics Materials & Certifications Engineer to get prior approval for testing expenses.
 - e) Aeronautics will maintain a database of approved sources and third-party tested aggregates that conform to the requirements of the 2020 Specifications.
- 5) Frequency of Testing. Test results for aggregate products from the same ledge, processed using the same method and equipment, shall be considered to meet the Aeronautics requirements for 1 year from the testing date. IDOT Aeronautics reserves the right to re-test aggregates to confirm compliance.

William C. Eves, P.E.
Acting Chief Engineer

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

February 20, 2014

Springfield

Number: 87-2

TO: CONSULTING ENGINEERS

SUBJECT: DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS

I. Introduction

This Policy Memorandum deals with the implementation of the bituminous density quality assurance specifications as outlined in the Standard Specifications for Construction of Airports, Sections 401-4.15 and 403-4.15.

II. Sampling

After completion of compaction and when the pavement has reached ambient temperature, the paved area shall be divided into Sublots of 500 tons per type of mix. One core sample (2 cores per sample) shall be taken from each Sublot. The longitudinal and transverse location for each sample shall be determined by use of a random number "Deck" provided by the Division. No core shall be taken closer than two (2) feet from the edge of the mat. A core extraction device shall be used to obtain all cores from the mat. All cores are to be taken by the contractor under the supervision and remain in the possession of the Engineer. It is imperative that the Engineer and the contractor realize that the cores are "money" and that improper coring, extraction, shipping and/or testing can be costly.

One mix sample per 1000 tons of mix laid shall be taken for Extraction, Maximum Specific Gravity (G_{mm}) and Air Void tests. The mix samples shall be sampled by the contractor and split in half.

The Resident Engineer shall randomly designate and send the split samples to an independent laboratory for testing. The laboratory will be verified to be ASTM- certified for all the required testing and be contracted through the Consultant. The frequency of testing split samples shall be 1 per 5000 tons. Higher frequencies may be necessary if the contractor's tests, and/or mix quality control are inconsistent.

III. Testing

All cores shall be tested for Bulk Specific Gravity (G_{mb}) in accordance with ASTM D2726 using Procedure 10.1, "For Specimens That Contain Moisture." The Theoretical Maximum Gravity (G_{mm}) shall be determined according to ASTM D2041. From these tests the in-place air voids of the compacted pavement are calculated according to ASTM

D3203 for "dense bituminous paving mixtures." Selection of the proper G_{mm} shall be based on a running average of four (4) tests per Lot.

- E.g. Lot 1 - Use the average of the two (2) tests for Lot 1.
 Lot 2 - Use the average of the four (4) tests from Lots 1 and 2.
 Lot 3 - Use the average of the four (4) tests from Lots 2 and 3.

NOTE: When more than four (4) Sublots are used, still use a running average of four (4) tests per Lot.

IV. Acceptance Calculations

The first step in calculating the quantities for pay is to calculate the Mean (\bar{X}) and the Standard Deviation (S) of the Sublot tests. From this data the Lot samples should first be tested for outliers. After consideration for outliers, the Percent Within Tolerance (PWT) and the Percent Within Limits (PWL) are calculated to determine the final pay quantities for the Lot.

EXAMPLE

1. Test Data

- Lot Quantity = 2000 tons
- Sublot Test 1 = 4.35 % Air Voids
- Sublot Test 2 = 3.96 % Air Voids
- Sublot Test 3 = 6.75 % Air Voids
- Sublot Test 4 = 6.25 % Air Voids

2. Calculating the Mean and Standard Deviation

Sublot	\bar{X}	$(\bar{X} - \bar{X})$	$(\bar{X} - \bar{X})^2$
1	4.35	-0.978	0.956
2	3.96	-1.368	1.871
3	6.75	1.422	2.022
4	<u>6.25</u>	0.922	<u>0.850</u>
Sum =	21.31		5.699

$N = 4$

Mean $\bar{X} = 21.34 / 4 = 5.328$

Variance $(S)^2 = \text{Sum } \frac{(\bar{X} - \bar{X})^2}{3} = \frac{5.699}{3} = 1.900$

Standard Deviation $S = \sqrt{1.900} = 1.378$

3. Test for Outliers

Check for Critical "T" Values

$$T = \frac{|(X_1 - \bar{X})|}{S} = \frac{|3.96 - 5.328|}{1.378} = 0.99$$

* Difference between the suspect test value (X_1) and the Mean (\bar{X}).

If the T value exceeds the critical "T" Value in the table below and no assignable cause can be determined for the outlier, discard the suspected test measurement and obtain another random sample from the Sublot in question. If the new test exceeds the Mean (\bar{X}) in the same direction from the Mean as the suspected test, recalculate the T value including all tests (original test, suspected test, and new test) for an outlier and for computing final payment.

TABLE OF CRITICAL "T" VALUES

Number of observations (N)	Critical "T" Value 5% Significance Level
3	1.15
4	1.46
5	1.67
6	1.82
7	1.94
8	2.03
9	2.11
10	2.18
11	2.23
12	2.29

Based on the above table, the "T" value of 0.99 does not exceed the Critical "T" Value of 1.46 for N = 4. Therefore, the value (3.96) is not an outlier and shall be used in calculating the Lot payment.

4. Calculation of Lot Payment

To calculate the Lot Payment use the Acceptance Criteria as outlined under Item 401-4.15(c) or Item 403-4.15(c).

$$Q_L = \frac{(\bar{X} - 1)}{S} = \frac{5.328 - 1}{1.378} = 3.141$$

$$Q_U = \frac{(7 - \bar{X})}{S} = \frac{7 - 5.328}{1.378} = 1.213$$

From this data the Percentage Within Tolerance (PWT) for both the lower and upper tolerance limits is determined by Table 6 (see Item 401 Bituminous Surface Course and/or Item 403 Bituminous Base Course in the Standard Specifications) for the number (N) of samples tested.

Eq. PWT (lower) = 99.0%
PWT (upper) = 90.4%

We now calculate the Percent Within Limits (PWL) for the Lot.

$$PWL = [PWT (lower)] + [PWT (upper)] - 100$$

$$PWL = (99.0 + 90.4) - 100 = 89.4\%$$

Using Table 5, the % Adjustment in Lot Quantity is:

$$\% \text{ Adjustment} = 0.5 \text{ PWL} + 55.0$$

$$\% \text{ Adjustment} = 0.5 (89.4) + 55.0$$

$$\% \text{ Adjustment} = 99.7$$

$$\text{Adjusted Quantities} = \% \text{ Adjustment} \times \text{Lot Quantities}$$

$$\text{Adjusted Quantities} = 0.997 \times 2000 \text{ tons}$$

$$\text{Adjusted Quantities} = 1994 \text{ tons}$$

5. Resampling and Retesting

The contractor has the right to request the resampling and retesting of a complete Lot. This privilege is only allowed once for each Lot and must be requested in writing by the contractor within 48 hours of receiving the official report from the Engineer.

6. Reporting

After completion of the tests for each Lot, the Engineer shall complete the necessary calculations for final adjustment in quantities on the Form AER-1 and have both the Engineer and the Contractor sign the report for copying to both the FAA and IDOA.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 87-2, dated April 1, 2010

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

February 20, 2014

Springfield

Number: 87-4

TO: CONSULTING ENGINEERS

SUBJECT: DETERMINATION OF BULK SPECIFIC GRAVITY (d) OF COMPACTED BITUMINOUS MIXES

A. SCOPE

This method of test covers the determination of the bulk specific gravity and the percent air, of core samples from compacted bituminous mixtures using a saturated surface-dry procedure.

B. DEFINITIONS

1. Bulk Specific Gravity (G_{mb}) ASTM 2726 or density is the weight per unit volume (gms/cc) of a mixture in its existing state of consolidation. The volume measurement for this specific gravity will include the volume of all the aggregate, asphalt, and air spaces (voids) in the aggregate particles and between the aggregate particles.
2. Theoretical Maximum Specific Gravity (G_{mm}) ASTM 2041 is the weight per unit volume (grams/cc) of a mixture assuming complete consolidation; i.e., all the air spaces (voids) between the aggregate particles are eliminated.
3. Percent Density is a measure of the degree of compaction in relation to the Theoretical Maximum Specific Gravity.
4. Percent Air is a measure of the air voids in the compacted pavement.

C. APPARATUS

1. Balance - The balance shall be accurate to 0.1 gm throughout the operating range. It may be mechanical or electrical and shall be equipped with a suitable suspension apparatus and holder to permit weighing of the core in water while suspended from the balance. If the balance is a beam type, it shall be set up so that the core is placed in the basket that is suspended from the zero (0) end of the balance arm.
2. Water bath - The container for immersing the core in water while suspended from the balance shall be equipped with an overflow outlet for maintaining a constant water level. This water bath should be large enough to handle full-depth cores. When testing several cores at the same time, a dish-pan, sink or suitable container may be used for soaking.

D. PROCEDURE

1. Prior to testing, cores shall be sorted on a flat surface in a cool place. The sample(s) shall be brushed with a wire brush and/or other suitable means, to remove all loose and/or foreign materials, such as seal coat, tack coat, foundation material, soil, paper and foil prior to testing.
2. If a core contains binder and surface or multiple lifts, the lifts shall be separated. This may be done in the following manner:
 - a. Mark the separation line between the two lifts.
 - b. Place the core in a freezer for 20-25 minutes.
 - c. Place a 2 or 3-inch wide chisel on the separation line and tap with a hammer. Rotate the core and continue this process until the core separates. Brush loose pieces with a wire brush if needed.
 - d. Allow 2-3 hours for the core to return to ambient temperature before proceeding.
3. Prepare the water baths for soaking and weighing with water at 77° F. Water baths should be maintained at this temperature throughout testing. Saturate the cores by submerging in the water for a minimum of 20 minutes.
4. With the balance and water bath properly assembled and zeroed, suspend the sample from the balance and submerge it in the water bath. The core must be placed with the original top and bottom in a vertical position. If necessary, add sufficient water to bring the water level up to the overflow outlet. Permit any excess to overflow. Read and record the Saturated Submerged Weight. Designate this weight as (C).
5. Remove the core from the water bath and blot the excess water from the surface of the core with an absorbent cloth or other suitable material. This must be done quickly to prevent the internal water from escaping.
6. Place the core on the balance and read and record the Saturated Surface-dry Weight in air. Designate this weight as (B).
7. Place the core in a tared pan and dry in an oven. When the core is dry (less than 0.5 gm loss in one hour), record the weight and subtract the pan weight. Designate this weight as (A).
8. The following calculation is used to determine the Bulk Specific Gravity of the core.

$$G_{mb} = \frac{A}{B - C}$$

G_{mb} = Bulk Specific Gravity

A = Oven dry weight

B = Saturated surface-dry weight

C = Saturated submerged weight

E. PERCENT DENSITY

The following calculation is used to determine the percent density of the core:

$$\% \text{ Density} = 100 \times \frac{G_{mb}}{G_m}$$

G_{mb} = Bulk Specific Gravity

G_{mm} = Theoretical Maximum Gravity*

Note: The Theoretical Maximum Gravity (G_{mm}) is determined from the mix design until current Vacuum Pycnometer test are available.

F. PERCENT AIR. To calculate the percent air, use the following formula:

$$\% \text{ Air} = 100 - \% \text{ Density}$$

G. WEIGHT PER SQUARE YARD OF COMPACTED MIXTURE. The actual weight per square yard of a compacted mixture can be calculated by using the Bulk Specific Gravity (G_{mb}). The volume of a square yard of pavement one (1) inch thick is 0.75 cubic foot. Taking the weight of a cubic foot of water as 62.37 pounds, one square yard of compacted material, one (1) inch thick weighs:

$$\text{Pounds / Sq. Yd. (1" thick)} = 0.75 \times 62.37 \times G_{mb}$$

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 87-4, dated January 1, 2004

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

March 28, 2022

Springfield

Number 96-1A

TO: CONSULTING ENGINEERS

SUBJECT: FOR AERONAUTICS 2020 STANDARD SPECIFICATIONS,
ITEM 610, STRUCTURAL PORTLAND CEMENT CONCRETE:
JOB MIX FORMULA APPROVAL & PRODUCTION TESTING.

- I. This policy memorandum addresses the Job Mix Formula (JMF) approval process and production testing requirements when Item 610 is specified for an airport construction contract.
- II. PROCESS
 - a. The contractor may submit a mix design with recent substantiating test data, or he may submit a mix design generated by the Illinois Division of Highways with recent substantiating test data for approval consideration. The mix design should be submitted to the Resident Engineer. An Item 501 PCC Pavement mix can be used in lieu of a Class SI mix, with the approval of the Division.
 - b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the *2020 Standard Specifications for Construction of Airports* and/or the contract special provisions.
 - c. The mix design should also indicate the following information:
 1. The name, address, and producer/supplier number for the concrete.
 2. The source, producer/supplier number, gradation, quality, and SSD weight for the proposed coarse and fine aggregates.
 3. The source, producer/supplier number, type, and weight of the proposed flyash and/or cement.
 4. The source, producer/supplier number, dosage rate or dosage of all admixtures.
 - d. After completion of Items b and c above, the mix with substantiating test data shall be forwarded to the Division of Aeronautics for approval. Once the mix has been approved, the production testing shall be at the rate in Section III as specified herein.

III. PRODUCTION TESTING

- a. When directed by the Resident Engineer, the Contractor shall make, cure and store one set of cylinders in accordance with AASHTO T23 for acceptance testing for each day the mix is used. In addition, at least one slump, one mix temperature, and one air test shall be conducted for each day the mix is used.
- b. The concrete shall have a maximum slump of four inches (4") and minimum slump of two inches (2") when tested in accordance with AASHTO T119.
- c. The air content of the concrete shall be between 5% and 8% by volume when tested in accordance with AASHTO T152.
- d. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- e. Acceptance testing for concrete provided under this item shall have a 14-day compressive strength of not less than 3,500 psi when tested in accordance with AASHTO T22. The testing lab shall be IDOT or AASHTO approved. The Resident Engineer will be responsible for the strength tests on the specimens at no expense to the contractor.
- f. If more than 100 cubic yards of the mix is placed in a given day, additional tests at a frequency of 1 per 100 cubic yards shall be taken for strength, slump, mix temperature, and air.
- g. The Resident Engineer shall collect actual batch weight tickets for every batch of Item 610 concrete used for the project. The actual batch weight tickets shall be kept with the project records and shall be available upon request of the Department of Transportation.

William C. Eves, P.E.
Acting Chief Engineer

Supersedes Policy Memorandum 96-1 (2020) dated December 3, 2020

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020

Springfield, Illinois

Number 96-3

TO: CONSULTING ENGINEERS

SUBJECT: REQUIREMENTS FOR QUALITY ASSURANCE ON PROJECTS
WITH BITUMINOUS CONCRETE PAVING

I. SCOPE

The purpose of this policy memorandum is to define to the Consulting Engineer the requirements concerning Quality Assurance on bituminous concrete paving projects. Specifically, this memo applies whenever the Contractor is required to comply with the requirements set forth in Policy Memorandum 2003-1, "*Requirements for Laboratory, Testing, Quality Control, and Paving of Bituminous Concrete Mixtures*".

II. LABORATORY APPROVAL

The Resident Engineer shall review and approve the Contractor's plant laboratory to assure that it meets the requirements set forth in the contract specifications and Policy Memorandum 2003-1. This review and approval shall be completed prior to utilization of the plant for the production of any mix.

III. QUALITY ASSURANCE DURING PRODUCTION PAVING

A. The R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. designated by the Division of Aeronautics. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Sample preparation, sample size and number of samples shall be according to Policy Memorandum, "*HMA Comparison Samples*".

B. At the option of the Engineer, additional independent assurance tests may be performed on split samples taken by the Contractor for Quality Control testing. In addition, the Resident Engineer shall witness the sampling and splitting of these samples at the start of production and as needed throughout mix production. The Engineer may select any or all split samples for assurance testing. These tests may be performed at any time after sampling. The test results will be made available to the Contractor as soon as they become available.

C. The Resident Engineer may witness the sampling and testing being performed by the Contractor. If the Resident Engineer determines that the sampling and Quality Control tests are not being performed according to the applicable test procedures, the Engineer may stop production until corrective action is taken. The Resident Engineer will promptly notify the Contractor, both verbally and in writing, of observed deficiencies. The Resident Engineer will document all witnessed samples and tests. The Resident Engineer may elect to obtain samples for testing, separate from the Contractor's Quality Control process, to verify specification compliance.

1. Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits:

<u>Test Parameter</u>	<u>Acceptable Limits of Precision</u>
% Passing	
1/2 in.	5.0 %
No. 4	5.0 %
No. 8	3.0 %
No. 30	2.0 %
No. 200	2.2 %
Asphalt Content	0.3 %
Maximum Specific Gravity (G_{mm}) of Mixture	0.026
Bulk Specific Gravity (G_{mb}) of Gyratory Brix	0.045

2. In the event a comparison of the required plant test results is outside the above acceptable limits of precision, split or independent samples fail the control limits, an extraction indicates non-specification mix, or a continual trend of difference between Contractor and Engineer test results is identified, the Engineer will immediately investigate. The Engineer may suspend production while the investigation is in progress. The investigation may include testing by the Engineer of any remaining split samples or a comparison of split sample test results on the mix currently being produced. The investigation may also include review and observation of the Contractor's technician performance, testing procedure, and equipment. If a problem is identified with the mix, the Contractor shall take immediate corrective action. After corrective action, both the Contractor and the Engineer shall immediately resample and retest.

- C. The Contractor shall be responsible for documenting all observations, records of inspection, adjustments to the mixture, test results, retest results, and corrective actions in a bound hardback field book or bound diary which will become the property of IDA upon completion and acceptance of the project. The Contractor shall be responsible for the maintenance of all permanent records whether obtained by the Contractor, the Contractor's Consultants, or the producer of bituminous mix material. The Contractor shall provide the Engineer full access to all documentation throughout the progress of the work.

Results of adjustments to mixture production and tests shall be recorded in duplicate and sent to the Engineer.

IV. ACCEPTANCE BY ENGINEER

Density acceptance shall be performed according to the Standard Specifications for Construction of Airports, section 401-6.1 or according to the acceptance procedure outlined in the Special Provisions.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 96-3, dated February 20, 2014

State of Illinois Department of
Transportation Division of
Aeronautics

POLICY MEMORANDUM

June 22, 2018

Springfield, Illinois

Number 97-2

TO: CONSULTING ENGINEERS

SUBJECT: PAVEMENT MARKING PAINT ACCEPTANCE

I. SCOPE

The purpose of this policy memorandum is to define the procedure for acceptance of pavement marking paint.

II. RESIDENT ENGINEER'S DUTIES

The Resident Engineer shall follow the acceptance procedure outlined as follows:

- A. Require the contractor to furnish the name of the paint manufacturer, IDOT Test I.D. number and the Batch/Lot number proposed for use prior to beginning work. Notify the I.D.A. Materials Certification Engineer when this information is available.
- B. Require the manufacturer's certification before painting begins. Check the certification for compliance to the contract specifications.
 1. The certification shall be issued from the manufacturer and shall include the specification and the batch number.
 2. The paint containers shall have the manufacturer's name, the specification and the batch number matching the certification.
- C. If no batch number is indicated on the certification or containers, sample the paint according to the procedure for the corresponding paint type.
- D. If the I.D.A. Engineer of Materials indicates that batch number has not been previously sampled and tested, sample the paint according to the procedure for the corresponding paint type. The Division of Aeronautics will provide paint cans upon request by the Resident Engineer. Samples will only be taken in new epoxy lined cans and lids so that the paint will not be contaminated. It is important to seal the sample container immediately with the paint can lid to prevent the loss of volatile solvents.

Mark the sample cans with the paint color, manufacturer's name, and batch number. The paint samples and manufacturer's certification shall be placed in the mail or delivered within 24 hours after sampling. Address or deliver the samples to the Material's Certification Engineer at:

Illinois Department of Transportation
Division of Aeronautics
One Langhorne Bond Drive
Springfield, Illinois 62707

Sampling Procedures for Each Paint Type:

1. Waterborne or Solvent Base Paints
 - a. A sample consists of one one-pint cans taken per batch number. Before drawing samples, the contents of the component's container must be thoroughly mixed to make certain that any settled portion is fully dispersed.
 - b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

2. Epoxy Paint
 - a. Take separate one-pint samples of each paint component prior to marking. Before drawing samples, the contents of each component's container must be thoroughly mixed to make certain that any settled portion is fully dispersed. **Do not combine the two components or sample from the spray nozzle.**
 - b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

III. TESTING

The paint will be tested for acceptance by the IDOT Bureau of Materials and Physical Research for conformance to the contract specifications.



Alan D. Mlacnik, P.E.
Chief Engineer

Supersedes policy memorandum 97-2 dated January 1, 2004

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020

Springfield, Illinois

Number 2003-1

TO: CONSULTANTS & CONTRACTORS

SUBJECT: REQUIREMENTS FOR LABORATORY, TESTING, QUALITY CONTROL, AND PAVING OF SUPERPAVE HMA CONCRETE MIXTURES FOR AIRPORTS

I. SCOPE

The purpose of this policy memorandum is to define to the Contractor the requirements concerning the laboratory, testing, Quality Control, and paving of HMA mixtures utilizing Superpave technology. References are made to the most recent issue of the Standard Specifications for Construction of Airports (Standard Specifications) and to American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO) and IDOT Bureau of Materials Illinois Lab Procedure (ITP) testing methods. The Quality Assurance and acceptance responsibilities of the Resident Engineer are described in Policy Memorandum 96-3.

II. LABORATORY

The Contractor shall provide a laboratory located, at the plant, according to the current Illinois Department of Transportation, Bureau of Materials Policy Memorandum (PM) 6-08, *Minimum Private Laboratory Requirements for Construction Materials Testing or Mix Design*. The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Hot Mix Asphalt (HMA) Job Mix Formula (JMF), Quality Control (QC) testing and Quality Assurance (QA) testing. The laboratory and equipment furnished by the Contractor shall be properly calibrated and maintained. The Contractor shall maintain a record of calibration results at the laboratory. The Engineer may inspect measuring and testing devices at any time to confirm both calibration and condition. If the Engineer determines that the equipment is not within the limits of dimensions or calibration described in the appropriate test method, he may stop production until corrective action is taken. If laboratory equipment becomes inoperable or insufficient to keep up with mix production testing, the Contractor shall cease mix production until adequate and/or sufficient equipment is provided.

III. MIX DESIGN SUBMITTAL

Based upon data and test results submitted by the Contractor, the Illinois Division of Aeronautics (IDA) Engineer of Construction & Materials shall issue the final Job Mix Formula (JMF) approval letter that concurs or rejects the Contractor's proposed JMF. The Contractor will be required to perform the sampling and laboratory testing and develop a complete mix design, according to the following guidelines: Mix design submittals should be submitted to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer. Note: Quality Control (QC) Managers shall

be Level III QC/QA qualified and will be responsible for all mix designs. All Technicians obtaining samples and performing gradations shall have successfully completed the IDOT Mixture Aggregate Technician Course and Technicians performing mix design testing and plant sampling/testing shall have successfully completed the IDOT Bituminous Concrete Level 1 Technician Course under the Illinois Department of Transportation, Bureau of Materials & Physical Research QC/QA Training Program.

A. Initial Mix Design Submittal

1. Use the first tab/page of the IDOT, QC/QA Package, Mix Design Software spreadsheet workbook. Provide the Producer name, Producer # and Producer location of each aggregate and asphalt binder (AB). Producers are assigned Producer numbers by IDOT Central Bureau of Materials.
2. Material code for each aggregate.
3. Aggregate Gradations per ASTM C-136 (The Contractor shall obtain representative samples of each aggregate).
4. Material code for each aggregate (i.e. 022CM11, etc.).
5. Material code for the grade of AB.
6. Proposed Aggregate Blend (% for each aggregate) Note: Based on the gradation results, the Contractor shall select the blend percentages that comply with the Standard Specifications, Section 401/403 – 3.3 (Table: Aggregate – Asphalt Pavements)
7. Producer name, Producer #, and specific gravity of the proposed asphalt cement.
8. IDOT approved Performance Grade (PG) Binder shall be used unless otherwise specified by the IDA Engineer of Construction & Materials.

After verification and approval by IDA of the proposed design information from this Section A, Initial Mix Design Submittal, the Contractor shall proceed to Section B, Mixture Design and Testing, and perform mixture tests on 4 gyratory brix sample (4 point mix design) to determine the optimum AB content for the target Air Voids.

Note: If Section A, Initial Mix Design Submittal, is not performed first, and the complete mix design (gyratory testing) is submitted with an unapproved material source or an incorrect aggregate blend, then the gyratory laboratory testing would have to be re-done.

B. Preliminary Mixture Design & Testing

Design Parameters

Gyrations (N_{des}) – per Standard Specifications for Construction of Airports (Standard Specifications), Section 401/403 – 3.3 (JMF), Table (Asphalt Design Criteria)

Asphalt Content – AC% per Standard Specifications, Section 401/403 – 3.3 (JMF), Table (Aggregate – Asphalt Pavements)

Maximum Specific Gravity – G_{mm} (AAHSTO T 209)

Bulk Specific Gravity – G_{mb} (AAHTO T 166)

% air voids – V_a (ASTM D3203) per Standard Specifications, Section 401/403 – 3.3 Table (Asphalt Design Criteria)

VFA % – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table (Asphalt Design Criteria)

C. Preliminary Mix Design Submittal

The Preliminary JMF including all test results shall be submitted to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer with the following data:

- a) Aggregate & asphalt cement material codes
- b) Aggregate & asphalt cement producer numbers, names, and locations
- c) Percentage of each individual aggregate
- d) Aggregate blend % for each sieve
- e) AC Specific Gravity
- f) Bulk Specific Gravity and Absorption for each aggregate
- g) Summary of Superpave Design Data: AC % Mix, G_{mb} , G_{mm} , VMA, Voids (Total Mix), Voids Filled, V_{be} , P_{be} , P_{ba} , G_{se}
- h) Optimum design data listing: AC % Mix, G_{mb} , G_{mm} , VMA, Voids (Total Mix), Voids Filled, G_{se} , G_{sb}
- i) Percent of asphalt that any RAP will add to the mix
- j) Graphs for the following: Gradation on 0.45 Power Curve, AC vs. Voids (Total Mix), AC vs. Specific Gravities, AC vs. Voids Filled, AC vs. VMA
- k) Tensile Strength Ratio (TSR)
- l) Type and amount of anti-strip agent when used
- m) Date the JMF was developed

D. Mix Approval

Once the preliminary JMF is reviewed and approved by IDA, a JMF approval letter will be issued to the consultant and contractor. Production of HMA is not authorized until a JMF letter has been issued.

E. Change in Material Sources

The above procedure, III. MIX DESIGN SUBMITTAL, shall be repeated for each change in material source or gradation of aggregate materials.

IV. MIX PRODUCTION TESTING

The Quality Control (QC) of the manufacture and placement of HMA mixtures is the responsibility of the Contractor and will be according to the Standard Specifications, Section 401/403-5.1 - 5.6. In addition, the Contractor shall develop a Contractor Quality Control Program (CQCP) in accordance with Item 100 in the Standard Specifications. The (CQCP) shall be submitted on the Form AER 27, Hot Mix Asphalt (HMA) Quality Control Plan. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Quality Control includes the recognition of defects and their immediate correction. This may require increased testing, communication of test results to the plant or the job site, modification of operations, suspension of HMA production, rejection of material, or other actions as appropriate. The Resident Engineer shall be immediately notified of any failing tests and subsequent remedial action. Form AER-14 shall be reported to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer and the Resident Engineer no later than the start of the next workday. The Contractor shall provide a Quality Control (QC) Manager who will have overall responsibility and authority for Quality Control. This individual shall have successfully completed the IDOT Division of Highways HMA Concrete Level II Technician Course "HMA Proportioning and Mixture Evaluation." In addition to the QC Manager, the Contractor shall provide sufficient and qualified personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner.

V. TEST SECTION (Note: Applies for Method II only ($\geq 2,000$ tons/pay item))

The purpose of the test section is to determine if the mix is acceptable and can be compacted to a consistent passing density. The test strip construction and acceptance will be according to the Standard Specifications, Section 401/403-3.5.

VI. MATERIAL ACCEPTANCE

Material acceptance and acceptance sampling to determine conformance to the contract specifications will be performed by the Resident Engineer in accordance with the Standard Specifications, Section 401/403-6.1. In addition to the requirements set forth in Section 401/403-6.1 the R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2003-1 dated June 12, 2004