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Letting April 25, 2025

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. VE059
Vermilion Regional Airport
Danville, Illinois
Vermilion County
Illinois Project No. DNV-5169
SBG Project No. 3-17-SBGP-TBD**



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 April 25, 2025, 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. VE059
Vermilion Regional Airport
Danville, Illinois
Vermilion County
Illinois Project No. DNV-5169
SBG Project No. 3-17-SBGP-TBD**

Realign Taxiway A, Phase 3

For engineering information, please contact Eric Hills, P.E., C.M. of Crawford, Murphy & Tilly, Inc. at 217.572.1150 .

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.** A non-mandatory pre-bid meeting will be held on Tuesday, April 7, 2025 at 2:00 PM CT at the offices of the Vermilion Regional Airport Authority, 22633 N. Bowman Ave., Suite 1, Danville, IL 61834. For engineering information, contact Hayden Hamilton of Crawford, Murphy and Tilly, Inc. at (217) 572-1079.

6. **DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 10.0%.

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 , and the Construction Plans dated 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: 159 calendar days; Additive Alternate #1: 0 additional calendar days; Additive Alternate #2: 0 additional calendar days.

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

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

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

By Order of the
Illinois Department of Transportation

Gia Biagi,
Acting 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: January 2, 2025

1. OVERVIEW AND GENERAL 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 in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.
2. CONTRACTOR ASSURANCE. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.
3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 10.0% 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 in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.
4. IDENTIFICATION OF CERTIFIED DBE. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.
5. BIDDING PROCEDURES. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.

- (a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.
- (b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall 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 bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. 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.

- 6. UTILIZATION PLAN EVALUATION. 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 the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot meet the goal, in order for the Department to 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 Department determines, based upon the documentation submitted, that the bidder has made a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

- 7. CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs 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 firms. 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 guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.
- 8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.
 - (a) NOTICE OF DBE PERFORMANCE. The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.
 - (b) SUBCONTRACT. If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed 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.
 - (c) PAYMENT TO DBE FIRMS. 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 goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.
 - (d) FINAL PAYMENT. After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment 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 (form SBE 2115) to the Engineer. 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.

- (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.

SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) 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: 159 calendar days; Additive Alternate #1: 0 additional calendar days; Additive Alternate #2: 0 additional calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)

Effective: June 2, 2021

Revised: April 2, 2024

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. Of this goal, at least 50% of the labor hours of each prevailing wage classification performed by apprentices shall be performed by graduates of the Illinois Works Pre-Apprenticeship Program, the Illinois Climate Works Pre-Apprenticeship Program, or the Highway Construction Careers Training Program.

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.

SPECIAL PROVISION FOR SUBMISSION OF BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025

Revised: March 2, 2025

In accordance with 49 CFR 26.11(c) all DBE and non-DBEs who bid as prime contractors and subcontractors shall provide bidders list information, including all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor.

The bidders list information shall be submitted with the bid using the link provided within the “Integrated Contractor Exchange (iCX)” application of the Department’s “EBids System”.

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</u> (percent) | 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 | 18.4 |
| IL - Bureau, DeKalb, Grundy, Iroquois, Kendall, LaSalle, Livingston, Putnam | |
| IN - Jasper, Laporte, Newton, Pulaski, Starke | |
| 084 Champaign - Urbana, IL: | |
| SMSA Counties: | |
| 1400 Champaign - Urbana - Rantoul, IL - IL - Champaign | 7.8 |
| Non-SMSA Counties - | 4.8 |
| IL - Coles, Cumberland, Douglas, Edgar, Ford, Piatt, Vermilion | |
| 085 Springfield - Decatur, IL: | |
| SMSA Counties: | |
| 2040 Decatur, IL - IL - Macon | 7.6 |
| 7880 Springfield, IL - IL - Menard, Sangamon | 4.5 |
| Non-SMSA Counties | 4.0 |
| IL - Cass, Christian, Dewitt, Logan, Morgan, Moultrie, Scott, Shelby | |
| 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 - | 3.3 |
| IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren | |
| 088 Rockford, IL: | |
| SMSA Counties: | |
| 6880 Rockford, IL - IL - Boone, Winnebago | 6.3 |
| Non-SMSA Counties - | 4.6 |
| IL - Lee, Ogle, Stephenson | |
| 098 Dubuque, IA: | |
| Non-SMSA Counties - | 0.5 |
| IL - JoDaviess IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik WI - Crawford, Grant, Lafayette | |
| 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 - | 3.4 |
| IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine MO - Clark | |
| 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 - | 11.4 |
| IL - Alexander, Bond, Calhoun, Clay, Effingham, Fayette, Franklin, Greene, | |

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 Danville, Illinois; Vermilion 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:
- Only installing iron, steel and manufactured products produced in the United States;
 - 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.
 - 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
 - Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

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

- To provide to the 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.
 - To faithfully comply with providing U.S. domestic products.
 - To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
 - 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:
- 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.
 - 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.
 - To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
 - To furnish U.S. domestic product for any waiver request that the FAA rejects.
 - 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

- 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.*).

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.

A15.1.2 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.

ITEM 05A

VE059

**SECTION III
Special Provisions
For**

REALIGN TAXIWAY A, PHASE 3

IL. PROJ. DNV-5169

FEDERAL PROJ. NO.: 3-17-SBGP-TBD

AT

VERMILION REGIONAL AIRPORT

DANVILLE, IL

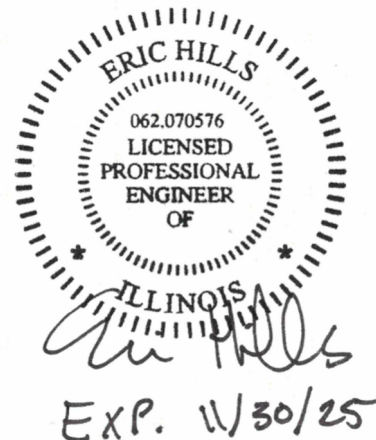
SUBMITTAL DATE: FEBRUARY 28, 2025

LETTING DATE: APRIL 25, 2025

Prepared By:



CRAWFORD, MURPHY & TILLY, INC.
Consulting Engineers
2750 West Washington Street
Springfield, Illinois, 62702



GENERAL

These Special Provisions, together with applicable Standard Specifications, Contract Requirements for Airport Improvement Project, Rules and Regulations, 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, Division of Aeronautics, and the representatives of the Vermilion Regional Airport Authority for the improvements to the Vermilion Regional Airport, Danville, 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 the case 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>

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PART 1 – GENERAL CONTRACT PROVISIONS

SECTION 20 – PROPOSAL REQUIREMENTS AND CONDITIONS

20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE

ADD:

Boring logs and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which the bidder may make or obtain from their own examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

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 150/5370-2 (latest) 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 Operational 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 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 shown on the cover sheet of the plan set.

- 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 City, Township, County, Illinois Department of Transportation and/or any agency whose jurisdiction the roadways being utilized are within. 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)

ADD: At the start of the first sentence of the first paragraph:

“a minimum of 10 days ”

ADD: New Section

40-10 BARRICADES, WARNING SIGNS AND HAZARD MARKINGS.

The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area 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 shall be placed as shown in the plans or as directed by the Resident Engineer or Airport Management. 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. Any cost of labor and equipment necessary to ensure safety at the airport for the duration of the project will be considered incidental to the contract and no additional reimbursement for these items of work will be allowed.

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), Safety on Airports During Construction Activity.

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 so 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.

The Contractor shall deactivate or cover all airfield lighting within the construction limits that is not required for aircraft movement on pavements, in order to minimize potential pilot confusion. Open-flame type lights shall not be permitted within the air operations areas of the airport.

SECTION 50 – CONTROL OF WORK

50-04 COOPERATION OF CONTRACTOR

ADD: At the end of this section:

A materials/pre-paving meeting shall be scheduled prior to the start of various paving operations to discuss material acquisition, mixing, placing, testing, etc. The superintendent, paving foreman, batching foreman/material supplier, quality control officer, and the Resident Engineer are required to attend this meeting.

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 with or hinder the progress of work being performed by other contractors or Airport personnel.

50-06 CONSTRUCTION LAYOUT STAKES

ADD: After 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 re-establishment 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: as the third to last paragraph:

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.

ADD: As the second to last paragraph:

Any inspection or checking of the Contractor's layout by the Resident Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimensions, grades, and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and benchmarks, and shall have them reset by a registered land surveyor at his/her expense when any are damaged, lost, displaced or removed. The Contractor shall use a registered surveyor or engineer and competent personnel and suitable equipment for the layout work required.

50-08 INSPECTION OF THE WORK

ADD:

Work performed by the Contractor outside of daylight hours shall be done under sufficient artificial area lighting to allow for proper construction methods and inspection.

Lights shall consist of vehicle or movable pole mounted floodlights and/or spotlights of sufficient number to illuminate the work area. Vehicle headlights will be allowed only in addition to other lights mentioned above. Lighting shall not interfere with air operations. Any work being performed under insufficient artificial lighting, in the Resident Engineer's judgment, shall be stopped until such time as additional lighting is provided. All work performed during that time will not be acceptable until proper inspection and testing can be made.

50-10 LOAD RESTRICTIONS

ADD: Before the second (2nd) to last paragraph of this section:

At all times, the Contractor shall have on site and available for use a self-propelled, vacuum or regenerative (recirculating) air pavement sweeper, a pavement blower or tractor mounted "sweeper box".

ADD: After the fourth (4th) paragraph:

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.

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 Manager. 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.

The contractor shall coordinate construction hauling, construction access and load restrictions with the County Superintendent of Highways and/or the Township Road Commissioner and the City whose limits the project is located within. The Contractor shall be responsible for damage to any airfield pavement or public road caused by his construction operations. Any damage to existing airfield pavements or public roads shall be replaced by the Contractor at his own expense to the satisfaction of the Owner.

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 the Airport Manager and the Resident Engineer. At all times the Contractor shall provide a self-propelled, vacuum or regenerative (recirculating) air pavement sweeper, a pavement blower or tractor mounted "sweeper box".

ADD:

Material tracked onto public streets shall be removed continuously during 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.

ADD:

The Contractor shall provide a plan of erosion and dust control on haul roads, borrow pits, and stockpile areas.

50-14 FINAL ACCEPTANCE

REVISE: The first paragraph to read.

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 will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall

constitute the final inspection. The Engineer shall notify the Contractor in writing of final acceptance as of the date of the final inspection and charging of contract time will be stopped on that date.

REVISE: The second paragraph to read.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will notify the Contractor, and the Contractor shall correct the unsatisfactory work. The charging of Contract Time shall resume on the day following the inspection and shall continue until the remaining work, including the applicable requirements of Section 40-08, Final Clean-up, is completed to the Engineer's satisfaction. All work listed on the punch list shall be considered part of the contract and shall be considered incidental to the completion of the contract and the contract time charged until final acceptance. If the Contractor believes that an item listed on the punch list is beyond the scope of the contract, the Contractor shall notify the Engineer in writing prior to commencing work on the punch list item in question. Any punch list items completed by the Contractor without such written notification shall be considered incidental to the contract and shall not be eligible for payment unless determined otherwise by the Engineer, Owner, and the Department. Charging of contract time may be suspended if there is a delay between notice of presumptive completion from the contractor and receipt of a punch list.

50-16

PLANS AND WORK DRAWINGS

REVISE: The sixth (6th) paragraph to read.

Prior to submission, the Contractor shall review all shop drawing submittals for accuracy, completeness, and compliance with the contract requirements. The Contractor shall stamp, sign and date each submittal indicating Contractor approval of the submittal. Only Prime Contractor submittals will be accepted. Sub-Contractor and/or material/manufacturer Submittals shall be reviewed and submitted in accordance with this paragraph.

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 fifteenth (15th) paragraph to read as follows:

Shop drawing submittals that do not include the information in section 60-11 will be rejected and returned to the Contractor.

SECTION 60 – CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

REVISE: The first sentence of the third paragraph as follows:

. . . shall provide, prior to delivery, . . .

ADD: Between the first (1st) and second (2nd) sentence of the ninth (9th) paragraph

A waiver for any materials used on this project will only be granted on a per-project basis. To obtain a waiver, all Buy America information for each material must be submitted prior to the waiver's approval.

ADD: After the ninth (9th) paragraph:

The FAA shall have ultimate review authority in how the Buy America Waiver Request is prepared by the Contractor. The FAA may require additional documentation from the Contractor for any and all materials to be incorporated into the Project, even for items that the Contractor is able to show conformance with 49 USC 50101. The Contractor's costs associated with preparing the Waiver Request(s), revising, and resubmitting the documentation shall be considered incidental to the Project.

EDIT: Paragraph eleven (11) to state:

. . . effect on the date of advertisement; and meets "Buy America" requirements.

ADD SECTION

60-11 CERTIFICATION OF MATERIALS

The Contractor shall certify all materials contained in the contract. certification and documentation shall be submitted to the resident 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.

As a guide to the certification process and requirements, the Contractor shall use the Illinois Department of Transportation/Division of Aeronautics MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS (latest edition). Copies of this manual are available from the Illinois Division of Aeronautics. The MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS defines the Resident Engineer's/Contractor's responsibilities. The Contractor shall have the

sole responsibility to provide the Resident Engineer with appropriate documentation to satisfy the contract certification requirements prior to the delivery of materials.

The cost of providing the required material documentation and certifications shall not be paid for separately, but shall be considered incidental to the associated item.

All submittals shall contain the following information:

ADD: At the end of the Section:

Shop drawing submittals that do not include the information below will be rejected and returned to the Contractor. All submittals shall contain the following information:

| | |
|--------------------------|--|
| PROJECT LOCATION: | Vermilion Regional Airport |
| PROJECT TITLE: | Realign Taxiway A, PH 3 |
| PROJECT NUMBERS: | Illinois Project: DNV-5169 |
| | SBG Project: 3-17-SBGP-TBD |
| CONTRACT ITEM: | (i.e., AR156510 – Silt Fence) |
| SPECIFICATION: | (i.e., 102-2.5 Silt Fence) |
| SUBMITTED BY: | (Contractor/Subcontractor Name) |
| DATE: | (Date of Submittal) |

If the Division of Aeronautics requires additional documentation, they shall request it through the Resident Engineer.

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 Superintendent of Highways, the Township Road Commissioner and the City whose limits the project is located within and/or the responsible agency that maintains the roadway. The cost of 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.

70-10 USE OF EXPLOSIVES

DELETE: All paragraphs of this section

ADD:

Explosives shall not be used.

70-11 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

REVISE: The first (1st) sentence of the fourth (4th) paragraph to read:

. . . navigational aids, and all other existing features to remain of the airport . . .

70-12 RESPONSIBILITY FOR DAMAGE CLAIMS

REVISE: The first (1st) sentence of the first (1st) paragraph to read:

. . . the Engineer, the Owner, the Department . . .

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 fourth (4th) paragraph:

The Contractor shall be responsible for locating or causing to be located Airport or Agency owned utilities or services including power and control cables.

ADD: After the eighth (8th) paragraph:

The following table includes contact numbers that may provide assistance for locating cable. The personnel listed in the table are in no way responsible for damage to existing utilities.

VERMILION REGIONAL AIRPORT

| Utility Service of Facility | Person to Contact | Contact Phone |
|------------------------------------|-----------------------|--|
| FAA Control & Communications Cable | Airways Facility Unit | Arrangement made through Resident Engineer |
| Airfield Lighting Cables | Airport Manager | 1-217-442-4624 |
| Electric Cables | J.U.L.I.E. | 1-800-892-0123 |
| Telephone Cables | J.U.L.I.E. | 1-800-892-0123 |
| Gas Lines | J.U.L.I.E. | 1-800-892-0123 |
| Water Lines | J.U.L.I.E. | 1-800-892-0123 |

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 or as shown in plans.
- 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.

ADD SECTION

70-26

CONTRACTOR'S WARRANTY

All materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the contract documents. All work not so conforming to these standards may be considered defective. If required by the Department, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

Except where otherwise required by the Specifications, the Contractor shall provide written guarantee of all of the work performed under the contract, certifying the work to be free from defects in materials and workmanship for a period of one (1) year from the date of final acceptance of his/her completed contract work. Final completion and acceptance of the work shall be deemed to have occurred on the date of acceptance by the Owner, the Department, and the FAA, if applicable, and shall be the date of the final inspection providing no defects are observed.

In specific instances where longer guarantees are stipulated for a particular portion of the work, such longer periods shall govern and be subject to the terms of this paragraph. If the Owner has exercised his/her privilege of partial occupancy or use, the guarantee period for that occupied or used portion, and that portion only, shall commence on the date of such partial occupancy or use, provided, however, that if such equipment or portion of work is found defective or otherwise not to comply with the requirements of the contract documents, the guarantee period shall not commence until the work is corrected to comply with the contract requirements.

If the Contractor, after such notice, fails to promptly comply with the terms of the guarantee, the Owner may have the defects corrected and the Contractor and his/her surety shall be liable for all expenses thus incurred.

SECTION 80 – PROSECUTION AND PROGRESS

80-04 **LIMITATION OF OPERATIONS**

CHANGE: The second (2nd) paragraph to read:

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the Resident Engineer) the required advance notice period as specified by the CSPP before the start of such work. The Contractor shall not close an AOA until so authorized by the Resident Engineer and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph 70-09 titled CONSTRUCTION SAFETY AND PHASING PLAN (CSPP).

ADD: After the fourth (4th) paragraph:

The Contractor shall comply with all notes, requirements, and minimum safe operating distances from active surfaces as listed in the Construction Safety and Phasing Plan (CSPP)

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 |

Requests for extension of contract time due to inclement weather will not be considered until after final acceptance. No allowance will be made for anticipated profits.

PART 2 – GENERAL CONSTRUCTION ITEMS

ITEM 100 - CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)

BASIS OF PAYMENT

ADD SECTION:

100-13 Basis of measurement and payment. Contractor Quality Control Program (CQCP) is for the personnel, tests, facilities and documentation required to implement the CQCP. The CQCP will be paid as a lump sum with the following schedule of partial payments:

- a. With first pay request, 25% with approval of CQCP and completion of the Quality Control (QC)/Quality Assurance (QA) workshop.
- b. When 25% or more of the original contract is earned, an additional 25%.
- c. When 50% or more of the original contract is earned, an additional 20%.
- d. When 75% or more of the original contract is earned, an additional 20%
- e. After final inspection and acceptance of project, the final 10%.

102-5.1 ADD:

Payment will be made under:

Item AR401010 - CONTRACTOR QUALITY CONTROL PROGRAM - per lump sum

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

MATERIALS

102-2.1 ADD:

If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 50-18, 60-01, 60-03 and 60-11 of the Standard and Special Provisions, the pay item shall not be included on the Construction Progress Payment report until such submittals have been furnished.

METHOD OF MEASUREMENT

102-4.1 DELETE THIS SECTION

102-4.2 DELETE THIS SECTION

102-4.3 DELETE THIS SECTION

102-4.4 REVISE:

Fertilizer will not be measured for payment and shall be considered incidental to the seeding pay item in order to promote growth as recommended by the Contractor.

102-4.6 REVISE:

The quantity of straw wattles shall be measured for payment by the number of linear feet placed as specified and accepted by the Resident Engineer.

102-4.7 DELETE THIS SECTION:

102-4.9 DELETE THIS SECTION:

102-4.10 DELETE THIS SECTION:

BASIS OF PAYMENT

102-5.1 ADD:

Payment will be made under:

Item AR156510 - SILT FENCE - per linear foot

Item AR156515 - STRAW WATTLE - per linear foot

Item AR156520 - INLET PROTECTION - per each

Item AT156520 - INLET PROTECTION - per each

ITEM 105 – MOBILIZATION

DESCRIPTION

105-1.1 ADD AFTER THE THIRD PARAGRAPH:

Construction Access.

This item also includes the construction, strengthening, and improvement of the existing haul route to extend to the construction area as shown in the plans at the dimensions necessary for the contractor to have access. In order to provide Contractor Access to the Work Area, the Contractor shall construct a road in a manner that will provide all-weather access including temporary drainage improvements.

Restore Construction Access.

This item will also include the removal of the Construction Access and restoration of the turf and ground used as haul route access to the lines and grades shown on the Plans. Temporary drainage improvements will also be removed as part of this item.

105-1.3 ADD NEW SECTION AFTER 105-1.3:

CONSTRUCTION METHODS

105-1.4 Construction Access.

A temporary Construction Access (haul road) shall be established and constructed at the general location shown on the Plans from the access gate to the Work Area. The materials used may include crushed concrete, aggregate, millings, or other acceptable material to provide all-weather access to support the Contractor's equipment and haul traffic.

The dimensions of the Access shall be sufficient to allow unhindered ingress and egress but should not exceed 30' in width. Temporary culverts may be necessary to provide uninterrupted flow paths throughout each Phase of the Work. The Contractor shall determine the size, location, length, and number of drainage improvements (likely in the form of culverts) or temporary grading as needed or as directed by the Resident Engineer.

105-1.5 Restore Construction Access.

Upon completion of hauling and at a time when the Contractor no longer needs daily access to the Work Area, the Construction Access shall be removed and restored to the lines and grades shown on the Plans. All materials used for the temporary Contractor Access road shall be removed and hauled offsite at the Contractor's expense.

Earthwork and topsoiling shall be performed in accordance with Item 152 and Item 905.

Seeding and mulching will be measured for payment in accordance with Item 901 and 908. Temporary culverts shall be removed, and the new flow lines established by the project restored as requested by the Resident Engineer.

METHOD OF MEASUREMENT

105-2.1 ADD NEW SECTIONS AFTER 105-2.1

105-2.2 Construction Access will be measured for payment per lump sum as specified, completed, ready for operation, and accepted by the Resident Engineer. No additional measurement for payment will be made for an increase in Contract Time or weather events that impact the condition of the Access. Temporary drainage improvements and maintenance of the Access will not be measured separately for payment and instead shall be incidental to the Construction Access item. NO additional measurement for payment will be made for earthwork and topsoiling as specified under specifications 152 and 905. Instead, that work to restore construction access shall be incidental to the Restore Construct Access Item.

Based upon the contract lump sum price for "Construction Access", payments will be allowed as follows:

- a. With the first pay request, 25%.
- b. Upon completion and acceptance by the RPR of the pay item as described above, the remaining 75%.

105-2.3 Restore Construction Access will be measured for payment per lump sum as specified, completed to the lines and grades shown on the plans, and accepted by the Resident Engineer. Removal and Restoration of the temporary drainage improvements will not be measured separately for payment and instead shall be incidental to the Restore Construction Access item.

No additional measurement for payment will be made for earthwork and topsoiling as specified under specifications 152 and 905. Instead, that work to restore construction access shall be incidental to the Restore Construction Access item.

Seeding and mulching will be measured for payment in accordance with item 901 and 908.

Based upon the contract lump sum price for "Restore Construction Access", payments will be allowed as follows:

- a. Upon completion and acceptance by the RPR of the pay item as described above, 100%.

BASIS OF PAYMENT

105-3.1 REVISE FIRST SENTENCE TO READ:

Payment for accepted quantities of work performed by the Contractor and measured by the Resident Engineer shall be made at the contract unit price as specified in paragraphs 105-2.1, 105-2.2, and 105-2.3.

ADD:

Payment will be made under the following pay item(s):

Item AR150520 - MOBILIZATION - per lump sum

Item AR150550 - CONSTRUCTION ACCESS - per lump sum

Item AR150552 - RESTORE CONSTRUCTION ACCESS - per lump sum

ITEM 150 – RESIDENT ENGINEER FIELD OFFICE

DESCRIPTION

- 150-1.1 ADD: The Contractor shall provide the trailer or office location for the Field Office for sole use by the Resident Engineer. The Contractor is responsible for coordinating with all relevant parties to establish utility connections for the field office and for providing and maintaining the space as specified herein.

CONSTRUCTION METHODS

- 150-2.1(B) DELETE THIS PARAGRAPH

- 150-2.1(H) ADD:

The copier must be compatible with the Resident Engineers computer, and capable of scanning to and printing from this computer in paper sizes up to 11" x 17". Ink replenishment and paper shall be supplied by the contractor. The scanning capabilities shall allow for the creation of pdf documents for field books and plan sheets. A multiple sheet document feeder shall also be included for scanning multiple sheet documents such as field reports and catalog cuts.

- 150-2.1(M) ADD: After the last sentence

The contractor is responsible for establishing and maintaining internet connection at all times during the course of this project. The internet connection provided by the Contractor must be independent of any other Wi-Fi networks within range to be accessible to the field office. Any loss of connection sustained by the independent internet connection shall be re-established immediately upon notification of the issue by the Resident Engineer. The internet connection must maintain minimal latency and shall be promptly replaced if connection issues hinder the Resident Engineer's ability to perform work effectively

BASIS OF PAYMENT

- 150-4.1 DELETE PARAGRAPH 1
ADD:

Based upon the contract lump sum price for "Engineer's Field Office" partial payments will be allowed as follows:

- a. With first pay request, 25%.
- b. When 25% or more of the original contract is earned, an additional 25%.
- c. When 50% or more of the original contract is earned, an additional 40%.

- d. After Final Inspection, staging area clean-up and delivery of all Project Closeout materials as required by Section 90, paragraph 90-11, Contractor Final Project Documentation, the final 10%

ADD:

Payment will be made under the following pay item(s):

Item AR150510 - ENGINEER'S FIELD OFFICE - per lump sum

PART 3 – SITEWORK

ITEM 101 – PREPARATION/REMOVAL OF EXISTING PAVEMENTS

101-1.1

ADD:

DESCRIPTION

- The Remove Inlet task includes removing the inlets specified in the plans, followed by backfilling and compacting the excavated area.
- The Remove Splice Can item shall consist of removal of existing splice cans, followed by backfilling and compacting the excavated area.
- The Remove Taxi Guidance Sign task involves removing existing taxi guidance signs, runway exit signs, and hold line signs, along with their associated splice cans and the bases to which the signs are attached.
- The Remove Pavement item shall consist of the full depth removal of the pavement structure including aggregate base materials. Removed pavement material may be disposed of off-site or incorporated into embankments for new pavement as shown in the plans.
- The Remove Pipe item shall consist of the removal of existing pipe shown in the plans, followed by backfilling and compacting the excavated area.
- The Remove Underdrain item shall consist of the removal of existing underdrain pipe shown in the plans, followed by backfilling and compacting the excavated area.
- The Remove Underdrain Cleanout item shall consist of the removal of existing underdrain cleanouts shown in the plans, followed by backfilling and compacting the excavated area.
- The Remove Edge Light item shall consist of the removal of existing taxiway edge lights.
- The Remove Elevated Retroreflective Marker pay item shall consist of the removal of existing elevated retroreflective markers from either pavement or turf. If the marker is removed from pavement, the resulting void shall be filled with self-leveling sealant, NovaLink SL, or other approved equivalent and finished flush with the surrounding surface. If the marker is removed from turf, the excavated area shall be backfilled with suitable material and compacted to the satisfaction of the Resident Engineer to ensure a stable and uniform surface.

CONSTRUCTION METHODS

101-3.1(B)

REVISE TO READ:

Asphalt pavement to be removed shall be cut to the full depth of the asphalt pavement around the perimeter of the area to be removed, as specified in the contract documents at locations determined by the Resident Engineer. After completion of saw cutting, the Contractor shall remove the pavement structure using methods which will allow a vertical surface along all sides of the removal area. Material obtained from removal operations shall be hauled to a disposal site off of airport property by the Contractor or to a location designated by the Resident Engineer. No additional compensation will be made for hauling and disposal of the removed material. Existing aggregate base shall be compacted in accordance with Item 209 titled CRUSHED AGGREGATE BASE COURSE. Existing subgrade shall be compacted in accordance with Item 152 titled EXCAVATION, SUBGRADE, AND EMBANKMENT. If the material is to be wasted on the airport site or incorporated into embankment, it shall be broken to a maximum size of 4" or less.

Asphalt pavement milled in accordance with paragraph 3.5 may be incorporated into the embankment for the haul road extension. Excess millings shall be disposed of inside the Airport Perimeter Fence at the location directed by the Airport unless noted otherwise by the Airport or Resident Engineer.

101-3.16(c)

ADD SECTION: REMOVAL OF UNDERDRAIN CLEANOUT AND MISCELLANEOUS STRUCTURES

Where specified in the contract documents or as directed by the Resident Engineer, Underdrain cleanouts and miscellaneous structures shall be removed and legally disposed of off-site in a timely fashion after removal. Excavations after removal shall be backfilled with material equal or better in quality than adjacent embankment. When under paved areas, the backfill must be compacted to 95% of AASHTO T 99. for areas designated for aircraft with gross weights of 60,000 pounds or less and AASHTO T 180 for areas designated for aircraft with gross weights greater than 60,000 pounds, when outside of paved areas must be compacted to 95% of AASHTO T 99.

101-3.17

ADD SECTION: LIGHTING AND SIGNAGE REMOVALS

Removed light fixtures and signs not to be reinstalled in this project shall be offered to the airport. If the airport declines, the material shall become the property of the contractor, removed from the site, and disposed of offsite at a commercial disposal facility. Prior to removal the contractor and engineer shall verify the light fixtures and/or signs the airport elects to keep are in good physical and operable condition.

- a. The existing elevated edge lights, runway guard lights, distance remaining signs and guidance signs noted on the plans to be removed shall be salvaged, preserved, and protected without damage and either reinstalled where noted or offered to the airport. Salvageable parts include the light fixture, globe, stem, transformer, frangible

coupling, and base plate. The contractor shall be responsible to disconnect the light fixture, transformers and all existing wiring from the light can prior to removal.

- b. Existing light cans, splice cans, concrete duct bank, and guidance signs noted to be removed shall become the property of the contractor, removed from airport property, and disposed of offsite at a commercial disposal facility. The removal shall consist of the complete light or sign unit including base cans and foundations. Conduits entering the lights or signs shall be cut. The void shall be backfilled and compacted to the approval of the Engineer. Restoration shall be incidental and in accordance with Sections T-901, 905 and 908. The contractor shall be responsible to disconnect the fixture, transformers and all existing wiring from the light can prior to removal. If conduits are present, assure adequate access to the conduit is maintained for the construction phase of the project until the conduit is connected into the new system.
- c. Edge light removal shall include the removal and backfilling of the light base locations.

METHOD OF MEASUREMENT

101-4.1

ADD:

The pavement structures are variable in material composition and thickness, and the record drawings may not accurately represent the thickness of the individual layers, the number of individual layers, the layer types, nor the total pavement thickness. The Contractor shall satisfy himself prior to bidding as to the actual thickness of the pavements to be removed or milled. No additional compensation will be made for variability in the pavement structures or differences between the actual structure and that provided herein.

Removal of aggregate type materials below the full depth pavement structures shall be considered as part of the pavement removal and shall not be measured separately under Item P-152.

101-4.2

DELETE THIS SECTION

101-4.3

DELETE THIS SECTION

101-4.4

DELETE THIS SECTION

101-4.5

DELETE THIS SECTION

101-4.6

DELETE THIS SECTION

101-4.7

REVISE FIRST TWO SENTENCES:

Removal of pipe, underdrain and cable shall be measured for payment by the number of linear feet of material removed as specified, completed, and accepted by the Resident Engineer. Removal of lights & light bases/stakes, signs & sign bases, elevated retroreflective markers, inlets, underdrain cleanouts, splice cans and other buried structures will be measured as each item removed by the Contractor as specified, completed, and accepted by the Resident Engineer.

ADD:

Backfilling of the excavated area for any removal item shall be incidental to that pay item. No direct measurement or payment will be made for backfill material or compaction.

101-5.1

ADD:

Payment will be made under the following pay item(s):

Item AR108960 - REMOVE CABLE - per linear foot

Item AR125565 - SPLICE CAN - per each

Item AR125904 - REMOVE TAXI GUIDANCE SIGN - per each

Item AR125906 - REMOVE SPLICE CAN - per each

Item AR125913 - REMOVE EDGE LIGHT - per each

Item AR401921 - REMOVE PAVEMENT - per square yard

Item AR701900 - REMOVE PIPE - per linear foot

Item AR705904 - REMOVE UNDERDRAIN CLEANOUT - per each

Item AR751900 - REMOVE INLET - per each

Item AR800194 - REMOVE ELEVATED RETROREFLECTIVE MARKER - per each

Item AT701900 - REMOVE PIPE - per linear foot

ITEM 152 – EXCAVATION, SUBGRADE AND EMBANKMENT

DESCRIPTION

152-1.1 ADD: This item shall consist of excavation and embankment construction necessary to meet the lines and grades shown in the plans. Excavation of existing pavement layers, including base and subbase layers, shall be per Item 101.

This item shall consist of removal of unsuitable excavation under proposed pavements following topsoil stripping per Section 152-1.4, prior to placement of embankment as “Subgrade Undercut”.

Once the embankment has been placed, unsuitable materials for use as subgrade underneath proposed pavements shall be identified by the Contractor and approved by the Resident Engineer. Subgrade Undercut shall include removal of existing subgrade materials as “Subgrade Undercut”, placement of “Separation Fabric”, and backfill of “Crushed Aggregate Backfill” as detailed in the plans.

This item shall consist of grading material stockpiles from the current phase and previous phases within the designated stockpile area. Topsoil stripping, excavation and undercutting, embankment, final shaping, topsoiling, and grading necessary to meet the lines and grades shown in the plan shall be incidental to the “Unclassified Excavation” pay item.

152-1.2 DELETE THE SECOND AND THIRD PARAGRAPHS.

152-1.3 **CLASSIFICATION**

ADD:

f. Topsoil Stripping. Topsoil Stripping shall consist of stripping the existing topsoil from the proposed borrow area, below the proposed embankments or below the proposed airfield, roadway and shoulder pavements. For the purpose of this specification, topsoil shall consist of the material consisting of brush, sods, grass, decayed vegetable matter, or vegetation approximately twelve inches (12”) in depth.

152-1.5 ADD: After the last sentence:

Not Used.

152-1.6 ADD NEW SECTION:

Separation Fabric. Subgrade Repair shall consist of placing separation fabric on the bottom, sides, and top of the undercut backfill.

152-2.1 ADD: after the last sentence of the first paragraph:

Not Used.

152-2.2

ADD NEW SECTION:

Separation Fabric. Separation Fabric for use in areas of Subgrade Undercut shall be per the requirements of Section 102-3.6 and shall have the following physical properties:

| Physical Properties | Minimum Value |
|---|---------------|
| Weight of Fabric (oz/sy), ASTM D3776 (Mod.) | 6.0 |
| Burst Strength (psi), ASTM D3786 ^{1/} | 250 |
| Trapezoidal Tear Strength (lbs), ASTM D5733 ^{2/} | 60 |
| Grab Tensile Strength (lbs), ASTM D4632 ^{2/} | 160 |
| Grab Tensile Elongation (%), ASTM D4632 ^{2/} | 20 |

1/ Manufacturer's certification of fabric to meet requirements

2/ Test sample shall be tested wet.

The vendor shall furnish certified test reports with each shipment of material attesting that the fabric meets the above requirements.

152-2.3

ADD NEW SECTION:

Aggregate For Use in Subgrade Repair. Aggregate shall consist of crushed stone or crushed Portland Cement Concrete. All materials shall be accepted for use by the Engineer prior to placement.

- a. **Crushed Stone.** Clean, sound, durable particles of crushed stone free from coatings of clay, silt, organic material, or other objectionable materials. Aggregates shall contain no clay lumps or balls.
- b. **Crushed PCC.** Crushed Portland Cement Concrete (PCC) or other concrete containing pozzolanic binder material. The recycled concrete material shall be free of reinforcing steel and expansion material. Asphalt concrete overlays shall be removed from the PCC surface prior to pavement removal and crushing. An incidental amount of recycled asphalt concrete pavement and other foreign material may be present in the crushed material.
- c. **Gradation Requirements.** The gradation of the aggregate backfill shall meet the gradation requirements given in the following table:

Gradation Requirements

| Sieve designation (square openings) as per ASTM C136 and ASTM D422 | Percent Passing | |
|--|-----------------|-----------|
| | IDOT CA 1 | IDOT CA 2 |
| 3 inch | 100 | - |
| 2 ½ inch | 95 +/- 5 | 100 |
| 2 inch | 60 +/- 15 | 95 +/- 5 |
| 1 ½ inch | 15 +/- 15 | - |
| 1 inch | 3 +/- 3 | 75 +/- 15 |
| ½ inch | - | 50 +/- 15 |
| No. 4 | - | 30 +/- 10 |
| No. 10 | - | - |
| No. 16 | - | 20 +/- 15 |
| No. 40 | - | |
| No. 200 | - | 8 +/- 4 |

The maximum aggregate size for Aggregate Backfill shall be 3 inches.

CONSTRUCTION METHODS

152-3.1a DELETE: Paragraph 1 through paragraph 7:

ADD: after the first sentence:

Blasting will not be permitted.

152-3.6 PREPARATION OF EMBANKMENT AREA

ADD:

Compressible and/or organic materials shall be removed down to dense material as directed by the Resident Engineer and replaced with suitable embankment material.

Materials excavated during the stripping process shall not be utilized as embankment under the proposed or future pavements.

Upon completion of the earthwork, this material shall be incorporated as directed in Item 905 over the disturbed surface. Excavation, stockpiling and incorporation of this material

shall not be measured for payment but shall be considered incidental to Item 152. For topsoil required from offsite borrow, refer to Item 905.

152-3.8 FORMATION OF EMBANKMENTS:

ADD: After the fourth (4th) paragraph:

The Contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize the ponding of water. The Contractor shall cut temporary ditches or swales to maintain positive drainage. At locations where temporary ditches are not feasible, the Contractor shall excavate stormwater storage areas adjacent to, but at a lower elevation than, the bottom of the work and utilize mechanical pumps to promptly remove stormwater from the excavations.

ADD: After second (2nd) to last paragraph:

Upon completion of the embankment, the remaining earth excavation shall be offered to the Airport. If the Airport declines, the material shall become the property of the contractor, removed from the site, and disposed of offsite at a commercial disposal facility.

152-3.10 COMPACTION REQUIREMENTS:

ADD: After the first (1st) paragraph:

Subgrade compaction control tests shall ensure compaction to at least 100% of the maximum density for aircraft weighing less than 60,000 pounds, as determined by ASTM D698 (Standard Proctor), in the areas beneath proposed airfield pavements.

152-3.12 GEOTEXTILE FABRIC

ADD: After the first sentence:

NOT USED.

152-3.15 TOPSOIL

ADD:

The Contractor shall strip the vegetation from all proposed excavation areas at a minimum depth of 12" and from below all proposed pavement areas at a depth of 12". The stripped organic material shall be stockpiled outside the grading limits. After the embankment is placed the decomposed vegetative shall be re-spread and disturbed areas shall be prepared for seeding.

In the area directly below the proposed pavement structure, the Contractor shall strip the top approximately 12" off topsoil and shall store this material on site. Except where noted in the plans, this excavated material shall be replaced with select fill material and compacted to the specifications of Item 152. ~~for Aircraft weighing less than 60,000 lbs.~~

Materials excavated during the stripping process shall not be utilized as embankment under the proposed or future pavements.

Materials excavated during the stripping process shall be stockpiled at a location designated by the Contractor and approved by the Resident Engineer outside of the grading limits and allowed to decay. Upon completion of the earthwork, this material shall be incorporated as directed in Item 905 over the disturbed surface. Excavation, stockpiling and incorporation of this material shall not be measured for payment but shall be considered incidental to Item 152.

ADD NEW SECTION:

152-3.19. DUST CONTROL WATERING

This work shall consist exclusively of applying water to control dust resulting from construction operations and is not intended for use in compaction of earth embankment. The Contractor shall take measures to control dust.

Dust shall be controlled by a uniform application of sprinkled water as directed by the Resident Engineer or Airport, in a manner meeting their approval.

Dust control watering shall not be paid for separately but shall be considered incidental to the item requiring the dust control.

ADD NEW SECTION:

152-3.20. SUBGRADE REPAIR

Subgrade Repair shall be performed at the locations directed by the Resident Engineer.

- a. Excavation. Remove unsuitable subgrade materials to the minimum depth shown on the plans or as directed by the Engineer. All unsuitable material shall be disposed of on Airport property in locations designated by the Engineer and approved by the Airport. Excavation should be performed in conformance with Item 152.
- b. Preparing underlying course. Clean the subgrade of all foreign substances. Loosen the subgrade, grade and recompact to the satisfaction of the Engineer. The finished subgrade shall not be disturbed by traffic or other operations and shall be maintained in a satisfactory condition until the aggregate backfill is placed. The subgrade shall be checked and accepted by the Engineer before placing the separation fabric.

- c. Placing Separation Fabric. The separation fabric shall be installed on the bottom, sides, and top of all excavated areas in accordance with the manufacturer's recommendations and to the satisfaction of the Engineer. Separation fabric shall be placed concurrently with the placement of the aggregate backfill. The contractor shall not permit vehicular traffic on the separation fabric until the initial layer of aggregate is placed.
- d. General methods for placing aggregate backfill. The aggregate shall be placed in layers of no more than 8 inches of consolidated thickness. The aggregate shall be deposited and spread evenly to a uniform thickness and width. The material, as spread, shall be of uniform gradation with no pockets of fine or coarse materials. No material shall be placed in snow or on a soft, muddy, or frozen course. When more than one layer is required, the construction procedure described here shall apply similarly to each layer. During the placing and spreading, sufficient caution shall be exercised to prevent the incorporation of subgrade, shoulder, or foreign material in the subbase course mixture.
- e. Finishing and consolidating. After spreading, the aggregate shall be thoroughly consolidated by rolling. Sufficient rollers shall be furnished to adequately handle the rate of placing and spreading of the aggregate. The aggregate shall be consolidated to the satisfaction of the Engineer.
- f. Surface tolerance. The surface of the top layer shall show no deviations in excess of 1/2 inch. Correct deviations exceeding this amount by removing material and replacing with new material, or by reworking existing material and compacting it to meet these specifications.
- g. Protection. Work on subgrade undercut shall not be conducted during freezing temperatures nor when the subgrade is wet. When the subbase material contains frozen material or when the underlying course is frozen, the construction shall be stopped. The Contractor shall protect and maintain the subgrade from yielding.
- h. Maintenance. The Contractor shall maintain the completed course in a satisfactory condition until accepted by the Engineer.

METHOD OF MEASUREMENT

152-4.1

DELETE: 1st paragraph and replace with:

Prior to beginning any work, the Contractor shall verify all earthwork quantities shown in the contract documents are in agreement with the earthwork quantities from their own calculations. Existing grades on the design cross sections, where they do not match the locations of actual spot elevations shown on the plans, were developed by computer interpolation from those spot elevations. Contractor shall recognize that, due to the interpolation process, the actual ground surface at any particular location may differ somewhat from the interpolated surface shown on the design cross sections. If the Contractor, based upon his own investigation to verify the topography, identifies

discrepancies in the design cross sections, he shall notify the Resident Engineer in writing at least two weeks prior to disturbing the existing grade. Disturbance of existing grade in any area shall constitute acceptance by the Contractor of the accuracy of the elevations depicted in the contract documents.

Measurement for payment specified by the cubic yard shall be computed by the average end areas of design cross sections. The end area is that bound by the original ground line established by field cross-sections and the final theoretical pay line established by cross-sections shown on the plans, subject to verification by the Resident Engineer.

REVISE : Last sentence of 2nd paragraph to read:

If a discrepancy in plan quantity is discovered after the work has been started, an appropriate adjustment will be made.

ADD: To end of 2nd paragraph:

If an Agreement on Accuracy of Plan Quantities is desired, the from AER 981 must be submitted to the Engineer prior to the NTP issuance.

REVISE: 1st sentence of 4th paragraph to read:

For payment specified by the cubic yard, measurement for all excavation or embankment shall be computed by the average end area of design cross sections.

152-4.1a REVISE: 1st sentence to read:

The quantity of unclassified excavation shall be measured for payment by the number of cubic yards in its original position.

ADD NEW SECTION:

152-4.1e **Dust control watering.** Dust control watering will not be measured for payment but shall be considered incidental to the contract items for which dust control is required.

ADD NEW SECTION:

152-4.1f **Subgrade Undercut.** This item shall be measured for payment by the number of cubic yards in its original position excavated from subgrade repair locations as accepted by the Resident Engineer.

ADD NEW SECTION:

152-4.1g **Separation Fabric.** Separation Fabric shall be measured for payment by the number of square yards placed for Subgrade Repair as specified, completed, and accepted by the Resident Engineer.

ADD NEW SECTION:

152-4.1h **Crushed Aggregate Backfill.** This item shall be measured for payment by the number of cubic yards placed, compacted, and accepted by the Resident Engineer at the locations of Subgrade Repair.

ADD NEW SECTION:

152-4.1i The quantity of topsoil stripping shall not be measured for payment and shall be considered incidental to Item 152.

BASIS OF PAYMENT

152-5.1

ADD:

These prices shall be full compensation for all scarification, excavation, off site removal, hauling, grading, final shaping, and compacting necessary to construct the proposed embankments in conformance with the lines and grades shown in the plans, and for all labor, equipment, tools and incidentals necessary to complete this item.

Payment will be made under the following pay item(s):

Item AR152410 - UNCLASSIFIED EXCAVATION - per cubic yard

Item AR152490 - CRUSHED AGGREGATE BACKFILL - per cubic yard

Item AR152515 - SUBGRADE UNDERCUT - per cubic yard

Item AR156513 - SEPARATION FABRIC - per square yard

Item AS152490 - CRUSHED AGGREGATE BACKFILL - per cubic yard

Item AS152515 - SUBGRADE UNDERCUT - per cubic yard

Item AS156513 - SEPARATION FABRIC - per square yard

Item AT152410 - UNCLASSIFIED EXCAVATION - per cubic yard

PART 4 – BASE COURSES

ITEM 209 – CRUSHED AGGREGATE BASE COURSE

MATERIALS

209-2.1 DELETE: Paragraph B; Crushed Gravel

209-2.6 ADD: After first sentence

NOT USED.

209-3.1 ADD: Before the first sentence of the 1st paragraph

Two (2) weeks prior to placement of aggregate the contractor shall prepare a laydown plan with the sequence lanes and widths to minimize material re-handling; the location of any temporary ramps; and estimated time of completion for each portion of work. The laydown plan and any modifications shall be approved by the Engineer prior to material placement.

209-3.9(b) ADD: after the 2nd sentence

Documentation must be provided to the Resident Engineer demonstrating that the elevation difference between the top of the P-209 surface and the top of the underlying subgrade at the same location is adequate to serve as a depth check.

BASIS OF PAYMENT

209-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR209607 - CRUSHED AGG. BASE COURSE - 7" - per square yard

Item AS209607 - CRUSHED AGG. BASE COURSE - 7" - per square yard

PART 6 – FLEXIBLE PAVEMENTS

ITEM 401 – ASPHALT MIX PAVEMENT SURFACE COURSE

COMPOSITION

401-3.3 JOB MIX FORMULA (JMF).

ADD: After the last sentence of Footnote 4 of the Asphalt Design Criteria Table:

See plans for target air voids percentage.

401-3.5 CONTROL STRIP.

ADD BEFORE THE FIRST SENTENCE:

A Control strip will not be required for asphalt surface mix pavement less than 2,000 tons.

CONSTRUCTION METHODS

401-4.7 APPLICATION OF PRIME AND TACK COAT.

REMOVE: Second (2nd) paragraph:

401-4.8 LAYDOWN PLAN, TRANSPORTING, PLACING, AND FINISHING.

REVISE: 3rd paragraph to read:

The Contractor shall survey at the locations shown in the staking plan prior to the first lift and each subsequent lift of asphalt surface course and certify in writing to the Resident Engineer that every lot of each lift meets the grade tolerances specified in the contract documents before the next lift can be placed. The survey data collected by the Contractor for each lift of the pavement structure shall be provided to the Engineer in a format specified by the Engineer.

401-4.10 JOINTS

ADD: After the first paragraph of this section:

At any time during the bituminous surface 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 liquid asphalt and this work shall be considered incidental to Item 401 and no additional compensation will be allowed.

ADD: After the last sentence of this section:

Any indentations or surface degradation caused by the joint heater assembly must be removed to produce a uniform, flawless surface. All corrections shall be made at the contractor's expense.

401-4.11 SAW-CUT GROOVING

DELETE: all paragraphs.

ADD:

NOT USED.

ACCEPTANCE CRITERIA

401-6.2e. PROFILOGRAPH SMOOTHNESS FOR QA ACCEPTANCE.

REVISE: First (1st) sentence of the first (1st) paragraph to read:

profilograph smoothness and acceptance will apply. The final profilograph shall be the full length of the project to facilitate testing of roughness between lots.

ADD: After the last sentence of the first (1st) paragraph:

Profilograph shall be performed one foot right and left of project centerline and 15 feet right and left of project centerline.

BASIS OF PAYMENT

401-8.1 ADD:

Payment will be made under the following pay item(s):

Item AR401610 - BITUMINOUS SURFACE COURSE - per ton

Item AS401610 - BITUMINOUS SURFACE COURSE - per ton

ITEM 403 – ASPHALT MIX PAVEMENT BASE COURSE

COMPOSITION

403-3.3 ADD After the last sentence of Footnote 4 of the Asphalt Design Criteria Table:

See plans for target air voids percentage.

403-3.4 DELETE: All paragraphs.

ADD: After the first sentence

NOT USED.

CONSTRUCTION METHODS

403-4.7 APPLICATION OF PRIME AND TACK COAT.

REMOVE: Second (2nd) paragraph:

403-4.8 REVISE: 3rd paragraph to read

The Contractor shall survey at the locations shown in the staking plan prior to the first lift and each subsequent lift of asphalt base course and certify in writing to the Resident Engineer that every lot of each lift meets the grade tolerances specified in the contract documents before the next lift can be placed. The survey data collected by the Contractor for each lift of the pavement structure shall be provided to the Engineer in a format specified by the Engineer.

403-4.10 JOINTS

ADD: At any time during the bituminous 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 liquid asphalt and this work shall be considered incidental to Item 403 and no additional compensation will be allowed.

401-4.11 SAW-CUT GROOVING

DELETE: All Paragraphs

ADD:

NOT USED.

METHOD OF MEASUREMENT

403-7.1 ADD:

The Test Section will be measured per each. In the case of a failed Test Section or for other reasons both foreseeable and unforeseeable, no additional measurement for payment shall be made beyond the quantity of Test Section shown in the plans.

The quantity of Bituminous Base Course placed as part of the Test Section will be measured for payment by the number of tons of asphalt used in the Test Section as specified, completed and accepted by the Resident Engineer.

BASIS OF PAYMENT

403-8.1(b.) REVISE: Last sentence of first (1st) paragraph to read:

When a control strip passes, the control strip tonnage shall be paid at 100% for material used as recorded on the batch weights or truck scale weights provided to the Resident Engineer with each delivery.

ADD:

Payment will be made under the following pay item(s):

Item AR403610 - BITUMINOUS BASE COURSE - per ton

Item AS403610 - BITUMINOUS BASE COURSE - per ton

Item AS403630 - BITUMINOUS BASE TEST SECTION - per each

PART 9 – MISCELLANEOUS

ITEM 602 – BITUMINOUS PRIME COAT

BASIS OF PAYMENT

602-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR602510 - BITUMINOUS PRIME COAT - per gallon

Item AS602510 - BITUMINOUS PRIME COAT - per gallon

ITEM 603 – BITUMINOUS TACK COAT

BASIS OF PAYMENT

603-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR603510 - BITUMINOUS TACK COAT - per gallon

Item AS603510 - BITUMINOUS TACK COAT - per gallon

ITEM 610 – CONCRETE FOR MISCELLANEOUS STRUCTURES

DESCRIPTION

610-1.1 ADD: This item shall include concrete used for the purpose of installing new lights, signs, splice cans, and other miscellaneous items that require the use of structural PCC.

ITEM 620 – PAVEMENT MARKING

DESCRIPTION

620-1.1 REVISE: First (1st) sentence of the first (1st) paragraph to read: This item shall consist of marking the new pavement, pavement that has been treated with a seal coat, remarking of existing taxiway markings and removal of existing pavement marking as specified in the contract documents or as directed by the Resident Engineer.

MATERIALS

620-2.2 MARKING MATERIALS.

DELETE: Table 1: Marking Materials Application Rates

DELETE: Table 2: Acceptable Paint Color

ADD:

Paint and glass beads shall be the type, color, and applied at the application rates shown in table 1.

Table 1: Project Acceptable Marking Materials and Application Rates

| Paint¹ | | | | Glass Beads² | |
|--------------------------|--------------------------------|------------------------------|---------------------------------|--------------------------------|---------------------------------|
| Type | Color | Fed Std. 595 Number | Application Rate Maximum | Type | Application Rate Minimum |
| Waterborne Type III | White Runway Markings | 37925 | 55 ft ² /gal | III | 6 lb/gal |
| Waterborne Type III | Yellow Taxiway Markings | 33538 or 33655 | 55 ft ² /gal | III | 6 lb/gal |
| Waterborne Type III | Black Border Markings | 37038 | 55 ft ² /gal | No Beads | No Beads |
| Waterborne Type III | Red Markings | 31136 | 90 ft ² /gal | I, Gradation A | 5 lb/gal |
| Waterborne Type II | Temporary 1 st coat | See above for White & Yellow | 115 ft ² /gal | No beads | No Beads |
| Waterborne Type III | Temporary Final coat | See above for White & Yellow | 55 ft ² /gal | III | 6 lb/gal |

1. See paragraph 620-2.3

2. See paragraph 620-2.4

3. Waterborne Type II paint shall only be used for temporary marking. Any locations utilizing Waterborne Type II paint for temporary marking shall be capped with a temporary final coat of Waterborne Type III paint prior to project completion.

620-2.3 PAINT.

DELETE:

Epoxy, Methacrylate, Solvent-Base and Preformed Thermoplastic

620-2.4 REFLECTIVE MEDIA

REVISE: first paragraph to read

Glass beads for white and yellow paint shall meet the requirements for Federal Specification TT-B-1325D of the Type and Gradation shown in Table 3 of section 620-2.2.

REVISE: 2nd paragraph to read

Glass beads for red paint shall meet the requirements of the Type and Gradation shown in Table 3 of section 620-2.2. Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

DELETE: 5th paragraph

CONSTRUCTION METHODS

620-3.3.b REVISE: to read

b. Preparation of pavement to remove existing markings. Existing pavement markings shall be removed by rotary grinding, water blasting, or by other methods approved by the Resident Engineer minimizing damage to the pavement surface. The Resident Engineer must have adequate time to review and approve the pavement marking removal method prior to initiating the marking removal. The removal area may need to be larger than the area of the markings to eliminate ghost markings. After removal of markings on asphalt pavements, apply a fog seal or seal coat to 'block out' the removal area to eliminate 'ghost' markings.

620-3.6 APPLICATION – PREFORMED THERMOPLASTIC AIRPORT PAVEMENT MARKINGS.

REPLACE: First (1st) paragraph with:

NOT USED.

BASIS OF PAYMENT

620-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR620520 - PAVEMENT MARKING - WATERBORNE - per square feet

Item AR620525 - PAVEMENT MARKING - BLACK BORDER - per square feet

Item AR620900 - PAVEMENT MARKING REMOVAL - per square feet

Item AS620520 - PAVEMENT MARKING - WATERBORNE - per square feet

Item AS620525 - PAVEMENT MARKING - BLACK BORDER - per square feet

PART 11 – DRAINAGE

ITEM 701 – PIPE FOR STORM DRAINS AND CULVERTS

CONSTRUCTION METHODS

701-3.5 ADD: After the first (1st) paragraph of this section.

On all areas outside of the pavement areas, material for backfill shall be fine, readily compactible soil or granular material. Backfill material shall be free of brick, rock, or any other objectionable material. Backfill material shall meet the approval of the Engineer.

METHOD OF MEASUREMENT

701-4.1 REVISE: The last two sentences to read:

Excavation, bedding, backfill, and concrete collar connections to existing pipe are considered incidental to this item and included in the Contractor's unit price. No separate measurement or payment shall be made for the excavation, bedding, or backfill associated with the pipe.

701-4.2 DELETE THIS SECTION.

BASIS OF PAYMENT

701-5.1 REVISE: 1st paragraph to read

Payment for accepted quantities of work performed by the Contractor and measured by the Resident Engineer shall be made at the contract unit price as specified in paragraphs 701-4.1 of this section. Payment shall be full compensation for furnishing all materials and for all preparation, excavation, and installation of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the work as specified.

ADD:

Payment will be made under the following pay item(s):

Item AR701518 - 18" RCP, CLASS IV - per linear foot

Item AR701530 - 30" RCP, CLASS IV - per linear foot

Item AT701518 - 18" RCP, CLASS IV - per linear foot

ITEM 705 – PIPE UNDERDRAINS FOR AIRPORTS

DESCRIPTION

705-1.1 ADD:

This item shall also include “Underdrain Connection”, which involves the connection of new underdrain to existing underdrains.

This item shall also include “Underdrain Direct Connect” which involves the connection of new underdrain to inlets, manholes, collection structures, concrete storm sewer pipe, or other drainage structures.

CONSTRUCTION METHODS

705-3.1 ADD:

The “Underdrain Connection” shall have a liquid-tight connection between new and existing underdrain pipes. The completed Connection shall not disrupt flow of water.

The “Underdrain Direct Connect” shall be a completed in accordance with the Plans and shall have a liquid-tight connection between the drainage structure and the incoming underdrain.

METHOD OF MEASUREMENT

705-4.1 ADD:

The quantity for “Underdrain Connection” shall be measured for payment by the number of each Connection made as specified, completed, and accepted by the Resident Engineer.

The quantity for “Underdrain Direct Connect” shall be measured for payment by the number of each Direct Connect made as specified, completed, and accepted by the Resident Engineer.

No separate measurement for payment will be made for the excavation, trenching, backfill materials, and other work necessary to complete the Underdrain work as specified; instead, that work shall be incidental to the construction of the underdrains.

705-4.2 ADD SECTION:

The quantity of underdrain connections to pipe and structures will be measured for payment by the number of each connection made as specified, completed, and accepted by the Resident Engineer.

BASIS OF PAYMENT

705-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR705524 - 4" PERFORATED UNDERDRAIN W/SOCK - per linear foot

Item AR705544 - 4" NON PERFORATED UNDERDRAIN - per linear foot

Item AR705645 - UNDERDRAIN CONNECTION - per each

Item AR705900 - REMOVE UNDERDRAIN - per linear foot

Item AR801456 - UNDERDRAIN DIRECT CONNECT - per each

Item AR705635 - UNDERDRAIN COLLECTION STRUCTURE - per each

Item AR705640 - UNDERDRAIN CLEANOUT - per each

ITEM 751 – MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES

DESCRIPTION

751-1.1 REVISE: 1st paragraph to read

This item shall consist of construction of manholes, catch basins, inlets, cleanouts, collection structures and inspection holes, in accordance with these specifications, at the specified locations and conforming to the lines, grades, and dimensions specified in the contract documents or required by the Resident Engineer.

751-3.6 REVISE: 1st paragraph to read.

Where the contract documents specify connections to existing or proposed structures and pipes, these connections shall be watertight and made so that a smooth uniform flow line will be obtained throughout the drainage system.

751-3.7 REVISE: last sentence of the 1st paragraph to read.

For concrete or brick structures, mortar or concrete shall be placed around these pipes to form a watertight, neat connection.

METHOD OF MEASUREMENT

751-4.1 REVISE THE FIRST SENTENCE TO READ:

The quantity of inlets, catch basins, manholes, cleanouts, and collection structures shall be measured for payment by the number of each unit installed as specified, completed, and accepted by the Resident Engineer.

BASIS OF PAYMENT

751-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR705635 - UNDERDRAIN COLLECTION STRUCTURE - per each

Item AR705640 - UNDERDRAIN CLEANOUT - per each

Item AR751411 - INLET - TYPE A - per each

Item AR751550 - MANHOLE 5' - per each

Item AT751411 - INLET - TYPE A - per each

PART 12 – TURFING

ITEM 901 – SEEDING

DESCRIPTION

901-1.1 ADD: This item shall consist of seeding and fertilizing the disturbed ground and stockpiles shown in the plans.

CONSTRUCTION METHODS

901-2.2 ADD: Before the first (1st) sentence:

Lime will not be required unless considered necessary by the Contractor to promote establishment of the turf.

901-3.2 **DRY APPLICATION METHOD**

REPLACE: Paragraph (C.), Seeding.

c. **Seeding.** Grass seed shall be sown with a machine that is capable of cutting a slit in the soil free from leaves and debris, placing the seed in the slit and compacting the seed into the soil of the slit in one continuous operation at the rate shown in 901-2.1.

901-3.3 **WET APPLICATION METHOD**

DELETE: This section.

BASIS OF PAYMENT

901-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR901510 - SEEDING - per acre

Item AT901510 - SEEDING - per acre

ITEM 904 – SODDING

DESCRIPTION

- 904-1.1 ADD: After the first (1st) paragraph:
This item shall consist of sodding around the paved areas as detailed in the plans.

MATERIALS

- 904-2.2 ADD: Before the first (1st) sentence:
Lime will not be required unless considered necessary by the Contractor.
- 904-2.3 ADD: Before the first (1st) sentence:
Fertilizer will not be required unless considered necessary by the Contractor.

CONSTRUCTION METHODS

- 904-3.2 PREPARING THE GROUND SURFACE
ADD:
The areas to be sodded shall be stripped of vegetation, in accordance with Item 152, thoroughly disked or scarified to a 3" minimum depth, and brought to grade with topsoil as described in Item 152 – Excavation and Embankment.

BASIS OF PAYMENT

- 904-5.1 ADD:
Payment will be made under the following pay item(s):
Item AR904510 - SODDING - per square yard

ITEM 905 – TOPSOILING

CONSTRUCTION METHODS

905-3.1 **GENERAL**

DELETE:

The first sentence.

ADD:

A compacted 6-inch minimum layer of topsoil shall be spread evenly over the disturbed areas as directed by the Resident Engineer outside the proposed pavement to facilitate drainage and the growth of turf.

905-3.3 DELETE: The third paragraph.

905-3.4 REVISE THE 1ST SENTENCE TO READ:

The topsoil shall be evenly spread on the prepared areas to a uniform compacted depth of 6 inches.

METHOD OF MEASUREMENT

905-4.1 DELETE: This section.

905-4.2 DELETE: This section.

BASIS OF PAYMENT

905-5.1 ADD:

No payment will be made for topsoiling. Cost associated with stripping, stockpiling, and placing topsoil shall be considered incidental to the earthwork items.

ITEM 908 – MULCHING

MATERIALS

908-2.1 **MULCH MATERIAL**

DELETE: Sections a., b., and c.

ADD: Light-Duty Hydraulic Mulch shall be used. Knitted Straw Mat (Excelsior Blanket) is not permitted.

METHOD OF MEASUREMENT

908-4.1 REVISE: 1st paragraph to read:

The quantity of mulching shall be measured for payment by the number of acres of the surface covered with mulch, as specified, completed, and accepted by the Resident Engineer.

BASIS OF PAYMENT

908-5.1 ADD:

Payment will be made under the following pay item(s):

Item AR908514 - LIGHT-DUTY HYDRAULIC MULCH - per acre

Item AT908514 - LIGHT-DUTY HYDRAULIC MULCH - per acre

PART 13 – LIGHTING INSTALLATION

ITEM 108 – INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

DESCRIPTION

108-1.1

DELETE: The last sentence of the first paragraph.

DELETE: The last Paragraph in this section

ADD:

This item of work shall consist of the underground installation of 5000V cables in unit duct or duct bank at the locations shown on the plans and in accordance with these specifications. When crossing existing utilities or as required by the Engineer, the Contractor shall hand dig the trenches for the proposed cables.

The Jumper Cable shall consist of a single-conductor #8, 5000V cable in unit duct, installed above ground and connected to existing taxiway edge lights to maintain illumination of active edge lights adjacent to active pavement. The contractor shall remove the above-ground cabling upon project completion.

Contractor shall color code all airfield lighting cables in ducts, manholes and handholes as directed by the Engineer. All costs of color coding shall be considered incidental to the contract unit price for the associated item.

EQUIPMENT AND MATERIALS

108-2.1 GENERAL

ADD:

Airfield Lighting cable under this item shall be:

- L-824, 1 - 1/C #8, 5,000 V, Type C, in 3/4" unit duct
- L-824, 2 - 1/C #8, 5,000 V, Type C, in 1-1/4" unit duct
- 1 - 1/C #6, Counterpoise – Bare Copper Wire

108-2.4 CABLE CONNECTIONS

DELETE: The first and second sentence of paragraph **D. The Taped or Heat-Shrank Splice.**

ADD:

To further reduce the possibility of water (moisture) entrance into the connector between the cable and the field attached connector, heat shrinkable tubing with interior adhesive shall be applied over all cable connections.

The heat shrinkable tubing shall cover the entire L-823 connector. All connections shall be at manholes or light bases. No direct burial splicing will be allowed.

No splices will be allowed in the new cable unless at the end of a spool of cable. Splices due to termination points shall be done in splice cans, manholes, handholes and light cans. Any repairs necessary to cable damaged during installation shall be done at the Contractor's expense and shall consist of replacing the entire length of damaged cable between pull points.

In line connections for existing cables to be spliced or those which are cut during construction shall be repaired with the cast splice kit. The Contractor shall have a minimum of five (5) splice kits on the jobsite at all times for emergency repairs. Splice markers shall be installed over each splice in cables not to be abandoned. Cast splice kits shall be as specified in paragraph (a). All field splices shall be covered with a flexible polyolefin heat-shrinkable sleeve.

CONSTRUCTION METHODS

108-3.1 GENERAL

ADD:

Any damages to existing utilities as a result of the Contractor's operations shall be repaired immediately at his expense.

108-3.2 INSTALLATION IN DUCT OR CONDUIT

DELETE: The first sentence of the fourth paragraph.

ADD:

The Contractor shall install conduit in trench between the lights and signs as shown in the plans.

The Contractor shall coordinate the cable trenching, placement and backfilling operations so that the cable will not be damaged by (a) the use of mechanized road building equipment in the area where underground cable is or will be in existence, and (b) stone or other foreign materials falling into the trench or mixing into the trench backfill materials.

Contractor shall provide a minimum of 3 feet of cable slack in all manholes, handholes and light bases.

108-3.3.a TRENCHING

REVISE 18 inches to 24 inches in the last sentence of the first paragraph.

108-3.5 SPLICING

DELETE: The first and second paragraph of Section **D. Taped or Heat-Shrink Splices.**

ADD:

Contractor shall use cast splicing kits as described in Article 108-2.4 for any splices made inside the electric handholes and manholes. Contractor shall provide shop drawing for splicing method and cast splicing kit. Contractor shall also leave a minimum of 30" of slack on each side of the cable being spliced.

Splicing of FAA cables shall be tested and approved by FAA.

The Contractor may elect to install FAA approved "Complete Kit" or "Super Kit" with sealant and rubber boot in lieu of heat shrink connectors at no additional cost to the contract.

108-3.11 LOCATING OF EXISTING CABLES

ADD:

Contact Personnel are listed in Section 70-16 herein.

108-3.12 ADD SECTION:

Jumper Cable. This item shall include all temporary electrical items necessary to maintain the existing airport light and sign circuits on adjacent airfield pavements to remain operational at all times during the course of the project. To maintain the existing airfield electrical systems, the contractor will need to provide temporary circuiting/cable/connections/lighting and temporary conduits. This work shall be closely coordinated with the Airport and RPR for the duration of the project. This item shall also include temporarily covering and uncovering existing lights on active circuits within a closure area on a nightly or extended basis as necessary. The covering method shall be reviewed and approved by the Airport. Unsatisfactory methods shall be replaced at the discretion of the Airport.

The contractor shall temporarily install cables in existing underground conduits to cross pavements and/or connect to the adjacent operating circuits to avoid any above-ground jumper cables. Above-ground jumper cables will only be allowed at the locations shown on the plans. Temporary electrical work shall also include circuit bypasses as required and as indicated on the drawings to maintain lighting for active traffic surfaces during construction, disconnection of portions of lighting for closed areas, covering of existing edge lights with 3' traffic cones where permitted by the Airport, covering and switching off guidance signs directing traffic into closed surfaces, and other measures approved by the Airport.

Cable shall be of the same size and type as that of the circuit being temporarily modified, and connections shall be made with L-823 connectors. Cables shall be installed in conduit or shallow buried as allowed by drawings and as approved by the Airport. Secure, mark, and protect from traffic all aboveground conduits, and mark the location of all direct-buried cable.

Guidance signs directing traffic into a closed area shall be covered using black felt or black plexiglass.

When no longer required, the modified lighting circuit shall be restored to its original condition or to the condition required for the permanent work. All temporary installations shall be removed, including

underground portions, and any damage to surfaces shall be repaired. Temporary modifications to other electrical circuits or facilities shall be consistent with the existing installation and in compliance with all applicable Codes and standards, with completed restoration to original or final condition when temporary modification is no longer required. Existing taxiway/taxilane edge lights temporarily removed shall be reinstalled on the existing light base with new isolation transformers

METHOD OF MEASUREMENT

108-4.1

REVISE: This Section to read as follows:

No measurement for payment will be made for trenching, excavation, backfill, dewatering and restoration regardless of the type of material encountered.

108-4.2

REVISE: This Section to read as follows.

The length of cable or counterpoise wire installed in trench, duct bank, or conduit, including grounding connectors and marking tape, to be paid for, shall be the number of linear feet measured in place, complete and ready for operation, and accepted as satisfactory, and no extra quantity will be allotted for any vertical distances or the required cable slack, as stated under Item 108-3.3, in the Standard Specifications.

The cost of routing the cable through duct, splicing, marking, trenching, backfilling, compaction and all connections shall be included in the unit price bid for the cable.

The quantity of line marking tape installed shall be considered incidental to the work and shall not be measured separately for payment.

The cost of construction and placement of concrete cable markers to include excavation, backfilling, and compaction shall be included in the unit price bid for the cable.

108-4.3 ADD SECTION:

Jumper Cable work will include providing and installing temporary jumper cables to maintain circuit continuity, temporarily covering guidance signs, testing circuits before and after temporary modifications, and other temporary electrical work as required by phasing. Temporary work shall include furnishing conduit and mounting stakes, cable, connectors, and other materials associated with the temporary work, labor and equipment required to accomplish the temporary work, and associated removals and restoration to original or final condition when no longer required.

The Jumper Cable item will be measured for payment per linear foot and shall include all labor, materials, and incidentals necessary to provide an operational lighting and signage system throughout the course of the project. Work associated with covering lights and guidance signs, circuit testing, and

other temporary electrical work will not be measured separately for payment and shall be considered part of the Jumper Cable item.

BASIS OF PAYMENT

108-5.1

ADD:

Payment for accepted quantities of work performed by the Contractor and measured by the Resident Engineer shall be made at the contract unit price as specified in paragraph 108-4.2 and 108-4.3 of this section. These prices shall be full compensation for furnishing all materials and for all preparation of existing cable, conduit, and unit duct as shown on the plans.

Payment will be made under the following pay item(s):

Item AR108158 - 1/C #8 5 KV UG CABLE IN UD - per linear foot

Item AR108258 - 2/C #8 5 KV UG CABLE IN UD - per linear foot

Item AR108706 - 1/C #6 COUNTERPOISE - per linear foot

Item AR801512 - JUMPER CABLE - per linear foot

ITEM 125 – INSTALLATION OF AIRPORT LIGHTING SYSTEMS

DESCRIPTION

125-1.1

ADD:

The MITL – Base Mounted item shall consist of the installation and connection to circuits of a new base mounted fixture with a new transformer on a new precast light base in locations specified in the contract documents.

The MITL – Stake Mounted item shall consist of the installation and connection to circuits of a new stake mounted fixture with a new transformer on a new stake in locations specified in the contract documents.

New edge lights and signs shall be LED.

CONSTRUCTION METHODS

125-3.5

REMOVALS

ADD:

Removal of electrical items shall include the removal of the feature and the foundation. Airport shall have the right of first refusal for all removed electrical items and components.

BASIS OF PAYMENT

125-5.1

ADD: These prices shall be full compensation for furnishing all materials and for all preparation, removals, modifications, assembly, and installation of these materials, coordination with the manufacturers and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under the following pay item(s):

Item AR125410 - MITL - STAKE MOUNTED - per each

Item AR125415 - MITL - BASE MOUNTED - per each

Item AR125444 - TAXI GUIDANCE SIGN, 4 CHARACTER - per each

Item AR125445 - TAXI GUIDANCE SIGN, 5 CHARACTER - per each

Item AR125446 - TAXI GUIDANCE SIGN, 6 CHARACTER - per each

**APPENDIX A – POLICY MEMORANDUMS & SUBSURFACE INVESTIGATION
REPORT**

APPENDIX 1: POLICY MEMORANDUM 2003-1 (HMA TESTING)

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

APPENDIX 2: POLICY MEMORANDUM 96-3 (HMA QA)

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

APPENDIX 3: IDOT MEMORANDUM (HMA COMPARISON SAMPLES)



Illinois Department of Transportation

Memorandum

To: Airport Consultants and Contractors
From: William Eves, P.E.
Subject: HMA Comparison Samples
Date: December 7, 2020

In accordance with Policy Memorandum 96-3, the Resident Engineer (R.E.) shall obtain split comparison samples from the contractor for testing by an ASTM-certified, independent testing laboratory. In order to reduce splitting errors, the R.E. shall request that the contractor split the sample down to individual test sample size. The split samples shall be placed in individual paper bags for each test.

The following list shows the number and size of each sample:

3 Superpave Gyratory Brix (Gmb)..... 3 bags: 4800 grams each
Vacuum Pycnometer Test (Gmm).....2 bags: 1500 grams each
Ignition Oven or Extraction.....2 bags: 1500 grams each

Each paper bag shall be identified with the following information:

Airport Name:
Illinois Project Number:
Type of Mix (Base or Surface):
Date Sampled:
Lot-Sublot Number:
Type of test (Brix - Pycnometer - Ignition Oven or Extraction):

For the samples identified as brix the R.E. shall also include the number of gyrations that are required in the construction contract: Illinois Standard Specifications for Construction of Airports (September 25, 2020), Items 401 and 403, Asphalt Design Criteria.

NUMBER OF SAMPLES TO BE SUBMITTED FOR TESTING

One per test section for each type of mix, then one randomly selected sample for each 5000 tons of mix produced under production paving. Projects with less than 5000 tons of mix shall have one split sample tested per mix type for the project in addition to the test section split sample, if a test section is specified. The split samples not selected shall be stored by the contractor for use at the discretion of the Division of Aeronautics.

The R.E. shall place all seven (7) bags in a box along with all samples and ship them to an ASTM-certified, independent lab for testing. The cost of all testing

is to be borne by the Consultant. The lab shall be chosen by the Consultant but shall not be the same one used by the Contractor. All testing results shall be obtained in a timely manner. The R.E. shall also fill out the sample identification sheet, which shall be sent to the laboratory. Copies of the sample identification sheet and all testing results shall be submitted to:

Illinois Department of Transportation, Division of Aeronautics
Attn: Mixtures and Certification Engineer

Supersedes Comparison Samples Memorandum, dated February 20, 2014

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS

SAMPLE IDENTIFICATION

AIRPORT _____ LOCATION _____

ILLINOIS PROJECT NO. _____

MIX PRODUCER _____

PRODUCER NUMBER _____

LOCATION _____

TYPE OF MIX _____

LOT NUMBER _____ SUBLOT NUMBER _____

DATE SAMPLED _____

SAMPLED FROM _____

OF GYRATIONS _____

COMMENTS _____

FILL IN ALL BLANKS

R.E. or REPRESENTATIVE SIGNATURE

EMAIL COPY TO:

DIVISION OF AERONAUTICS
MIXTURES and CERTIFICATIONS ENGINEER

NOTE: Samples should be submitted on day of sampling but no later than 48 hours.

APPENDIX 4: POLICY MEMORANDUM 87-4 (BULK SP. GRAVITY)

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020

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:

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

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:

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

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

Supersedes Policy Memorandum 87-4, dated February 20, 2014

APPENDIX 5: POLICY MEMORANDUM 96-1 (610 PCC)

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

APPENDIX 6: POLICY MEMORANDUM 22-1 (CEMENT)

State of Illinois Department of Transportation
Office of Intermodal Project Implementation
Aeronautics

POLICY MEMORANDUM

February 10, 2022

Springfield, Illinois

Number 22-1

TO: CONSULTING ENGINEERS / CONTRACTORS

SUBJECT: ACCEPTED CEMENT TYPES

- I. This policy memorandum addresses the accepted cement types for use in Items 501 and 610 Concrete mixtures. Type IL cement has been added to the approved list and may be used on all IDOT-Let Aeronautics projects.
- II. The following cement types are approved.
 - a. Type I cement conforming to the requirements of ASTM C 150.
 - b. Type IL cement conforming to the requirements of ASTM C 595.
 - c. All other types are not allowed unless specified by Special Provisions.

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

APPENDIX 7: POLICY MEMORANDUM 22-2 (AGG. APPROVAL)

State of Illinois Department of Transportation
Office of Intermodal Project Implementation
Aeronautics

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

APPENDIX 8: POLICY MEMORANDUM 97-2 (620 PAINT)

State of Illinois Department of
Transportation Division of
Aeronautics

POLICY MEMORANDUM

December 3, 2020

Springfield, Illinois

Number 97-2

TO: CONSULTING ENGINEERS

SUBJECT: PAVEMENT MARKING PAINT AND GLASS BEADS ACCEPTANCE

I. SCOPE

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

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 and glass beads 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-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.
Bureau Chief of Airport Engineering

Supersedes policy memorandum 97-2 dated June 22, 2018

APPENDIX 9: BUY AMERICAN REQUIREMENTS

49 U.S.C.

United States Code, 2009 Edition

Title 49 - TRANSPORTATION

SUBTITLE VII - AVIATION PROGRAMS

PART E - MISCELLANEOUS

CHAPTER 501 - BUY-AMERICAN PREFERENCES

Sec. 50101 - Buying goods produced in the United States

From the U.S. Government Printing Office, www.gpo.gov

§50101. Buying goods produced in the United States

(a) Preference.—The Secretary of Transportation may obligate an amount that may be appropriated to carry out section 106(k), 44502(a)(2), or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title for a project only if steel and manufactured goods used in the project are produced in the United States.

(b) Waiver.—The Secretary may waive subsection (a) of this section if the Secretary finds that—

- (1) applying subsection (a) would be inconsistent with the public interest;
 - (2) the steel and goods produced in the United States are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
 - (3) when procuring a facility or equipment under section 44502(a)(2) or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title—
 - (A) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment; and
 - (B) final assembly of the facility or equipment has occurred in the United States;
- or
- (4) including domestic material will increase the cost of the overall project by more than 25 percent.

(c) Labor Costs.—In this section, labor costs involved in final assembly are not included in calculating the cost of components.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1298, §49101; renumbered §50101 and amended Pub. L. 104–287, §5(88)(D), (89), Oct. 11, 1996, 110 Stat. 3398.)

Historical and Revision Notes
Pub. L. 103–272

| <i>Revised Section</i> | <i>Source (U.S. Code)</i> | <i>Source (Statutes at Large)</i> |
|----------------------------|---------------------------|--|
| 49101(a) | 49 App.:2226a(a). | Nov. 5, 1990, Pub. L. 101–508, §9129, 104 Stat. 1388–371. |
| 49101(b) | 49 App.:2226a(b). | |
| 49101(c) | 49 App.:2226a(c). | |

In this chapter, the word “goods” is substituted for “product” and “products” for consistency.

In subsection (a), the words “Notwithstanding any other provision of law” are omitted as surplus. The words “after November 5, 1990” are omitted as obsolete.

In subsection (b), before clause (1), the words “The Secretary may waive” are substituted for “shall not apply” for consistency. In clause (2), the words “steel and goods” are substituted for “materials and products” for consistency. In clause (4), the word “contract” is omitted as surplus.

Pub. L. 104–287, §5(89)

This makes a clarifying amendment to 49:50101(a) and (b)(3), 50102, 50104(b)(1), and 50105, as redesignated by clause (88)(D) of this section, because 49:47106(d) was struck by section 108(1) of the Federal Aviation Administration Authorization Act of 1994 (Public Law 103–305, 108 Stat. 1573).

Amendments

1996—Pub. L. 104–287, §5(88)(D), renumbered section 49101 of this title as this section.

Subsecs. (a), (b)(3). Pub. L. 104–287, §5(89), substituted “section 47127” for “sections 47106(d) and 47127”.

Use of Domestic Products

Pub. L. 103–305, title III, §305, Aug. 23, 1994, 108 Stat. 1592, provided that:

“(a) Prohibition Against Fraudulent Use of ‘Made in America’ Labels.—(1) A person shall not intentionally affix a label bearing the inscription of ‘Made in America’, or any inscription with that meaning, to any product sold in or shipped to the United States, if that product is not a domestic product.

“(2) A person who violates paragraph (1) shall not be eligible for any contract for a procurement carried out with amounts authorized under this title [enacting section 47509 of this title, amending sections 44505 and 48102 of this title, and enacting provisions set out as notes under this section and section 40101 of this title], including any subcontract under such a contract pursuant to the debarment, suspension, and ineligibility procedures in subpart 9.4 of chapter 1 of title 48, Code of Federal Regulations, or any successor procedures thereto.

“(b) Compliance With Buy American Act.—(1) Except as provided in paragraph (2), the head of each office within the Federal Aviation Administration that conducts procurements shall ensure that such procurements are conducted in compliance with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a through 10c [41 U.S.C. 10a—10b–1], popularly known as the ‘Buy American Act’).

“(2) This subsection shall apply only to procurements made for which—

“(A) amounts are authorized by this title to be made available; and

“(B) solicitations for bids are issued after the date of the enactment of this Act [Aug. 23, 1994].

“(3) The Secretary, before January 1, 1995, shall report to the Congress on procurements covered under this subsection of products that are not domestic products.

“(c) Definitions.—For the purposes of this section, the term ‘domestic product’ means a product—

“(1) that is manufactured or produced in the United States; and

“(2) at least 50 percent of the cost of the articles, materials, or supplies of which are mined, produced, or manufactured in the United States.”

Similar provisions were contained in the following prior authorization act: Pub. L. 102–581, title III, §305, Oct. 31, 1992, 106 Stat. 4896.

Purchase of American Made Equipment and Products

Pub. L. 103–305, title III, §306, Aug. 23, 1994, 108 Stat. 1593, provided that:

“(a) Sense of Congress.—It is the sense of Congress that any recipient of a grant under this title [enacting section 47509 of this title, amending sections 44505 and 48102 of this title, and enacting provisions set out as notes under this section and section 40101 of this title], or under any amendment made by this title, should purchase, when available and cost-effective, American made equipment and products when expending grant monies.

“(b) Notice to Recipients of Assistance.—In allocating grants under this title, or under any amendment made by this title, the Secretary shall provide to each recipient a notice describing the statement made in subsection (a) by the Congress.”

APPENDIX 10: STORM WATER PREVENTION PLAN



Storm Water Pollution Prevention Plan

Route N/A
Section VERMILION REGIONAL AIRPORT
County VERMILION

Marked N/A
Project No. DNV-5169

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Date

DNV Airport Manager

Title

1. Site Description

- a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):

Remove existing Taxiway A and construct new 50' Taxiway A at 400' offset to Runway 3/21 centerline. Improve grading and drainage, install lighting and signage, install pavement markings, and perform other appurtenant work as shown on the plans.

- b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as

The improvements will consist of the following: Remove existing pavement, construct embankment, construct aggregate base and HMA pavement, construct new drainage and concrete storm sewer system, construct airfield lighting systems and cabling, place topsoil and seed/sod/mulch.

- c. The total area of the construction site is estimated to be 26± acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities 26± acres.

- d. ~~The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.~~
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.
- f. ~~The names of receiving water(s) and areal extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.~~

2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

a. Erosion and Sediment Controls

- (i) Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.
 - (A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

1. **Temporary Stabilization** - In areas of new soil embankments, existing vegetation, silt fence, straw wattles, and inlet protection will serve to intercept the waterborne silts and prevent it from entering the storm drain system or leaving the site. See plan sheets.
2. **Permanent Stabilization** - All areas disturbed by construction operations will be stabilized with permanent seeding and mulching following final grading. Erosion control blanket may be placed in problem locations as needed.

- (ii) **Structural Practices.** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices (use additional pages, as necessary):

- **Inlet Protection** - In-place before all earthmoving activities to prevent waterborne silts from entering the existing storm drain system. The purpose of this practice is to help prevent sediment from entering storm drains until the contributing watershed is stabilized and allows early use of the storm drainage system.
- **Silt Fence** - In-place before all earthmoving activities to prevent waterborne silts from entering the existing storm drain systems and existing / new swales. The purpose of this practice is to help prevent unwanted sediment from traveling across the project area until the contributing watershed is stabilized and allows early use of the storm drainage system.
- **Straw Wattles** - In-place before all earthmoving activity and ditch grading to prevent waterborne silts from entering the existing storm drain systems and swales.

b. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- (i) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.

- (ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

The existing storm water management system will continue to be utilized after construction.

c. Other Controls

- (i) **Waste Disposal.** No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
- (iii) Prevent offsite tracking of sediments and generation of dust. Stabilized construction entrances or vehicle washing racks should be installed at locations where vehicles leave the site. Where dust may be a problem, implement dust control measures such as irrigation.

d. Approved State or Local Plans

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

Not applicable.

3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan (use additional pages, as necessary):

During construction, the contractor shall:

- **Clean up, stabilize and grade work area to eliminate concentration of runoff.**
- **Maintain or replace erosion control items as directed by the Resident Engineer.**

All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 0.5 inches or greater rainfall, or an equivalent snowfall.

Contractor shall follow inspection procedures as described in the Inspections section below. The contractor's responsibility shall end *after* final acceptance of the project.

4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

5. Non-Storm Water Discharges

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge. (Use additional pages as necessary to describe non-storm water discharges and applicable pollution control measures).

Not applicable.



Contractor Certification Statement

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

Project Information: Realign Taxiway A, PH 3

| | | | |
|---------|-----------------------------------|-------------|-----------------|
| Route | <u>N/A</u> | Marked | <u>N/A</u> |
| Section | <u>VERMILION REGIONAL AIRPORT</u> | Project No. | <u>DNV-5169</u> |
| County | <u>VERMILION</u> | | |

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

| | |
|---------------------------|--------------------|
| _____ Signature | _____ Date |
| _____ Title | |
| _____ Name of Firm | |
| _____ Street Address | |
| _____ City | <u>IL</u> State |
| _____ Zip Code | |
| _____ Telephone Number | |

APPENDIX 11: SUBSURFACE EXPLORATION AND GEOTECHNICAL EVALUATION REPORT
(AVAILABLE INFORMATION)

AVAILABLE INFORMATION

**Subsurface Exploration
And
Geotechnical Evaluation**

The Subsurface Exploration and Geotechnical Evaluation Report (or any portions thereof) are provided only as available information. The Contractor may draw his own conclusions from the data shown. The soils information provided is not represented as or representative of all soil which might be encountered within the limits of the project. The Contractor shall by his own means, satisfy himself as to the existing site and geotechnical/subsurface conditions for determining cost, means, methods, techniques and sequences of construction.

The information presented in the boring logs and pavement cores are representative of that exact location shown in the plans. Pavement substrata properties at other locations may vary.



Midwest Engineering and Testing, Inc.
geotechnical - environmental - materials engineers
501 Mercury Drive
Champaign, IL 61822-9649
217-359-2128
FAX 217-359-8446
www.metgeotech.com

June 24, 2021

Mr. Eric Hills
Crawford, Murphy & Tilly, Inc.
2700 West Washington Street
Springfield, IL 62702

Re: Subsurface Exploration and Geotechnical Evaluation
Taxiway A Realignment – Phase 1; DNV-4742
Vermilion Regional Airport
Danville, Illinois
MET Project No. 213048

Dear Mr. Hills:

In accordance with your request, Midwest Engineering and Testing, Inc. (MET) has completed the subsurface exploration and evaluation of the foundation conditions at the above-referenced site. The geotechnical report, which includes our findings and recommendations for design and construction of the foundation system, is being submitted via e-mail in .pdf format. Hard copies can be provided, if so desired.

MET appreciates the opportunity to be of service during this phase of the project. If there are any questions or comments you may have regarding the content of this report or if we may be of any further service, please contact us at your convenience.

Sincerely,

Midwest Engineering and Testing, Inc.

Nicholas D. Wendling, P.E.
Geotechnical Department Manager

Daniel E. Tappendorf, P.E.
President

**SUBSURFACE EXPLORATION
AND
GEOTECHNICAL EVALUATION**

**Taxiway A Realignment – Phase 1; DNV-4742
Vermilion Regional Airport
Danville, Illinois**

Prepared For

**Crawford, Murphy & Tilly, Inc.
2750 West Washington Street
Springfield, Illinois**

June 24, 2021

MET File No. 213048

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GENERAL PROJECT DESCRIPTION

The proposed project involves the realignment of the existing Taxiway A at the Vermilion Regional Airport in Danville. The proposed new taxiway is expected to be constructed parallel to the existing taxiway approximately 100 feet to the west northwest. We anticipate the project will include placement of engineered structural fill, crushed aggregate base, and hot mix asphalt or concrete pavement.

The scope of services included a reconnaissance of the site, subsurface exploration, field and laboratory testing of the soil samples collected and engineering analysis and evaluation of the data. Authorization to perform this subsurface exploration and analysis was in the form of a fully executed Subconsultant Agreement with Crawford, Murphy, & Tilly, Inc. that was issued in response to MET Proposal 20221, dated November 9, 2020.

PROJECT LOCATION

The proposed project is located at the existing Vermilion Regional Airport in northeast Danville, Illinois. The new taxiway will be located in Sections 10 and 15, Township 20 North, Range 11 West of the Second Principal Meridian in Vermilion County, Illinois. A Vicinity Map, Figure 1, is included in the Appendix

GEOLOGY OF THE AREA

General

The geology of the Danville, Illinois region has been greatly influenced by several major landforming factors. Bedrock and tectonic movements prior to the Pleistocene Period, continental glaciation during the Pleistocene Period, wind action, and man have all contributed to the geologic history of the area.

Bedrock Geology

Bedrock in the project area is generally found at a depth ranging from 100 to 200 feet below the ground surface and consists primarily of Pennsylvanian Age deposits associated with the Carbondale Formation. Shale, coal, sandstone and limestone are the predominant rock types comprising the formation in this area.

Surficial Geology

The subject site is located in east-central Vermilion County. In this area, the surficial geology typically consists of a thin layer of wind deposited and water worked loessial material overlying extensive deposits of glacial drift. The drift is comprised primarily of glacial till, a compact, heterogeneous mixture of sand and pebbles bound in a clay to silt matrix, but can also contain inclusions of granular outwash material. Pockets, lenses, seams and tubes of water-sorted gravels, sands, and silts are commonly found in these geologic formations.

Pedology

The USDA Soil Survey web application was reviewed in order to obtain surficial soil type characterization in the area of the project site. Soils mapped in the project vicinity include Blount Silt Loam (silty loam loess over clayey till, somewhat poorly drained), Ashkum Silty Clay Loam (clayey colluvium over till, poorly drained), and Orthents (earth fill). The majority of the proposed project was classified as Orthents, likely due to previous grading projects for the Airport taxiway and runways.

FIELD INVESTIGATION

In order to evaluate the significant engineering characteristics of the subgrade soils, a field exploratory program was undertaken. A total of nine (9) subsurface borings were completed for this project at the approximate locations shown on the Soil Boring Location Diagram, Figure 2, in the Appendix.

The soil borings were performed with a Diedrich D-50 track-mounted drilling rig equipped with an automatic hammer. Conventional, continuous-flight, hollow-stem augers were used to advance the borings with representative samples obtained using split-barrel sampling techniques in general accordance with AASHTO Procedure T-206. All borings were advanced through a depth of 11.5 feet below surface grade. Representative samples of the soils encountered in the field were placed in clean, glass sample jars and are now stored in the laboratory for further analysis, if desired.

Field Tests and Measurements

Standard Penetration Tests: Standard Penetration Tests (SPTs) were performed through the termination depth of each boring. The SPT value ("N", or blow counts) is defined as the number of blows required to advance a 2-inch O.D., split-barrel sampler a distance of one-foot by a 140-pound hammer falling 30-inches. These values provide a useful preliminary indication of the consistency or relative density of most soil deposits and are included on the Soil Boring Logs for each 6-inch interval of driving.

Water Level Measurements: Groundwater level observations were made during the drilling and sampling process. Water level information is noted on the Soil Boring Logs.

Dynamic Cone Penetrometer (DCP) Tests: At the boring locations, DCP tests were performed through three (3) consecutive 6-inch intervals on the subgrade soils beginning below the topsoil materials. The DCP consists of a hand-held rod with a conical tip that is driven into the subgrade with a sliding drop hammer. The penetration data has been correlated to Illinois Department of Transportation (IDOT) Immediate Bearing Values (IBV). The DCP and IBV results are shown on Table 1, Subgrade Dynamic Cone Penetrometer (DCP) Test Results, found in the Appendix.

LABORATORY TESTING

Additional significant characteristics of the subsurface materials were determined in the laboratory to provide data on which to classify and quantitatively assess the engineering properties of the samples obtained. The types of soils encountered were identified and logged on the Soil Boring Logs in the Appendix. The Appendix also contains various data sheets and test forms with results of the field and laboratory tests performed.

Visual Classification: A soils engineer visually classified all samples in accordance with the Unified Soil Classification System (ASTM D-2488) terminology. An explanation of the symbols used in USCS system is included in the Appendix. The USDA Textural Classification System was used on the Boring Plan and Soil Profile sheet.

Moisture Content Tests: The natural moisture content (MC) of all samples was determined by AASHTO method T 265 and is recorded on the Soil Boring Logs as a percentage of the dry weight of the soil.

Unconfined Compression Tests: The undrained shear strength of suitable cohesive soil samples obtained from the split-barrel samplers was determined using a Rimac® spring tester to perform unconfined compressive strength tests. For cohesive samples too short to perform Rimac® testing, the unconfined compressive strength was estimated using a calibrated hand penetrometer. The strength values of soil samples obtained by the SPT method must also be considered, recognizing that this sampling technique provides a representative, but somewhat disturbed sample. The results are listed on the Soil Boring Logs beneath the column labeled "Q_u".

Dry Density Determination: The dry density (D_d) was determined on the cohesive soils where intact samples were available. The results are included on the Soil Boring Logs.

Grain Size Analysis: The grain size distribution of the soil particles was determined for selected samples in accordance with AASHTO T 88. The data is included on the Report of Soil Grain Size Analysis sheets in the Appendix.

Atterberg Limits: The plasticity characteristics of selected cohesive soils were determined by performing Atterberg Limit tests (AASHTO T 89 and T 90). This data was used to aid in the soil classification and in the evaluation of engineering properties. The data is included on the Report of Soil Grain Size Analysis sheets in the Appendix.

Moisture Density Relationship: The moisture density relationship of three (3) bulk soil samples was determined using the Standard Proctor Method of Test (AASHTO T99). The test determines the maximum dry density and the optimum moisture content for compaction of the select soil sample using standard

compactive effort. The results are included on the Proctor Data Sheets included in the Appendix.

California Bearing Ratio (CBR): The California Bearing Ratio (CBR) of three (3) select soil samples was determined in accordance with AASHTO T193. The CBR test compares the bearing capacity and strength of the soil sample to that of a well-graded crushed stone. The test was performed on reconstituted samples which were prepared remolded to approximately 100 percent of the maximum dry density near optimum moisture content, as determined by the Standard Proctor Method of Test. The results of the test are included in the Appendix.

Eades and Grimm pH Test: A select soil sample was subject to the Eades and Grimm pH test which is used to estimate the soil-lime proportion requirement for soil stabilization. The test involves preparing lime, soil, and water mixtures at selected lime percentages, allowing 1-hour of time for the chemical reactions to take place, and subsequently measuring the pH to determine at which soil-lime proportion the pH of the solution is above 12.0. A discussion of the test results is included in the Geotechnical Evaluation section of this report.

DESCRIPTION OF TERRAIN

The existing Vermilion Regional Airport is located in northeastern Danville, Illinois. Surface topography in the vicinity is relatively flat and most of the land surrounding the airport is utilized as agricultural cropland.

DESCRIPTION OF SUBSURFACE CONDITIONS

Each of the borings was advanced through a thin layer of vegetation and clayey silt topsoil, with the exception of boring B-3 which encountered about 4 to 5 feet of topsoil like materials. The topsoil was underlain by 2 to 4 feet of variably colored fine-grained silty clay to clayey silt fill and loessial soils. The fill and loess was underlain by glacial drift deposits which extended through the boring termination depths. The upper drift deposits consisted of stiff to hard clayey silt glacial till, which was underlain by silty clay glacial till.

Samples of the subgrade soils in the upper 5 feet of the soil profile possessed moisture contents ranging from 13 to 28 percent and stiff to hard consistency. Samples of the upper silty clay soils possessed an average liquid limit and plastic index of 38 and 19 percent, respectively, with a clay size fraction of about 31 percent. A sample of the clayey silt possessed a liquid limit and plastic limit of 27 and 17 percent, respectively with a clay size fraction of about 27 percent.

The DCP tests generally indicated an in-place IBV of 1.7 to 17.4 through the upper 18 inches of the existing subgrade soils. The DCP test results at each boring location are shown on Table 1 in the Appendix.

Groundwater Observations

Groundwater was encountered at a depth of 7.5 feet in boring B-1 while all other borings remained dry during and upon completion of the drilling activities. The geology in the vicinity can cause a perched groundwater condition, where the more pervious loessial and fill soils allow precipitation to infiltrate into the subgrade, while the groundwater is prevented from further downward percolation by the relatively impermeable glacial till soils. It must be recognized that groundwater levels fluctuate with time due to variations in seasonal precipitation, lateral drainage conditions, and soil permeability characteristics.

GENERAL SUBGRADE EVALUATION

The proposed project involves construction of a new Taxiway A which will run parallel to the existing taxiway approximately 100 feet to the west northwest and will tie directly into the northern portion of Taxiway A which was constructed in 2010.

Site preparation within the proposed taxiway limits should include removal of the existing vegetation and the portion of topsoil which includes excessive root matter. The topsoil materials are not considered suitable subgrade soils and should be removed to a depth which removes the most organic soils containing excessive root matter, or through a depth of 24 inches below the proposed bottom of pavement, whichever is greater. The resulting exposed subgrade should then be compacted to at least 95 percent of maximum AASHTO T-99 dry density prior to placement of new fill to establish the final subgrade elevation. Once the initial demolition and clearing operations have been completed, it is anticipated that only minor grading operations will be required to establish proposed grade, expected to consist of less than 3 feet of cut or fill. Therefore, no slope stability or settlement analyses were deemed to be necessary.

The performance of a pavement is related to the physical properties of the paving materials and of the supporting subgrade soils. Based on the soil boring information, the subgrade soils are anticipated to consist primarily of stiff brown, dark brown, and gray silty clays and clayey silts. However, fill materials were encountered in several of the borings, and it is likely that the supporting subgrade soils will be somewhat variable in composition and strength.

The Immediate Bearing Value (IBV) is unique to IDOT and was created to serve as a method to quantify the bearing value of a subgrade soil immediately after compaction (without soaking) as a measure of subgrade stability under heavy construction loads. The IBV can be determined in the lab and also in the field using a DCP (dynamic cone penetrometer). Usually, the IBV helps determine remedial treatment thickness; typically, via moisture control, lime modification or undercutting and replacement with granular material, for weak subgrade soils in the field. The results of DCP testing conducted at the boring locations place the majority of the soils within the "Remedial Procedures Required" range. Based upon the results we anticipate that 12 inches or less of remediation would be required to provide a stable platform, with the exception of boring location B-1 where we estimate 18 inches of remediation would be required. Such an

estimation is based upon the DCP tests performed during the subsurface investigation and weather conditions at the time of construction will likely influence remedial treatment requirements.

As discussed, it is likely that the subgrade compaction process will expose areas requiring remediation prior to paving or placement of fill to establish the design subgrade elevation. Such areas should be evaluated by the soils engineer during construction to assess possible methods of treatment. Subgrade treatment options that could be considered for unstable areas include aeration to reduce the in-situ moisture content, removal and replacement of the poor soils with crushed stone, possibly in combination with a geotextile fabric, or chemical stabilization with lime or cement.

Aeration should be performed by tilling or discing the upper 10 to 12 inches of the subgrade soil followed by recompaction. However, the effectiveness of methods to reduce the in-situ moisture content will depend to a great extent on the temperature and humidity present when such operations are attempted.

The two remaining subgrade treatment methods for Illinois Department of Transportation (IDOT) projects are the use of additives (for both modification and stabilization), and removal and replacement. Modification refers to a short-term subgrade treatment that is intended to provide a stable working platform during construction. Stabilization refers to a subgrade treatment intended to provide structural stability for improved long-term pavement performance.

The Eades and Grimm pH test method was utilized to evaluate the soil-lime proportion which would be required for soil stabilization. Based upon the testing it is estimated that an addition rate of 5% lime by dry weight of the soil would be required. It should be noted that a significant amount of the subgrade soils consisted of clayey silt soils, which are likely to have plasticity indices of 10 or less and would typically not achieve significant strength gain after lime stabilization. Considering the amount of clayey silt soils encountered, and the variability of the soil composition anticipated due to previous grading and filling operations, it is our opinion that the on-site soils are not suitable for lime stabilization. However, it is our opinion that lime could be utilized at an addition rate of 3 to 5 percent to aid with drying of subgrade and fill soils, which would be considered a subgrade modification process. It should be noted that modification is considered a short-term improvement to aid with constructability, and considering the silty nature of the soils, if the lime modified soil is subject to construction traffic while wet, such soils would likely become unstable.

According to the table referenced in Section 6.3.2.2.2 in the Geotechnical Manual, the upper 24 inches of subgrade soils supporting pavement must have a minimum dry density of 90 PCF, a maximum organic content of 10 percent, 65 percent maximum silt and fine sand particle sizes, a minimum plasticity index of 12, maximum liquid limit of 50 and minimum shear strength of 1,000 PSF when compacted to 95% of the Standard Proctor Maximum Dry Density. Based upon the laboratory testing and our experience in the project vicinity, the soils classified as silty clays and sandy clays on the boring logs would satisfy the above criteria. However, the soils classified as clayey silt generally

would not meet the plasticity index requirement and would be on the borderline of satisfying the maximum of 65 percent of silt and fine sand sized materials. Topsoil materials were also subjected to testing to determine if they met the above requirements, and 2 of the 3 samples possessed liquid limits in excess of 50 percent, with a 3-sample average liquid limit of 51 percent. As such, the topsoil is not considered a suitable soil material within the upper 24 inches of the subgrade.

Based upon the IDOT Geotechnical Manual, the soils encountered in the borings would be considered highly susceptible to frost. According to the Table 2.2 from FAA AC 150/5320-6F, the silty clay soils would be included in frost group FG-3, while the siltier soils would fall within frost group FG-4.

The California Bearing Ratio test is often used in pavement design to evaluate the strength and support conditions of a subgrade soil. The test compares the strength of a soil after soaking to that of a well-graded crushed stone and is reported as a percent. The results of CBR test on samples from 1 to 5 ft. depth in borings B-2, B-7 and B-9 had CBR values of 8.2, 7.4 and 4.5, respectively.

Based upon the equation referenced in ASTM D6951 for low plasticity clays with CBR values of less than 10, the DCP tests indicate the subgrade soils below the topsoil materials which contained excessive root matter, possess in-place CBR's of between 0.6 and 8.36 percent, with an average CBR value of 3.7. Based upon past research and our experience with the soils encountered, subgrade soils which have been compacted to 95 percent of the maximum dry density as determined by the Standard Proctor test would have CBR values more than 6. However, the CBR value would typically decrease overtime to values of approximately 3 due to freeze/thaw cycles and elevated perched groundwater tables.

GENERAL COMMENTS

This geotechnical study has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations, and opinions contained herein have been promulgated in accordance with generally accepted practice in the fields of foundation engineering, soils mechanics, and engineering geology.

APPENDIX



Midwest Engineering and Testing, Inc.

geotechnical*environmental*materials engineers

Figure 1 - Vicinity Map

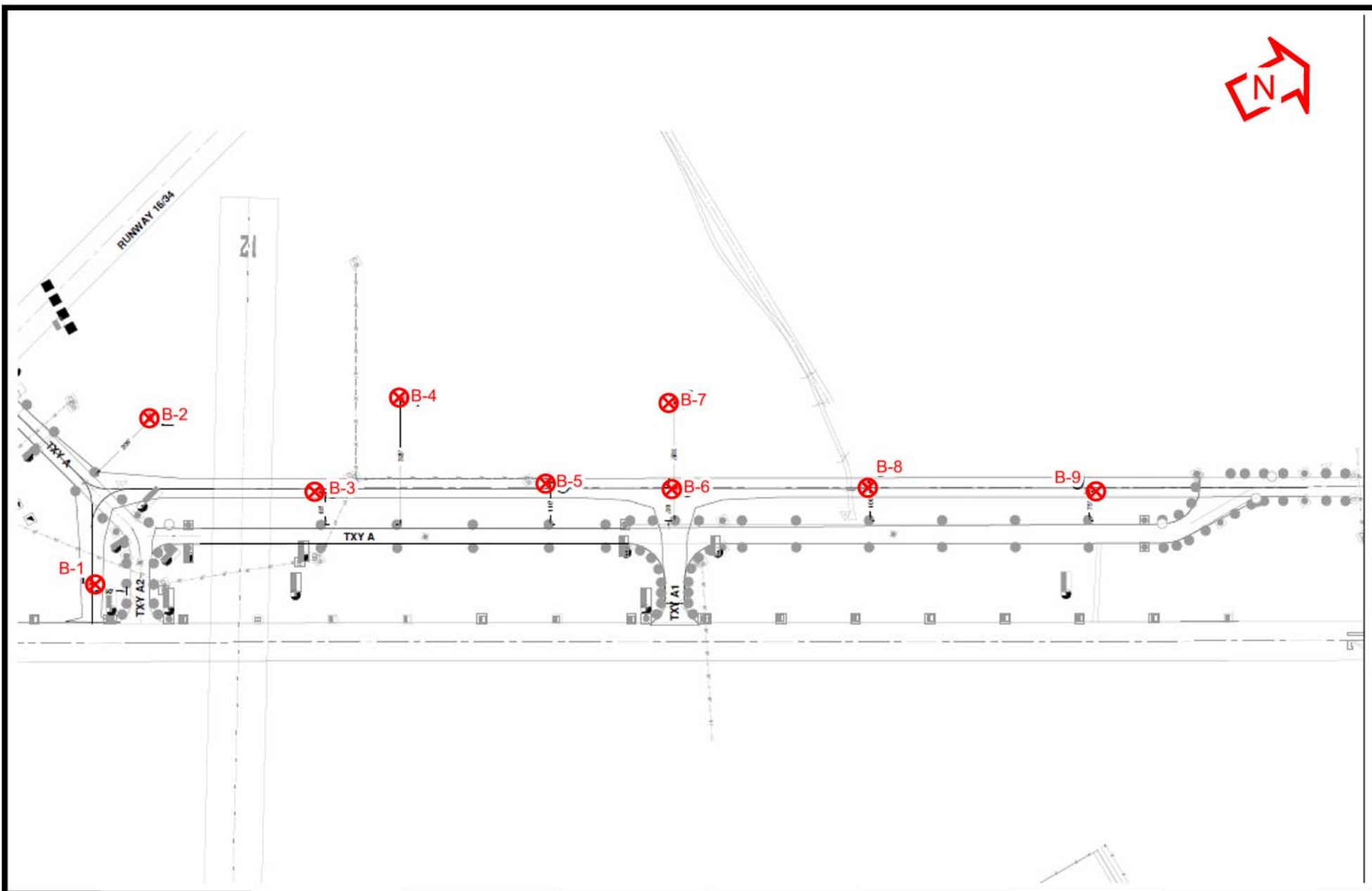
Taxiway A Realignment – Phase 1; DNV-4742
Vermilion Regional Airport
Danville, Illinois

SCALE: Shown Above

PROJECT NO.: 213048

DATE: June 18, 2021

DRAWN BY: NDW



Midwest Engineering and Testing, Inc.

geotechnical*environmental*materials engineers

Figure 2 - Boring Location Diagram

Taxiway A Realignment – Phase 1; DNV-4742
Vermilion Regional Airport
Danville, Illinois

SCALE: None

PROJECT NO.: 213048

DATE: June 18, 2021

DRAWN BY: NDW

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-1
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|----|----------------------|----------------------|--------|----------|---------|
| Ground Surface Elevation: | | | | | | | | |
| 15" Black clayey SILT (OL) Topsoil | 1 | 1-AU | 8 | 0.5 | 0.4 | 28 | 78 | |
| | 2 | | | | | | | |
| Brown and gray silty CLAY (CL) with sand | 3 | 2-SS | 6 | - | - | 22 | - | |
| | 4 | | | | | | | |
| | 5 | | | | | | | |
| 3-SS Poor Recovery | 6 | 3-SS | 4 | - | - | 19 | - | |
| | 7 | | | | | | | |
| Brown sandy CLAY (CL) with small gravel - Till | 8 | 4-SS | 12 | 1.3 | 1.4 | 16 | 113 | |
| | 9 | | | | | | | |
| | 10 | | | | | | | |
| 5-SS No Recovery - Spoon Drove on Rock | 11 | 5-SS | 19 | - | - | - | - | |
| | | | | | | | | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

▼
 Drilling: 7.5 ft.

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-2
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | | Sample | | | | | | |
|--|------|--------|----|-------------------------|-------------------------|-----------|-------------|--|
| Ground Surface Elevation: | Feet | No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
| 18" Dark brown clayey SILT (OL) Topsoil | 1 | 1-AU | 8 | 2.8 | - | 21 | - | Dry during and upon completion of drilling |
| Brown and dark brown mixed silty CLAY (CL) - Fill | 2 | | | | | | | |
| | 3 | 2-SS | 9 | 2.5 | 2.8 | 24 | 91 | |
| | 4 | | | | | | | |
| | 5 | | | | | | | |
| Brown clayey SILT (ML) with sand and small gravel - Till | 6 | 3-SS | 10 | 3.8 | 2.9 | 18 | 105 | |
| | 7 | | | | | | | |
| | 8 | 4-SS | 11 | 2.3 | 2.0 | 17 | 111 | |
| | 9 | | | | | | | |
| Brown silty CLAY (CL) with sand and small gravel - Till | 10 | | | | | | | |
| | 11 | 5-SS | 18 | 4.3 | 5.0 | 17 | 114 | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-3
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|---|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| Black clayey SILT (OL) Topsoil | 1 | 1-AU | 7 | - | - | 23 | - | Dry during and upon completion of drilling |
| | 2 | | | | | | | |
| | 3 | 2-SS | 8 | 2.5 | - | 24 | - | |
| | 4 | | | | | | | |
| Brown and gray silty CLAY (CL) with sand | 5 | | | | | | | |
| | 6 | 3-SS | 6 | 2.3 | 2.4 | 23 | 96 | |
| | 7 | | | | | | | |
| Brown and gray sandy CLAY (CL) | 8 | 4-SS | 3 | - | - | 22 | - | |
| | 9 | | | | | | | |
| | 10 | | | | | | | |
| Brown sandy SILT (SM) | 11 | 5-SS | 5 | 2.5 | - | 21 | - | |
| | | | | | | | | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-4
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|----|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| 14" Black clayey SILT (OL) Topsoil | 1 | 1-AU | 6 | 1.5 | - | 24 | - | Dry during and upon completion of drilling |
| | 2 | | | | | | | |
| Brown silty CLAY (CL) with sand | 3 | 2-SS | 6 | 1.5 | - | 21 | - | |
| | 4 | | | | | | | |
| | 5 | | | | | | | |
| Brown clayey SILT (ML) sand and small gravel - Till | 6 | 3-SS | 9 | 4.5+ | 3.1 | 20 | 105 | |
| | 7 | | | | | | | |
| | 8 | | | | | | | |
| Gray silty CLAY (CL) with sand and small gravel - Till | 9 | 4-SS | 16 | 4.5+ | 4.5 | 17 | 117 | |
| | 10 | | | | | | | |
| | 11 | 5-SS | 12 | 4.5+ | 2.0 | 15 | 116 | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-5
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|----|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| 7" Black clayey SILT (OL) - Topsoil | | | | | | | | |
| | 1 | 1-AU | 8 | 4.5+ | 4.1 | 18 | 107 | Dry during and upon completion of drilling |
| Brown and gray silty CLAY (CL) with sand - Possible Fill | 2 | | | | | | | |
| | 3 | 2-SS | 10 | 4.0 | 3.4 | 15 | 116 | |
| | 4 | | | | | | | |
| Brown clayey SILT (ML) with sand and small gravel - Till | 5 | | | | | | | |
| | 6 | 3-SS | 12 | 4.5+ | 2.7 | 17 | 111 | |
| | 7 | | | | | | | |
| | 8 | 4-SS | 17 | 4.5+ | 5.3 | 12 | 116 | |
| Gray silty CLAY (CL) with sand and small gravel - Till | 9 | | | | | | | |
| | 10 | | | | | | | |
| | 11 | 5-SS | 12 | 3.5 | 2.0 | 15 | 117 | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-6
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|----|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| 2" Black clayey SILT (OL) Topsoil | | | | | | | | |
| | 1 | 1-AU | 7 | 2.5 | 3.0 | 18 | 96 | Dry during and upon completion of drilling |
| Brown mixed silty CLAY (CL) - Fill | 2 | | | | | | | |
| | 3 | 2-SS | 5 | 2.0 | 2.1 | 22 | 102 | |
| Brown and gray silty CLAY (CL) | 4 | | | | | | | |
| | 5 | | | | | | | |
| | 6 | 3-SS | 11 | 3.0 | - | 15 | - | |
| Brown clayey SILT (ML) with sand and small gravel - Till | 7 | | | | | | | |
| | 8 | | | | | | | |
| | 9 | 4-SS | 15 | 4.3 | 3.4 | 14 | 111 | |
| Gray silty CLAY (CL) with sand and small gravel - Till | 10 | | | | | | | |
| | 11 | 5-SS | 12 | 3.8 | 2.6 | 14 | 114 | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-7
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|----|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| 6" Black clayey SILT (OL) Topsoil | | | | | | | | |
| | 1 | 1-AU | 8 | 4.5+ | 2.7 | 13 | 99 | Dry during and upon completion of drilling |
| Brown clayey SILT (ML) with sand | 2 | | | | | | | |
| | 3 | 2-SS | 9 | 3.8 | 2.2 | 15 | 107 | |
| | 4 | | | | | | | |
| Brown clayey SILT (ML) with sand and small gravel - Till | 5 | | | | | | | |
| | 6 | 3-SS | 10 | 4.0 | 3.6 | 17 | 113 | |
| | 7 | | | | | | | |
| | 8 | 4-SS | 9 | 2.5 | 1.5 | 16 | 115 | |
| | 9 | | | | | | | |
| Gray silty CLAY (CL) with sand and small gravel - Till | 10 | | | | | | | |
| | 11 | 5-SS | 12 | 2.0 | 0.8 | 17 | 106 | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-8
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|--|------|------------|----|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| 4" Black clayey SILT (OL) Topsoil | | | | | | | | |
| | 1 | 1-AU | 8 | - | - | 16 | - | Dry during and upon completion of drilling |
| Brown clayey SILT (ML) with sand and small gravel - Till | 2 | | | | | | | |
| | 3 | 2-SS | 12 | 4.5+ | 2.5 | 16 | 115 | |
| | 4 | | | | | | | |
| | 5 | | | | | | | |
| Gray silty CLAY (CL) with sand and small gravel - Till | 6 | 3-SS | 9 | 4.5+ | 1.9 | 16 | 118 | |
| | 7 | | | | | | | |
| | 8 | 4-SS | 8 | 3.3 | 2.2 | 14 | 119 | |
| | 9 | | | | | | | |
| | 10 | | | | | | | |
| | 11 | 5-SS | 11 | - | - | 15 | - | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Realign Taxiway A – Phase 1; DNV-4742
 Location: Vermilion Regional Airport
 Danville, Illinois

Boring: B-9
 Project No. : 213048
 Date of Boring: June 3, 2021
 Field Representative: Josh Blazek

| VISUAL SOIL CLASSIFICATION | Feet | Sample No. | N | Q _p (tsf) | Q _u (tsf) | MC (%) | Dd (pcf) | Remarks |
|---|------|------------|----|----------------------|----------------------|--------|----------|--|
| Ground Surface Elevation: | | | | | | | | |
| 14" Black clayey SILT (OL) Topsoil | 1 | 1-AU | 7 | 2.5 | - | 25 | - | Dry during and upon completion of drilling |
| Brown and dark brown mixed silty CLAY (CL) - Fill | 2 | | | | | | | |
| Brown and gray clayey SILT (ML) with sand and small gravel - Till | 3 | 2-SS | 6 | 4.5+ | 3.3 | 19 | 105 | |
| | 4 | | | | | | | |
| | 5 | | | | | | | |
| | 6 | 3-SS | 10 | 4.5+ | 4.9 | 12 | 118 | |
| Brown silty CLAY (CL) with sand and small gravel - Till | 7 | | | | | | | |
| | 8 | | | | | | | |
| | 9 | 4-SS | 13 | 4.5+ | 3.3 | 17 | 112 | |
| | 10 | | | | | | | |
| 5-SS No Recovery - Spoon Drove on Rock | 11 | 5-SS | 27 | - | - | - | - | |
| END OF BORING @ 11.5 FEET | 12 | | | | | | | |
| | 13 | | | | | | | |

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.



Realign Taxiway A – Phase 1; DNV-4742
Vermilion Regional Airport
Danville, Illinois
MET Project No. 213048

Midwest Engineering and Testing, Inc.
501 Mercury Drive
Champaign, IL 61822
217-359-2128
Fax 217-359-8446
www.metgeotech.com

Table 1
Subgrade Dynamic Cone Penetrometer (DCP) Test Results

| DCP Number | Existing Surface Materials | DCP Blows 0" - 6" | DCP Blows 6" - 12" | DCP Blows 12" - 18" | Subgrade IBV Value 0" - 12" | Subgrade IBV Value 6" - 18" |
|-----------------------|-----------------------------------|----------------------------------|-----------------------------------|------------------------------------|--|--|
| B-1 | 15" Topsoil | 3 | 2 | 2 | 2.3 | 1.7 |
| B-2 | 18" Topsoil | 5 | 4 | 5 | 4.8 | 4.8 |
| B-3 | 15" Topsoil | 4 | 4 | 5 | 4.2 | 4.8 |
| B-4 | 14" Topsoil | 3 | 3 | 4 | 2.9 | 3.5 |
| B-5 | 7" Topsoil | 4 | 6 | 8 | 5.5 | 8.4 |
| B-6 | 2" Topsoil | 4 | 6 | 5 | 5.5 | 6.2 |
| B-7 | 6" Topsoil | 4 | 9 | 7 | 7.7 | 9.9 |
| B-8 | 4" Topsoil | 4 | 10 | 15 | 8.4 | 17.4 |
| B-9 | 14" Topsoil | 4 | 5 | 6 | 4.8 | 6.2 |

Note: DCP tests started at approximately below the topsoil

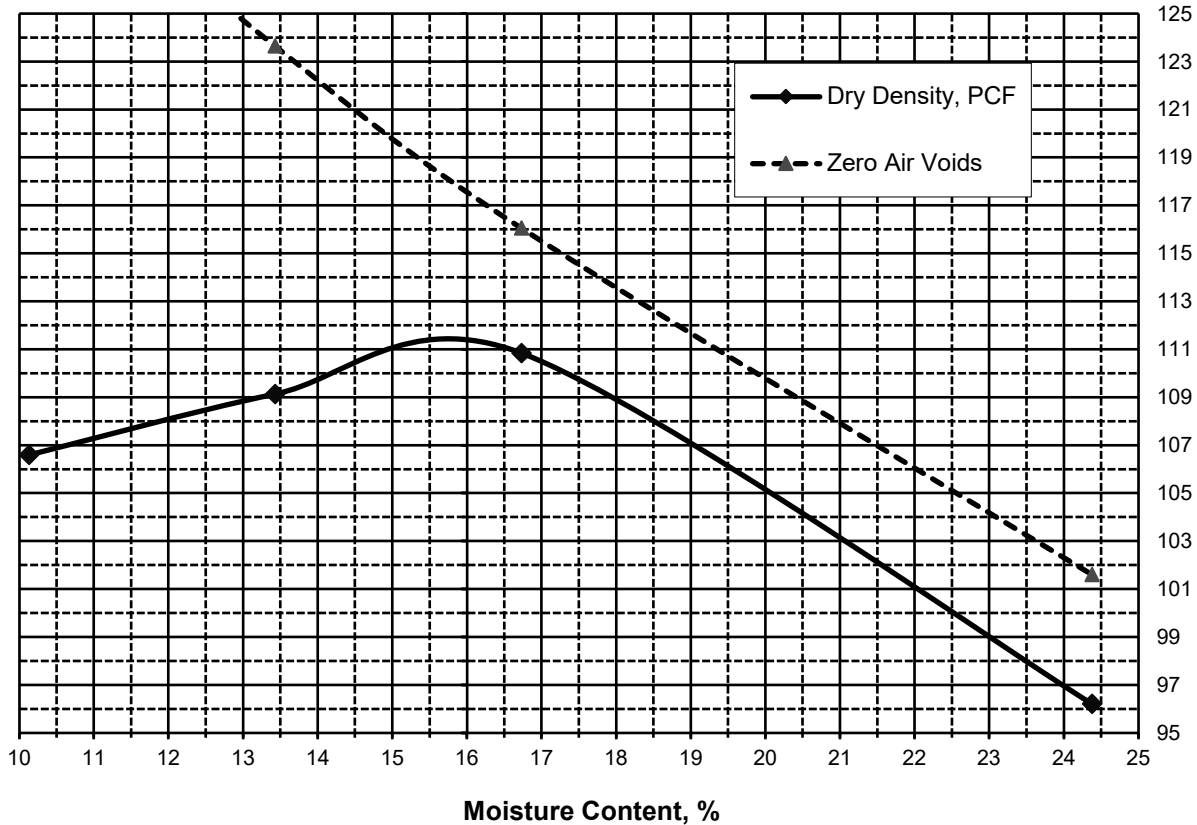
Report of Soil Grain Size Analysis (ASTM 422-D)

| | | | | | | | | | | | | | |
|----------------------|---------------------------------------|----------|------------------|-----------------|---------------------|--|-------|-----------------|-----------------|--------------------|------------------|--|--|
| Project Name: | Realign Taxiway A – Phase 1; DNV-4742 | | | | Client: | Crawford, Murphy & Tilly, Inc. | | | | Project No: | 213048 | | |
| | Vermilion Regional Airport | | | | | 2750 West Washington Street | | | | Date: | 06/10/21 | | |
| | Danville, Illinois | | | | | Springfield, Illinois 62702 | | | | | | | |
| | | | | | | | | | | | | | |
| Soil ID: | B-2 1-5' Auger Cuttings | | | | Description: | Brown, dark brown and gray silty CLAY (CL) with sand | | | | | | | |
| Original | Correction Factor | | Corrected | Diameter | Percent % | Sieve | | Ind. Wt. | Cum. Wt. | % Retained | % Passing | | |
| | + | - | | | | | | | | | | | |
| 45 | 0 | 5 | 40 | 0.056 | 78.1 | 1 | 25.4 | 0.0 | 0.0 | 0.00 | 100.0 | | |
| 44 | 0 | 5 | 39 | 0.043 | 76.1 | 3/4 | 19.05 | 0.0 | 0.0 | 0.00 | 100.0 | | |
| 40 | 0 | 5 | 35 | 0.031 | 68.3 | 1/2 | 12.7 | 0.0 | 0.0 | 0.00 | 100.0 | | |
| 36 | 0 | 5 | 31 | 0.02 | 60.5 | 3/8 | 9.525 | 0.0 | 0.0 | 0.00 | 100.0 | | |
| 33 | 0 | 5 | 28 | 0.012 | 54.7 | 4 | 5 | 2.3 | 2.3 | 0.92 | 99.1 | | |
| 30 | 0 | 5 | 25 | 0.009 | 48.8 | 10 | 2 | 3.7 | 6.0 | 2.40 | 97.6 | | |
| 27 | 0 | 5 | 22 | 0.006 | 42.9 | | | | | | | | |
| 26 | 0 | 5 | 21 | 0.005 | 41.0 | 20 | 0.8 | 1.0 | 1.0 | 2.0 | 95.6 | | |
| 24 | 0 | 5 | 19 | 0.005 | 37.1 | 40 | 0.4 | 1.3 | 2.3 | 4.6 | 93.1 | | |
| 22 | 0 | 5 | 17 | 0.003 | 33.2 | 100 | 0.15 | 3.7 | 6.0 | 12.0 | 85.9 | | |
| 17 | 0 | 5 | 12 | 0.001 | 23.4 | 200 | 0.072 | 1.5 | 7.5 | 15.0 | 83.0 | | |
| | | | | | | | | | | | | | |
| 25.4 | 100.0 | | | | | | | | | | | | |
| 19.05 | 100.0 | | | | | | | | | | | | |
| 12.7 | 100.0 | | | | | | | | | | | | |
| 9.525 | 100.0 | | | | | | | | | | | | |
| 5 | 99.1 | | | | | | | | | | | | |
| 2 | 97.6 | | | | | | | | | | | | |
| 0.8 | 95.6 | | | | | | | | | | | | |
| 0.4 | 93.1 | | | | | | | | | | | | |
| 0.15 | 85.9 | | | | | | | | | | | | |
| 0.072 | 83.0 | | | | | | | | | | | | |
| 0.056 | 78.1 | | | | | | | | | | | | |
| 0.043 | 76.1 | | | | | | | | | | | | |
| 0.031 | 68.3 | | | | | | | | | | | | |
| 0.02 | 60.5 | | | | | | | | | | | | |
| 0.012 | 54.7 | | | | | | | | | | | | |
| 0.009 | 48.8 | | | | | | | | | | | | |
| 0.006 | 42.9 | | | | | | | | | | | | |
| 0.005 | 41.0 | | | | | | | | | | | | |
| 0.005 | 37.1 | | | | | | | | | | | | |
| 0.003 | 33.2 | | | | | | | | | | | | |
| 0.001 | 23.4 | | | | | | | | | | | | |
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Report of Soil Grain Size Analysis (ASTM 422-D)

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|----------------------|--------------------------|----------|---------------------------------------|-----------------|------------------|--------------------------|-------------|-----------------|----------------------------------|-------------------|------------------|--------------------|------------|-------------|--------------|--|--|
| Project Name: | | | Realign Taxiway A – Phase 1; DNV-4742 | | | Client: | | | Crawford, Murphy & Tilly, Inc. | | | Project No: | | | 213048 | | |
| | | | Vermilion Regional Airport | | | | | | 2750 West Washington Street | | | Date: | | | 06/10/21 | | |
| | | | Danville, Illinois | | | | | | Springfield, Illinois 62702 | | | | | | | | |
| Soil ID: | | | B-9 1-5' Auger Cuttings | | | Description: | | | Brown clayey SILT (ML) with sand | | | | | | | | |
| Original | Correction Factor | | Corrected | Diameter | Percent % | Sieve | | Ind. Wt. | Cum. Wt. | % Retained | % Passing | | | | | | |
| | + | - | | | | 1 | 25.4 | | | | | 0.0 | 0.0 | 0.00 | 100.0 | | |
| 46 | 0 | 5 | 41 | 0.055 | 81.5 | 3/4 | 19.05 | 0.0 | 0.0 | 0.00 | 100.0 | | | | | | |
| 44 | 0 | 5 | 39 | 0.043 | 77.6 | 1/2 | 12.7 | 0.0 | 0.0 | 0.00 | 100.0 | | | | | | |
| 43 | 0 | 5 | 38 | 0.031 | 75.6 | 3/8 | 9.525 | 0.0 | 0.0 | 0.00 | 100.0 | | | | | | |
| 37 | 0 | 5 | 32 | 0.02 | 63.6 | 4 | 5 | 0.0 | 0.0 | 0.00 | 100.0 | | | | | | |
| 34 | 0 | 5 | 29 | 0.012 | 57.7 | 10 | 2 | 1.4 | 1.4 | 0.56 | 99.4 | | | | | | |
| 30 | 0 | 5 | 25 | 0.009 | 49.7 | | | | | | | | | | | | |
| 27 | 0 | 5 | 22 | 0.006 | 43.8 | 20 | 0.8 | 1.7 | 1.7 | 3.4 | 96.1 | | | | | | |
| 25 | 0 | 5 | 20 | 0.005 | 39.8 | 40 | 0.4 | 1.6 | 3.3 | 6.6 | 92.9 | | | | | | |
| 24 | 0 | 5 | 19 | 0.005 | 37.8 | 100 | 0.15 | 3.6 | 6.9 | 13.8 | 85.7 | | | | | | |
| 21 | 0 | 5 | 16 | 0.003 | 31.8 | 200 | 0.072 | 1.8 | 8.7 | 17.4 | 82.1 | | | | | | |
| 16 | 0 | 5 | 11 | 0.001 | 21.9 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 25.4 | 100.0 | | | | | | | | | | | | | | | | |
| 19.05 | 100.0 | | | | | | | | | | | | | | | | |
| 12.7 | 100.0 | | | | | | | | | | | | | | | | |
| 9.525 | 100.0 | | | | | | | | | | | | | | | | |
| 5 | 100.0 | | | | | | | | | | | | | | | | |
| 2 | 99.4 | | | | | | | | | | | | | | | | |
| 0.8 | 96.1 | | | | | | | | | | | | | | | | |
| 0.4 | 92.9 | | | | | | | | | | | | | | | | |
| 0.15 | 85.7 | | | | | | | | | | | | | | | | |
| 0.072 | 82.1 | | | | | | | | | | | | | | | | |
| 0.055 | 81.5 | | | | | | | | | | | | | | | | |
| 0.043 | 77.6 | | | | | | | | | | | | | | | | |
| 0.031 | 75.6 | | | | | | | | | | | | | | | | |
| 0.02 | 63.6 | | | | | | | | | | | | | | | | |
| 0.012 | 57.7 | | | | | | | | | | | | | | | | |
| 0.009 | 49.7 | | | | | | | | | | | | | | | | |
| 0.006 | 43.8 | | | | | | | | | | | | | | | | |
| 0.005 | 39.8 | | | | | | | | | | | | | | | | |
| 0.005 | 37.8 | | | | | | | | | | | | | | | | |
| 0.003 | 31.8 | | | | | | | | | | | | | | | | |
| 0.001 | 21.9 | | | | | | | | | | | | | | | | |
| | | | | | | Liquid Limit: | | 27% | | | | | | | | | |
| | | | | | | Plastic Limit: | | 17% | | | | | | | | | |
| | | | | | | Plasticity Index: | | 10% | | | | | | | | | |
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MOISTURE DENSITY RELATIONSHIP **ASTM D - 698**



SOIL I.D. NUMBER: 1

SAMPLE LOCATION: Sample was taken from B-2 from 1' to 5' below grade

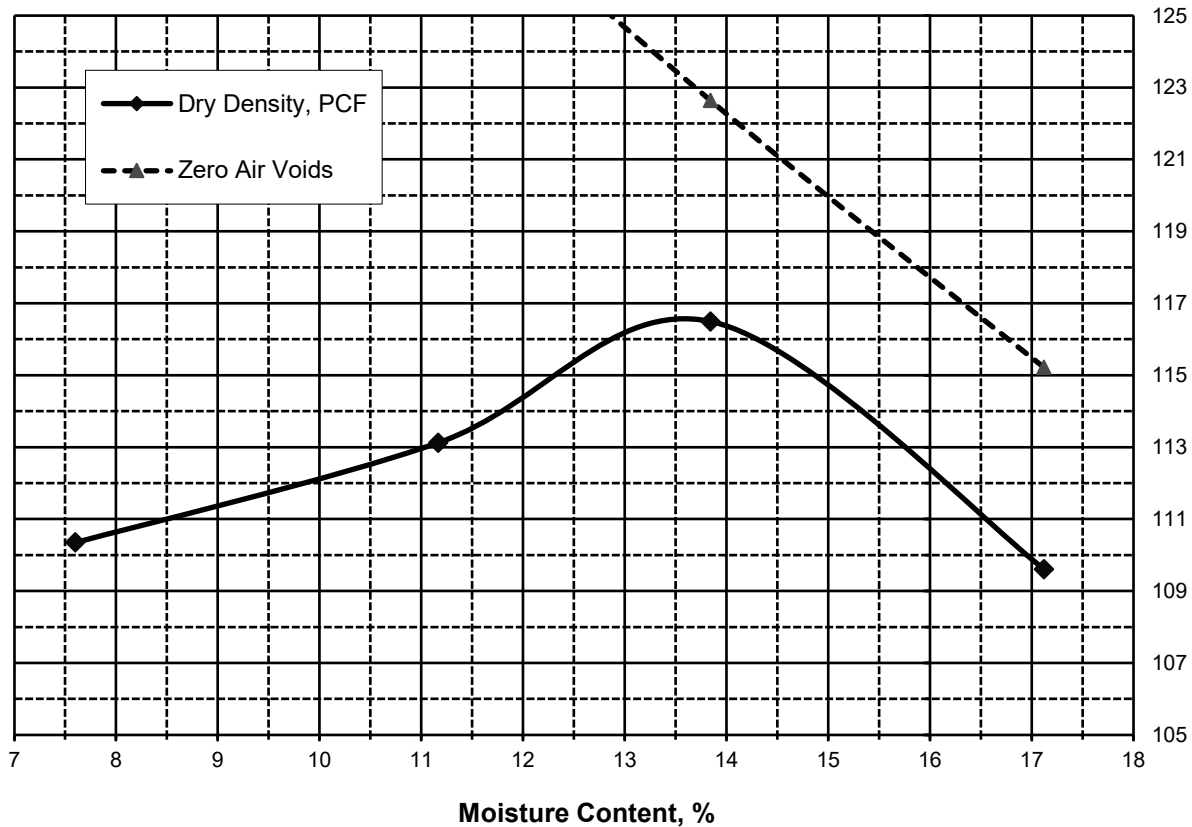
VISUAL CLASSIFICATION: Brown, dark brown and gray silty CLAY (CL) with sand

MAXIMUM DRY DENSITY, PCF: 110.8

OPTIMUM MOISTURE CONTENT, %: 15.7

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|---|--|
| <p>Client: Crawford, Murphy & Tilly, Inc. 2750 West Washington Street Springfield, Illinois 62702</p> <p>Date: June 7, 2021</p> | <p>Project: Realign Taxiway A – Phase 1; Vermilion Regional Airport Danville, Illinois</p> <p>Project Number: 213048</p> |
|---|--|

MOISTURE DENSITY RELATIONSHIP **ASTM D - 698**



SOIL I.D. NUMBER: 2

SAMPLE LOCATION: Sample was taken from B-7 from 1' to 5' below grade

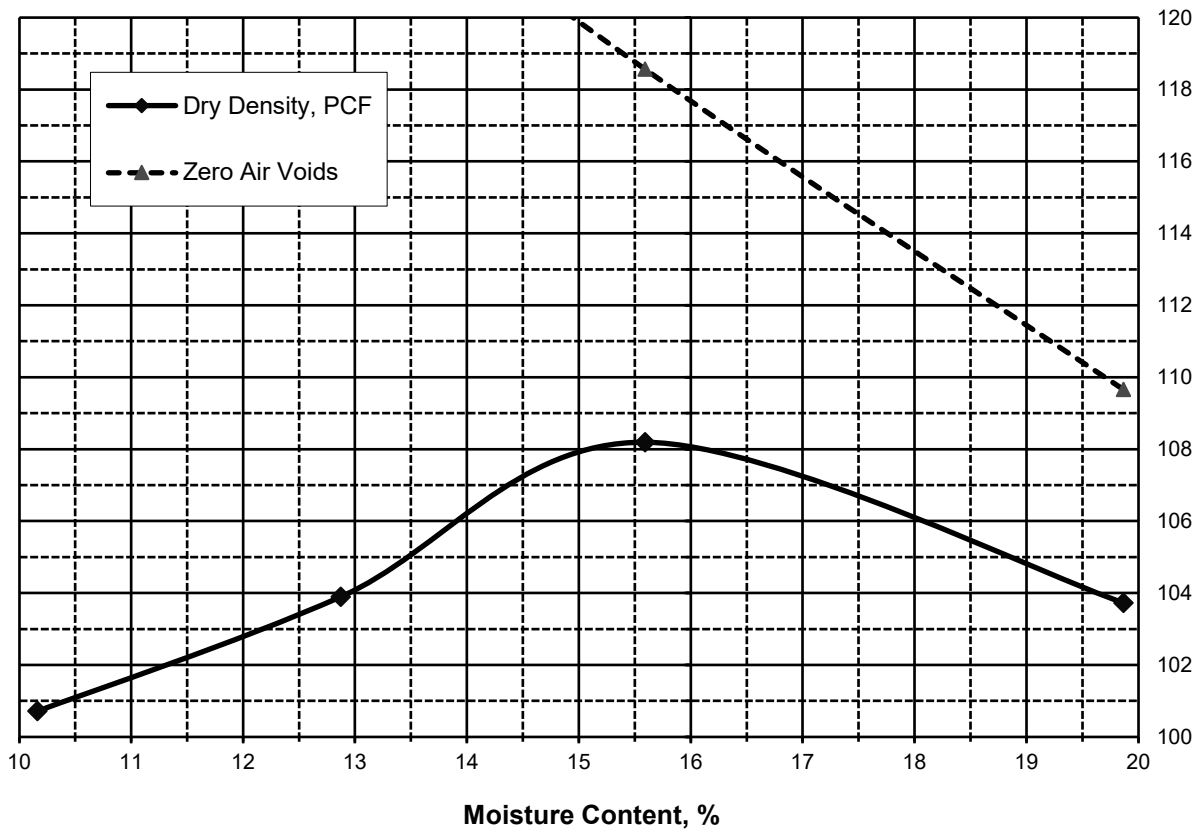
VISUAL CLASSIFICATION: Brown clayey SILT (ML) with sand

MAXIMUM DRY DENSITY, PCF: 116.5

OPTIMUM MOISTURE CONTENT, %: 13.6

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| <p>Client: Crawford, Murphy & Tilly, Inc. 2750 West Washington Street Springfield, Illinois 62702</p> <p>Date: June 8, 2021</p> | <p>Project: Realign Taxiway A – Phase 1; Vermilion Regional Airport Danville, Illinois</p> <p>Project Number: 213048</p> |
|---|--|

MOISTURE DENSITY RELATIONSHIP ASTM D - 698



SOIL I.D. NUMBER: 3

SAMPLE LOCATION: Sample was taken from B-9 from 1' to 5' below grade

VISUAL CLASSIFICATION: Brown and dark brown mixed silty CLAY (CL)

MAXIMUM DRY DENSITY, PCF: 108.2

OPTIMUM MOISTURE CONTENT, %: 15.5

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| <p>Client: Crawford, Murphy & Tilly, Inc. 2750 West Washington Street Springfield, Illinois 62702</p> <p>Date: June 8, 2021</p> | <p>Project: Realign Taxiway A – Phase 1; Vermilion Regional Airport Danville, Illinois</p> <p>Project Number: 213048</p> |
|---|--|

BOWSER-MORNER, INC.

Delivery Address: 4518 Taylorsville Road • Dayton, Ohio 45424 Mailing Address: P. O. Box 51 • Dayton, Ohio 45401

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LABORATORY REPORT

Report To: Midwest Engineering & Testing, Inc.
Attn: Nick Wendling
501 Mercury Drive
Champaign, IL 61822

Report Date: June 23, 2021
Job No.: 201226
Report No.: 432301
No. of Pages: 4

Report On: Laboratory Determination of California Bearing Ratio
Project: Vermillion Regional Airport
Sample ID: Three Soil Samples: B-2, B-7, B-9 – Sampled 6/3/2021

On June 9, 2021, three soil samples were submitted for laboratory determination of California bearing ratio for the above referenced project. Testing was performed as specified by the client and in accordance with ASTM D 1883, "CBR (California Bearing Ratio) of Laboratory Compacted Soils".

Client provided proctor data for remolding CBR test specimens. Results are summarized below and detailed on the attached data sheets.

| Test Parameter | B-2 (1'-5') | B-7 (1'-5') | B-9 (1'-5') |
|---------------------|-------------|-------------|-------------|
| CBR at 0.10 in., %: | 8.2 | 7.4 | 4.5 |
| CBR at 0.20 in., %: | 8.2 | 8.4 | 4.5 |

Should you have any questions, or if we may be of further service, please contact me at (937) 236-8805, extension 322.

Respectfully submitted,
BOWSER-MORNER, INC.

Karl A. Fletcher, Vice President
Assistant Director, CMT &
Geotechnical Laboratories

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GENERAL NOTES

SAMPLE IDENTIFICATION

Visual soil classifications are made in general accordance with the Unified Soil Classification System on the basis of textural and particle size categorization, and various soil behavior characteristics. Visual classifications should be substantiated by appropriate laboratory testing when a more exact soil identification is required to satisfy specific project applications criteria.

PARTICLE SIZE \pm

| | | |
|--------------------------|------------------------------|----------------------------|
| Boulders: 8 inches | Coarse Sand: 2 mm to 4 mm | Silt: 0.005 mm to 0.074 mm |
| Cobbles: 3 to 8 inches | Medium Sand: 0.42 mm to 2 mm | Clay: - 0.005 mm |
| Gravel: 5 mm to 3 inches | Fine Sand: 0.074 to 0.42 mm | |

DRILLING & SAMPLING SYMBOLS

SS: Split-spoon, 2" O.D. by 1 3/8" I.D.

ST: Shelby Tube, 2" O.D. or 3" O.D., as noted in test

AU: Auger Sample

DB: Diamond Bit

CB: Carbide Bit

RB: Roller Bit

WS: Wash Sample

BS: Bag Sample

HA: Hand Auger

SOIL PROPERTY SYMBOLS

N: Standard penetration count, indicating number of blows of a 140 lb. Hammer with a 30-inch drop, required to advance a split-spoon sampler one (1) foot.

Qu: Unconfined compressive strength, tons per square foot (tsf).

Qp: Calibrated hand penetrometer resistance, tsf.

MC: Moisture Content, %

LL: Liquid Limit PL: Plastic Limit PI: Plasticity Index

Dd: Dry density, pounds per cubic foot (pcf).

PID Photoionization Detector (Hnu meter) volatile vapor level, ppm

SOIL RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

| NON-COHESIVE SOILS | | COHESIVE SOILS | | |
|--------------------|---------------|----------------|----------------|---------------|
| Classifier | N-Value Range | Classifier | Qu Range (tsf) | N-Value Range |
| very loose | 0 – 3 | very soft | 0 – 0.25 | 0 – 2 |
| loose | 3 – 7 | soft | 0.25 – 0.5 | 2 – 5 |
| medium dense | 7 – 15 | medium stiff | 0.5 – 1.0 | 5 – 10 |
| dense | 15 – 38 | stiff | 1.0 – 2.0 | 10 – 14 |
| very dense | 38 + | very stiff | 2.0 – 4.0 | 14 – 32 |
| | | hard | 4.0 + | 32 + |

GROUNDWATER



Approximate Groundwater level at time noted on soil boring log, measured in open bore hole unless otherwise noted. Groundwater levels often vary with time, and are affected by soil permeability characteristics, weather conditions, and lateral drainage conditions.

IBV BASED REMEDIAL ACTION

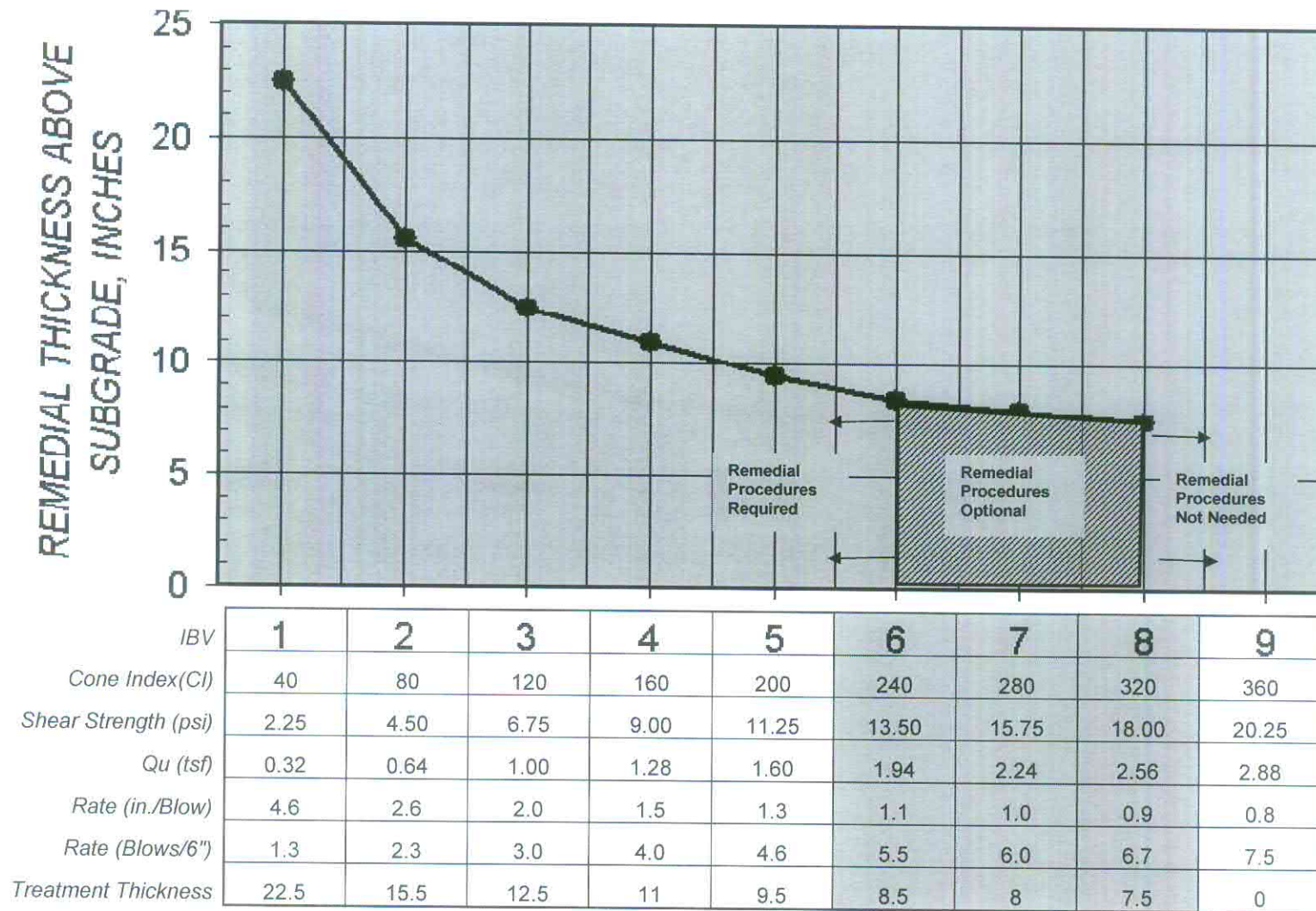


Figure A-2. Thickness design as a function of IBV, CI, Shear Strength, and Q_u for subgrade treatment (granular backfill or modified soil).

UNIFIED SOIL CLASSIFICATION

| MAJOR DIVISIONS | | | SYMBOL | TYPICAL DESCRIPTION |
|----------------------|------------------------------------|--------------------|--------|---|
| COARSE GRAINED SOILS | Gravel and Gravelly Soils | Clean Gravels | GW | Well-graded gravels and gravel-sand mixtures |
| | | | GP | Poorly-graded gravels and gravel-sand mixtures |
| | | Gravels with Fines | GM | Silty gravels and gravel-sand-silt mixtures |
| | | | GC | Clayey gravels and gravel-sand-clay mixtures |
| | Sand and Sandy Soils | Clean Sands | SW | Well-graded sands and gravelly sands |
| | | | SP | Poorly-graded sands and gravelly sands |
| | | Sands with Fines | SM | Silty sands and sand-silt mixtures |
| | | | SC | Clayey sands and sand-clay mixtures |
| FINE GRAINED SOILS | Silts and Clays of Low Plasticity | | ML | Inorganic silts or clayey silts of slight plasticity |
| | | | CL | Inorganic clays of low to medium plasticity |
| | | | OL | Organic silts and organic silty clays of low plasticity |
| | Silts and Clays of High Plasticity | | MH | Inorganic silts of high plasticity |
| | | | CH | Inorganic clays of medium to high plasticity |
| | | | OH | Organic clays of medium to high plasticity |
| Highly Organic Soils | | | PT | Peat, humus and swamp soils with high organic contents |

Note: Dual symbols are used to indicate borderline classifications.