# 14A

Letting April 25, 2025

## Notice to Bidders, Specifications and Proposal



Springfield, Illinois 62764

Contract No. QU025 Quad City International Airport Moline, Illinois Rock Island County Illinois Project No. MLI-5023 SBG Project No. N/A

# Illinois Department of Transportation

## **NOTICE TO BIDDERS**

- 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. QU025 Quad City International Airport Moline, Illinois Rock Island County Illinois Project No. MLI-5023 SBG Project No. N/A

Realign the General Aviation Entrance Road

For engineering information, please contact Morgan Mays, P.E. of HDR, Inc. at 319.423.6318.

## 3. INSTRUCTIONS TO BIDDERS.

- (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-23 of the Standard Specifications for Construction of Airports (Adopted March 22, 2023), become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
- (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded within 90 calendar days to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.
- 5. PRE-BID CONFERENCE. N/A
- **6. DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is <u>12.0</u>%.
- 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 <u>February 28, 2025</u>, and the Construction Plans dated <u>February 28, 2025</u> 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.

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 <u>Base Bid: 168 calendar days;</u> Additive Alternate #1: 7 additional calendar days; Additive Alternate #2: 0 additional calendar days; Additive Alternate #3: 7 additional calendar days.

- 10. INDEPENDENT WEIGHT CHECKS. The Department reserves the right to conduct random unannounced independent weight checks on any delivery for bituminous, aggregate or other pay item for which the method of measurement for payment is based on weight. The weight checks will be accomplished by selecting, at random, a loaded truck and obtaining a loaded and empty weight on an independent scale. In addition, the department may perform random weight checks by obtaining loaded and empty truck weights on portable scales operated by department personnel.
- **11. MATERIAL COST ADJUSTMENTS.** The Illinois Department of Transportation, Division of Aeronautics does not offer any material cost adjustment provisions.
- 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

## State of Illinois Department of Transportation

SPECIAL PROVISION FOR EEO

Effective: July 21, 1978 Revised: November 18, 1980

The requirements of the following provisions written for federally-assisted construction contracts, including all goals and timetables and affirmative action steps, shall also apply to all State-funded construction contracts awarded by the Illinois Department of Transportation.

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

- 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:

### APPENDIX A

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 contact or subcontract.

Area Covered (Statewide)

Goals for Women apply nationwide.

GOAL Goal (percent)

Female Utilization 6.9

## APPENDIX B

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.

| Economic Area   | Goal (percent) |
|---|----------------|
| 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:<br>SMSA Counties:   |      |
|-----|--|------|
|     | 1600 Chicago, IL -<br>IL - Cook, DuPage, Kane,<br>Lake, McHenry, Will              | 19.6 |
|     | 3740 Kankakee, IL - IL - Kankakee  | 9.1  |
|     | Non-SMSA Counties IL - Bureau, DeKalb, Grundy, Iroquois,                           | 18.4 |
|     | Kendall, LaSalle, Livingston, Putnam IN - Jasper, Laporte, Newton, Pulaski, Starke |      |
| 084 | Champaign - Urbana, IL:  |      |
|     | SMSA Counties:<br>1400 Champaign - Urbana - Rantoul, IL -                          | 7.8  |
|     | IL - Champaign<br>Non-SMSA Counties -  | 4.8  |
|     | IL - Coles, Cumberland, Douglas,<br>Edgar, Ford, Piatt, Vermilion                  |      |
| 085 | Springfield - Decatur, IL:<br>SMSA Counties:                                       |      |
|     | 2040 Decatur, IL -   | 7.6  |
|     | IL - Macon<br>7880 Springfield, IL -   | 4.5  |
|     | IL - Menard, Sangamon<br>Non-SMSA Counties   | 4.0  |
|     | IL - Cass, Christian, Dewitt, Logan,<br>Morgan, Moultrie, Scott, Shelby            |      |
| 086 | Quincy, IL:<br>Non-SMSA Counties   | 3.1  |
|     | IL - Adams, Brown, Pike MO - Lewis, Marion, Pike, Ralls                            | 0.1  |
| 087 | Peoria, IL:  |      |
|     | SMSA Counties:<br>1040 Bloomington - Normal, IL -                                  | 2.5  |
|     | IL - McLean<br>6120 Peoria, IL -   | 4.4  |
|     | IL - Peoria, Tazewell, Woodford<br>Non-SMSA Counties -                             | 3.3  |
|     | IL - Fulton, Knox, McDonough, Marshall,<br>Mason, Schuyler, Stark, Warren          | 3.3  |
| 088 | Rockford, IL:  |      |
|     | SMSA Counties:<br>6880 Rockford, IL -  | 6.3  |
|     | IL - Boone, Winnebago<br>Non-SMSA Counties -                                       | 4.6  |
|     | IL - Lee, Ogle, Stephenson   |      |
| 098 | Dubuque, IA:<br>Non-SMSA Counties -  | 0.5  |
|     | IL - JoDaviess<br>IA - Atlamakee, Clayton, Delaware,                               |      |
|     | Jackson, Winnesheik<br>WI - Crawford, Grant, Lafayette                             |      |
| 099 | Davenport, Rock Island, Moline, IA - IL:   |      |
|     | SMSA Counties:<br>1960 Davenport, Rock Island, Moline, IA - IL -                   | 4.6  |
|     | IL - Henry, Rock Island<br>IA - Scott  |      |
|     | Non-SMSA Counties -<br>IL - Carroll, Hancock, Henderson, Mercer, Whiteside         | 3.4  |
|     | IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine<br>MO - Clark               |      |

St. Louis, MO: SMSA Counties: 7040 St. Louis. MO - IL -14.7 IL - Clinton, Madison, Monroe, St. Clair MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City Non-SMSA Counties -11.4 IL - Alexander, Bond, Calhoun, Clav. 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 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 Executive Order 11246 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 provisions and specifications set forth in its federally assisted contracts, and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. 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 11246 and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The Illinois Department of Transportation will provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten working days of award of any construction contract and/or subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. This notification will list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- 4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the entire State of Illinois for the goal set forth in APPENDIX A and the county or counties in which the work is located for the goals set forth in APPENDIX B.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:

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- (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, United States 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:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) 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
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000. the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors 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 p 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 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 toward 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 on-site 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 as 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 Contractors 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 agreements; 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 Foreman, 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 of other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
  - (j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
  - (k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
  - (I) 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 supervisors' 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 p). 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 p 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 specified minority group of women is underutilized).
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone 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 his 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).

## State of Illinois Department of Transportation

## SPECIAL PROVISION FOR SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES NONFEDERAL-AID CONTRACTS

Effective: March 20, 1969 Revised: January 1, 1994

### 1. General

- a. The requirements set forth herein shall constitute the specific affirmative action requirements under this contract and supplement the non- discrimination requirements contained elsewhere in this proposal.
- b. The Contractor shall work with the Illinois Department of Transportation (IDOT) in carrying out Equal Employment Opportunity (EEO) obligations and in reviews of activities under the contract.
- c. The Contractor, and all subcontractors holding subcontracts (not including material suppliers) of \$10,000 or more, shall comply with the following minimum specific requirement activities of EEO. The Contractor shall include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

### 2. Equal Employment Opportunity Policy

The Contractor shall accept as operating policy the following statement which is designed to further the provision of EEO to all persons, and to promote the full realization of equal employment opportunity through a positive continuing program: "It is the policy of this Company to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age, or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

### 3. Equal Employment Opportunity Officer

The Contractor shall designate and make known to IDOT contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active Contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

## Dissemination of Policy

- a. All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the Contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
  - (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the Contractor's EEO obligations within thirty days following their reporting for duty with the Contractor.
  - (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the Contractor's procedures for locating and hiring minority and female employees.
- b. In order to make the Contractor's EEO policy known to all employees, prospective employees, and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the Contractor shall take the following actions:
  - (1) Notices and posters setting forth the Contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
  - (2) The Contractor's EEO policy and the procedures to implement such policy shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

### 5. Recruitment

- a. When advertising for employees, the Contractor shall include in all advertisements for employees the notation: "An Equal Opportunity Employer". All such advertisements shall be published in newspapers, or other publications, having a large circulation among minority groups in the area from which the project work force would normally be derived.
- b. The Contractor shall, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority and female applicants, including, but not limited to, State employment

agencies, schools, colleges and minority and female organizations. To meet this requirement, the Contractor shall, identify sources of potential minority and female employees, and establish with such identified sources procedures whereby minority and female applicants may be referred to the Contractor for employment consideration. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he/she is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with EEO contract provisions.

c. The Contractor shall encourage present employees to refer minority and female applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority and female applicants shall be discussed with employees.

#### 6. Personnel Actions

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, will be taken without regard to race, color, religion, sex, national origin, age, or disability. The following procedures shall be followed:

- a. The Contractor shall conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The Contractor shall periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The Contractor shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The Contractor shall promptly investigate all complaints of alleged discrimination made to the Contractor in connection with the obligations under this contract, shall attempt to resolve such complaints, and shall take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor shall inform every complainant of all of the avenues of appeal.

## 7. Training and Promotion

- The Contractor shall assist in locating, qualifying and increasing the skills of minority and female employees and applicants for employment.
- b. Consistent with the Contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance.
- c. The Contractor shall advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The Contractor shall periodically review the training and promotion potential of minority and female employees and shall encourage eligible employees to apply for such training and promotion.

### 8. Unions

If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor shall use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minorities and females within the unions, and to effect referrals by such unions of minority and female employees. Actions by the Contractor, either directly or through a Contractor's association acting as agent, shall include the procedures set forth below:

- a. The Contractor shall use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority and female employees for membership in the unions and increasing the skills of minority and female and employees so that they may qualify for higher paying employment.
- b. The Contractor shall use best efforts to incorporate an EEO clause into each union agreement to the end that such union shall be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age, or disability.
- c. The Contractor is to obtain information as to the referral practices and policies of the labor union, except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to IDOT and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the Contractor with a reasonable flow of minority and female referrals within the time limit set forth in the collective bargaining agreement, the Contractor shall, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and females. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minorities or female employees). In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to these Special Provisions, such Contractor shall immediately notify IDOT.

## 9. Selection of Subcontractors, Procurement of Materials, and Leasing of Equipment

The Contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

- a. The Contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR Part 23, shall have equal opportunity to compete for and perform subcontracts which the Contractor enters into pursuant to this contract. The Contractor shall use best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority and female representation among their employees. Contractors shall obtain lists of DBE construction firms from IDOT personnel.
- c. The Contractor shall use his/her best efforts to ensure subcontractor compliance with their EEO obligations.

### 10. Records and Reports

The Contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of IDOT.

- a. The records kept by the Contractor shall document the following:
  - (1) the number of minorities, non-minorities and females employed in each work classification on the project;
  - (2) the progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and females;
  - (3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
  - (4) the progress and efforts being made in securing the services of DBE subcontractors, or subcontractors with meaningful minority and female representation among their employees.
- b. The Contractor shall submit to IDOT a monthly report every month for the duration of the project, indicating the number of minority, non-minority and female employees currently engaged in each work classification required by contract work and the number of hours worked. This information is to be reported on Form SBE-956. If on-the-job training is being required by special provision, the Contractor will be required to collect and report training data.

## State of Illinois Department of Transportation

## SPECIAL PROVISION FOR REQUIRED PROVISIONS – STATE CONTRACTS

Effective: April 1 1965 Revised: January 1, 2017

### I. SELECTION OF LABOR

The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

## EMPLOYMENT OF ILLINOIS WORKERS DURING PERIODS OF EXCESSIVE UNEMPLOYMENT

Whenever there is a period of excessive unemployment in Illinois, which is defined herein as any month immediately following two consecutive calendar months during which the level of unemployment in the State of Illinois has exceeded five percent as measured by the United States Bureau of Labor Statistics in its monthly publication of employment and unemployment figures, the Contractor shall employ at least 90 percent Illinois laborers. "Illinois laborer" means any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.

Other laborers may be used when Illinois laborers as defined herein are not available, or are incapable of performing the particular type of work involved, if so certified by the Contractor and approved by the Engineer. The Contractor may place no more than three of his/her regularly employed non-resident executive and technical experts, who do not qualify as Illinois laborers, to do work encompassed by this Contract during period of excessive unemployment.

This provision applies to all labor, whether skilled, semi-skilled, or unskilled, whether manual or non-manual.

#### II. 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.

#### III. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The Contractor shall perform with his/her own organization contract work amounting to not less than 51 percent of the original total contract price, except that any items designated by the State as "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with his/her own organization.
  - a. "His/her own organization" shall be construed to include only worker employed and paid directly by the Contractor and equipment owned or rented by him/her, with or without operators.
  - b. "Specialty Items" shall be construed to be limited to work that requires specialized knowledge, craftsmanship or equipment not ordinarily available in contracting organizations qualified to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. In addition to the 51 percent requirement set forth in paragraph 1 above, the Contractor shall furnish (a) a competent superintendent or foreman who is employed by him/her, who has full authority to direct performance of the work in accordance with the contract requirements, and who is in charge of all construction operations (regardless of who performs the work), and (b) such other of his/her own organizational capability and responsibility (supervision, management, and engineering services) as the State highway department contracting officer determines is necessary to assure the performance of the contract.
- 3. The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of the contract or contracts or any portion thereof, or of his/her right, title or interest therein, without written consent of the Engineer. In case such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with the Contractor's own organization, work amounting to not less than 51 percent of the total contract cost, except that any items designated in the contract as "specialty items" may be performed by subcontract and the cost of any such specialty items so performed by subcontract may be deducted from the total cost before computing the amount of work required to be performed by the Contractor with his/her own organization. Materials purchased or produced by the Contractor must be incorporated into the project by the Contractor's own organization if their cost is to be applied to the 50 percent requirement.

No subcontracts, or transfer of contract, shall in any case release the Contractor of his/her liability under the contract and bonds. All transactions of the Engineer shall be with the Contractor. The Contractor shall have representative on the job at all times when either contract or subcontract work is being performed.

All requests to subcontract shall contain a certification that the subcontract agreement exists in writing and physically contains the required Federal and State Equal Employment Opportunity provisions and Labor compliance provisions, including the contract minimum wage requirements. The Contractor shall permit Department or Federal representatives to examine the subcontract agreements upon notice.

- 4. Any items that have been selected as "Specialty Items" for the contract are listed as such in the Special Provisions, bid schedule, or elsewhere in the contract documents.
- 5. No portion of the contract shall be sublet, assigned or otherwise disposed of, except with the written consent of the State highway department contracting officer, or his/her authorized representative, and such consent when given shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract. Request for permission to sublet, assign or otherwise dispose of any portion of the contract shall be in writing and accompanied by (a) a showing that the organization which will perform the work is particularly experienced and equipped for such work, and (b) an assurance by the Contractor that the labor standards provisions set forth in this contract shall apply to labor performed on all work encompassed by the request.

### IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions. Current wage rate information shall be obtained by visiting the Department of Labor website at <a href="http://www.illinois.gov/idol/Pages/default.aspx">http://www.illinois.gov/idol/Pages/default.aspx</a>. It is the responsibility of the Contractor to review the rates applicable to the work of this contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the Contractor by means of the Department of Labor website satisfies the notification of revisions by the Department to the Contractor pursuant to the Act, and the Contractor agrees that no additional notice is required.
- 2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of three years from the later of the date of final payment under the contract or completion of the contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon seven business days' notice, these records shall be available at a location within the State, during reasonable hours, for inspection by the Department or the Department of Labor; and Federal, State, or local law enforcement agencies and prosecutors.

## 3. SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021 Revised: November 2, 2023

Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <a href="https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx">https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx</a>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's

social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <a href="https://lcptracker.com/">https://lcptracker.com/</a>. 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."

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.

## V. NONSEGREGATED FACILITIES

(Applicable to State Financed Construction Contracts and related subcontracts exceeding \$10,000 which are not exempt from the Equal Opportunity clause).

By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement, as appropriate, the bidder, construction Contractor, subcontractor, or material supplier, as appropriate, certifies that (s)he does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that (s)he does not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. (S)He certifies further that (s)he will not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that (s)he will not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. (S)He agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, 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 which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. (S)He agrees that (except where he/she has obtained identical certifications from proposed subcontractors and material suppliers for specific time periods), he/she will obtain identical certifications from proposed subcontractors or material suppliers prior to the award of subcontracts or the consummation of material supply agreements, exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that (s)he will retain such certifications in his/her files.

## 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 Con  | tract Amount     | Daily Cha    | arges    |
| 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    |
| ·<br>   |                  |              |          |

## 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.

Contract No. QU025 Quad City International Airport Moline, Illinois Rock Island County Illinois Project No. MLI-5023 SBG Project No. N/A

### STATE OF ILLINOIS

### **SPECIAL PROVISIONS**

The following Special Provisions supplement the Standard Specifications for Construction of Airports (Adopted March 22, 2023) and the Special Provisions included herein which apply to and govern the airport improvement of: Realign the General Aviation Entrance Road at Quad City International, Contract QU025, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### 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: 168 calendar days; Additive Alternate #1: 7 additional calendar days; Additive Alternate #2: 0 additional calendar days; Additive Alternate #3: 7 additional calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

#### CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009 Revised: January 2, 2012

<u>Diesel Vehicle Emissions Control</u>. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall certify that only ULSD will be used in all jobsite equipment. The certification shall be presented to the Department prior to the commencement of the work.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls 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. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

#### CONSTRUCTION AIR QUALITY - IDLING RESTRICTION (BDE)

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas

or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

#### SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

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. <u>CONTRACTOR ASSURANCE</u>. 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 12.0% 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. <u>IDENTIFICATION OF CERTIFIED DBE</u>. 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. <u>BIDDING PROCEDURES</u>. 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. <u>UTILZATION PLAN EVALUATION</u>. 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

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 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 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 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 <u>each</u> 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).

## 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, 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".

## REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES

The Prevailing rates of wages are included in this Contract proposal. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and this Proposal, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <a href="https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx">https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx</a> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.





## Quad Cities International Airport

MLI-5023 | Realign the General Aviation Road Rock Island County, IL | Feb 28th 2025

## **Special Provisions**

Letting Date: April 25th, 2025 | Letting Item No. 14A

Contract No. QU025

HDR Project No. 10404260



Morgan A. Mays

4620 E. 53rd Street, Suite 200 Davenport, IA 52807 D 319.423.6318 M 319.400.2718 Morgan.Mays@hdrinc.com

## **Special Provisions** Quad Cities International Airport Rock Island County, IL



## **GENERAL**

These Special Provisions, together with applicable Standard Specifications, Rules and Regulations, Contract Requirements for Airport Improvement Projects, Payroll Requirements and Minimum Wage Rates which are hereto attached or which by reference are herein incorporated, cover the requirements of the State of Illinois, Department of Transportation, Division of Aeronautics for the construction of the subject project at the Quad Cities International Airport, Rock Island County, Illinois.

## **GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS**

The "Illinois Standard Specifications for Construction of Airports" dated March 22, 2023, State of Illinois Department of Transportation, Division of Aeronautics shall govern the project except as otherwise noted in these Special Provisions. In cases of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern. When noted within the Special Provisions, the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction", Adopted January 1, 2022, shall also apply.

Specifications may be obtained at

https://idot.illinois.gov/doing-business/procurements/engineering-architectural-professionalservices/consultant-resources/standard-specifications.html

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## Special Provisions Quad Cities International Airport Rock Island County, IL



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## PART 1 – GENERAL CONTRACT PROVISIONS

## Section 40 – Scope of Work

## **40-05 MAINTENANCE OF TRAFFIC**

### ADD:

The Contractor shall be responsible for cleaning and maintaining all haul roads and use a pick-up type of sweeper on all pavements and adjacent roadways utilized in hauling operations when material is tracked onto said pavement. If the Contractor fails to comply with the Standard Specifications, Contract Plans or these Special Provisions concerning traffic control, the Resident Engineer shall execute such work as may be deemed necessary to correct deficiencies and the cost thereof shall be deducted from compensation due, or which may become due the Contractor under the contract. The Contractor shall be responsible for supplying, maintaining and moving all barricades required for construction. The cost thereof shall not be paid for separately but shall be considered incidental to the contract unit prices.

The Contractor shall not be entitled to any extra compensation due to delays or inconveniences caused by said necessary methods, procedures, and measures to protect air traffic.

The Contractor shall not have access to any part of the active airfield (runway, taxiway or apron) for all equipment or personnel without the approval of the Airport Manager or the Airport Manager's authorized representative coordinated through the Resident Engineer.

## 40-09 SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)

### ADD:

## Limitations on Construction

- 1. Open flame welding or torch cutting operations shall be prohibited, unless adequate fire and safety precautions are provided.
- Open trenches, excavations and stockpiled material near any pavements shall be prominently marked with red flags and lighted by light units during hours of restricted visibility and/or darkness.
- 3. Stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions.
- 4. The use of explosives shall be prohibited.
- 5. Burning shall not be allowed.

## Special Provisions Quad Cities International Airport Rock Island County, IL



## Section 50 – Control of Work

## 50-06 CONSTRUCTION LAYOUT AND STAKES

ADD:

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.

Construction layout shall not be paid for separately but shall be considered incidental to the pay item for which the layout is required.

## **50-14 FINAL ACCEPTANCE**

ADD:

All work on the punch list shall be considered part of the contract and shall be considered incidental to the completion of the contract. 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 and Owner.



## Section 60 - Control of Materials

## 60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

ADD: After the last paragraph

The Contractor shall certify all materials contained in the contract. Certification documentation shall be submitted to the Engineer. It shall be the sole responsibility of the Contractor to ensure the delivery of adequate and accurate documentation prior to the delivery of the materials.

If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 50-16, 60-01, 60-03 and 60-11 of the Standard Specifications and Special Provisions, the pay item shall not be included on the Construction Progress Payment report until such submittals have been furnished.

## 60-03 CERTIFICATION OF COMPLIANCE

ADD:

Additional requirements are specified in Section 60-11 Certification of Materials.

## 60-11 CERTIFICATION OF MATERIALS

ADD:

The Contractor shall certify all materials incorporated into the contract. Certification documentation shall be submitted to the Resident Engineer. It shall be the sole responsibility of the Contractor to ensure the submittal of adequate and accurate documentation in order to satisfy the contract material certification requirements prior to the delivery of the materials. Materials without certification or those with certification that demonstrates the materials do not meet the requirements of the plans and specifications shall be considered nonconforming and subject to the provisions of Section 50-02.

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 dated April 1, 2010, or latest edition including any addendums. Copies of this manual are available by contacting The Division of Aeronautics – Construction Section at (217) 785-8500 or from their website at <a href="https://idot.illinois.gov/doing-business/procurements/construction-services/contractor-resources/aeronautics/construction-and-materials.html">https://idot.illinois.gov/doing-business/procurements/construction-services/contractor-resources/aeronautics/construction-and-materials.html</a>.

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.



## Section 70 - Legal Relations and Responsibility to Public

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

ADD:

Special care shall be taken on all operations, and particularly near FAA cables, to avoid damage to all underground utilities within the project limits. The approximate location of existing underground utilities is shown on drawings. Any utility lines that are broken and require replacement because of the Contractor's operations will be replaced by the contractor at his own expense. 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.

It shall be the Contractor's responsibility to locate and protect all airport-owned utilities within the construction limits. This includes all electrical cables, telecommunication cables, fiber optic cables, natural gas pipes, storm sewer, drain tile, sanitary sewer and water main.

Special attention is necessary when working near FAA cables. Any FAA utility that is damaged or cut during construction shall be repaired immediately. FAA requires that any damaged cable be replaced in its entirety, from control source to the service. Splices of any kind will not be permitted. Exposures of any FAA cables must be done by hand digging or hydro-excavation. No additional compensation will be made for locating, replacement or repair of FAA facilities or cables but, shall be incidental to the contract.

When FAA cables are required to be located, or the contractor is planning on working on or around FAA cables, conduits or equipment, a 10-working day advanced notice shall be given to the FAA before any such markings are required. Once FAA marks the cables, the contractor will be required to survey the FAA utilities so they can be replaced during construction without remarking by the FAA. This shall be incidental to the contract. The FAA personnel are only available from 9 am to 3 pm, Monday through Friday with advanced notice.



## PART 2 – GENERAL CONSTRUCTION ITEMS

## Item 102 - Temporary Air and Water Pollution, Soil Erosion, and Siltation Control

## **102-2.8** Add the following to this section:

The rolled excelsior shall consist of a polypropylene multi-filament woven netting sealed with metal clips or knotted at the ends. The filler material shall be 70% bark-free hardwood mulch ground at 1.5" and 30% bark-free hardwood mulch ground fine. The density shall be a minimum of 3.3 pounds per cubic foot based on a moisture content of 18% at manufacturing. The netting material shall retain 89% of its strength after 500 hours of exposure to sunlight. The maximum opening in the netting shall not exceed 1x1 mm in a tubular knit design.

## **102-3.7** Add the following to the end of section a.(1):

The rolled excelsior logs shall be installed according to the manufacturer's specifications. Logs shall be staked into the ground as required to prevent the migration of sediments or the washing away of the excelsior log.

## **102-3.9** Add the following to this section:

The Contractor shall inspect all rolled excelsior logs immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall immediately correct any deficiencies.

The Contractor shall also make a daily review of the location of rolled excelsior logs in areas where construction activities have altered the natural contour and drainage runoff to ensure that the rolled excelsior logs are properly located for effectiveness. Where deficiencies exist as determined by the Engineer, additional rolled excelsior logs shall be installed as directed by the Engineer.

Damaged or otherwise ineffective rolled excelsior logs, as determined by the Resident Engineer, shall be repaired or replaced promptly.

Sediment deposits shall either be removed when the deposit reaches half the height of the rolled excelsior log or a second rolled excelsior log shall be installed as directed by the Engineer.

During the construction operation when any loose material is deposited in the flow line of ditches, gutters or drainage structures so the natural flow of water is obstructed, the material shall be removed at the close of each working day.



## **102-3.10** Add the following to this section:

The rolled excelsior log shall remain in place until the Engineer directs it to be removed. After the rolled excelsior log removal, the Contractor shall remove and dispose of any excess sediment accumulations, dress the area to give it a pleasing appearance, and cover with vegetation all bare areas according to the contract requirements.

The removed rolled excelsior logs may be used at other locations provided the netting and other material requirements continue to be met to the satisfaction of the Engineer.

At the conclusion of the construction operations all drainage structures shall be free from all dirt and debris. This work will not be paid for separately but shall be considered included in the unit cost per foot of DITCH CHECK, ROLLED EXCELSIOR.

## **BASIS OF PAYMENT**

**102-5.1** Add the following to this section:

Payment will be made under:

Item AR156510 - SILT FENCE - PER FOOT

Item AR156514 - DITCH CHECK (ROLLED EXCELSIOR) - PER FOOT

Item AR156520 - INLET PROTECTION - PER EACH

Item AR156530 - TEMPORARY SEEDING - PER ACRE



## Item 156531 – Erosion Control Blanket DESCRIPTION

**156531-1.1** This item shall consist of furnishing, transporting, and placing erosion control blanket as indicated on the Construction Plans.

## **MATERIALS**

**156531-2.1** Materials shall meet the requirements of the following Articles of Division 1000 - Materials, Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, January 1, 2022.

| <u>Item</u>       | <u>Article</u> |
|-------------------|----------------|
| Knitted Straw Mat | 1081.10(b)     |
| Wire Staples      | 1081.10(d)     |

## **CONSTRUCTION REQUIREMENTS**

**156531-3.1** The blanket shall be placed within 24 hours after seeding operations have been completed on the areas specified. Prior to placing the blanket, the areas to be covered shall be relatively free of all rocks or clods over 1½ in. in diameter, and all sticks or other foreign material which will prevent the close contact of the blanket with the seed bed. If, as a result of rain, the prepared seed bed becomes crusted or eroded, or if eroded places, ruts, or depressions exist for any reason, the Contractor will be required to rework the soil until it is smooth and to reseed such areas which are reworked. After the area has been properly shaped, fertilized, and seeded, the blanket shall be laid out flat, evenly, and smoothly without stretching the material.

Placing and anchoring the blankets in ditches and on slopes shall be as follows: The blankets shall be stapled in-place, using four staples across the end at the start of each roll and placing staples on 6-ft centers along each side. All end seams shall overlap at least 2 in.

## METHOD OF MEASUREMENT

**156531-4.1** The area of Erosion Control Blanket to be paid for shall be the number of square yards of blanket measured in-place, satisfactorily installed and maintained throughout the duration of the project and the design lifespan of the blanket product.

## **BASIS OF PAYMENT**

**156531-5.1** Payment will be made at the contract unit price per square yard of Erosion Control Blanket. This price shall be full compensation for furnishing all materials, for all preparation and installation of these materials, including placement, staples, and maintenance, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Item AR156531 EROSION CONTROL BLANKET - PER SQUARE YARD

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## **END OF ITEM 156531**

Item 105 - Mobilization BASIS OF PAYMENT

**105-3.1** Add the following to this section:

Payment will be made under:

Item AR150520 - MOBILIZATION - PER LUMP SUM



## PART 3 – SITEWORK

## Item 151 - Clearing and Grubbing

**150-3.1** Revise this section to read as follows:

No measurement shall be made for clearing and grubbing.

**150-4.1** Revise the first paragraph to read as follows:

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

Payment will be made under:

Item AR151455 Clearing and Grubbing – per lump sum.



## Item 151420 - Clearing Trees 0-2.5' Butt Dia. DESCRIPTION

**151420-1.1** These items of work shall consist of removing trees of varying butt diameters. The work to remove the respective stumps is covered under Items AR151429, respectively.

## **CONSTRUCTION REQUIREMENTS**

151420-2.1 The Contractor shall remove the entire tree as identified in the Plans. The tree will be removed to the surface of the ground adjacent to the base of the tree, or to an elevation commensurate with that which will allow the stump to be ground using standard stump grinding equipment to an elevation no less than 12-in. below the nearest adjacent grade (specified elsewhere). The tree shall be removed by cutting only using standard, commercially available saws. No equipment shall be used to push, pull, or separate the tree from its current location. Saws may be hand-held or equipment mounted. Trees shall be removed in segments, at the discretion of the Contractor, which will prevent damage from occurring to any existing improvements on the property. All protections necessary to prevent damage from falling debris shall be the responsibility of the Contractor and coordinated with the respective homeowner prior to application, as needed. Protective devices may include, but are not limited to: plywood or oriented strand board (OSB) sheeting, tarps, metallic panels, etc., all of which are the sole responsibility of the Contractor to provide and remove when no longer necessary. All measures shall be removed at the end of each work day and the environment restored for safe homeowner use.

The trees shall be marked on each site by Resident Engineer (RE).

All debris that is generated by entire removal process shall be collected and disposed of by the Contractor off site in a legal manner. No burning of the debris or remaining material will be allowed.

## **METHOD OF MEASUREMENT**

**151420-3.1** The quantity of tree clearing to be paid for shall be the number of trees cleared as specified and accepted by the RE, for the respective Item.

## **BASIS OF PAYMENT**

**151420-4.1** Payment will be made at the contract unit bid price for Clearing Trees. This price shall be full compensation for removal of the tree and all collection and disposal of all debris generated by the removal process, and for all protective measures necessary, in accordance with this special provision and the specifications incorporated by reference.

Payment will be made under:

Item AR151420 - CLEARING TREES 0-2.5' BUTT DIA - PER EACH



# Item 151429 - Stump Removal 0.0-2.5' Dia. DESCRIPTION

**151429-1.1** These items of work shall consist of removing the stumps that remain after the removal of the specified trees by means of grinding. The trees are of varying butt diameters. The work to remove the respective trees is covered under Items AR151420.

#### **CONSTRUCTION METHODS**

**151429-2.1** Following the removal of the specified tree (specified elsewhere) the Contractor shall remove the remaining tree stump by means of mechanical grinding, using standard, and commercially available equipment. The stump shall require removal to an elevation no less than 12-in. below the nearest adjacent grade. No equipment shall be used to push, pull, excavate, burn, or in any way chemically remove the tree stump from its current location.

All protections necessary to prevent damage from flying debris shall be the responsibility of the Contractor and coordinated with the respective homeowner prior to application, as needed. Protective devices may include, but are not limited to: plywood or oriented strand board (OSB) sheeting, tarps, metallic panels, etc., all of which are the sole responsibility of the Contractor to provide and remove when no longer necessary. All measures shall be removed at the end of each work day and the environment restored for safe homeowner use.

The stumps shall be identified on each site by the Resident Engineer (RE).

All debris that is generated by entire removal process shall be collected and disposed of by the Contractor off site in a legal manner. No burning of the debris or remaining material will be allowed.

### **METHOD OF MEASUREMENT**

**151429-3.1** The quantity of stump removal to be paid for shall be the number of stumps removed as specified and accepted by the RE, for the respective Item.

#### **BASIS OF PAYMENT**

**151429-4.1** Payment will be made at the contract unit bid price for Stump Removal. This price shall be full compensation for removal of the stump and all collection and disposal of all debris generated by the removal process, and for all protective measures necessary, in accordance with this special provision and the specifications incorporated by reference.

Payment will be made under:

Item AR151429 STUMP REMOVAL 0.0-2.5' FT. DIA - PER EACH

#### **END OF ITEM AR151429**

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## Item 152 – Excavation, Subgrade, and Embankment BASIS OF PAYMENT

**152-3.6** Modify the second sentence of the first paragraph to read:

"The cleared surface shall be broken up by plowing or scarifying to a minimum depth of twelve (12) inches."

## **152-4.1b** Add the following to this section:

The fill volume quantity provided is calculated from a varying depth below existing ground elevation to the proposed ground elevation. This is to account for the fill volume between existing & proposed ground as well as additional fill required as a result of removing existing topsoil prior to any fill.

The cut volume quantity provided is calculated from existing ground to a varying depth below proposed ground. This is to account for the cut volume between existing & proposed ground as well as additional cut required before placing topsoil.

See plans for more details.

Note that the earthwork is associated with the roadway cut and fill is quantified and paid for under item AR152410, and the excavation associated with the box culvert undercut is quantified and paid for under AR152411. See structural sheets for box culvert quantities.

### **152-5.1** Add the following to this section:

Payment will be made under:

Item AR152410 - UNCLASSIFIED EXCAVATION/EMBANKMENT - PER CUBIC YARD

\*Item AS152410 – UNCLASSIFIED EXCAVATION/EMBANKMENT – PER CUBIC YARD

Item AR152411 - UNCLASSIFIED EXCAVATION (BOX CULVERT UNDERCUT) - LUMP SUM

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.



# Item 152541 – Stabilization Geogrid DESCRIPTION

### 152541-1.1

Work under this item shall include furnishing all labor, materials and equipment necessary to install a single layer stabilization grid between the subgrade and aggregate base course as shown on the plans.

### **MATERIALS**

### 152541-2.1

Geogrid shall be rectangular or square made from polypropylene material and shall be resistant to ultraviolet radiation.

The geogrid shall be integrally formed and deployed as a single layer having the following characteristics (ALL VALUES ARE MINUMUM AVERAGE ROLL VALUES UNLESS A RANGE OR CHARACTERISTIC IS INDICATED):

| Biaxial Class 2                  | Test/measurement | MD Values 1         | XMD Values 1        | General           |
|----------------------------------|------------------|---------------------|---------------------|-------------------|
| Properties                       | method           |                     |                     |                   |
| Aperture dimensions              | Nominal          | 1.0-1.6 in (25-40   | 1.3-1.6 in (33-40   |                   |
|                                  |                  | mm)                 | mm)                 |                   |
| Rib thickness                    | Nominal          | 0.05-0.09 in (1.27- | 0.05-0.09 in (1.27- |                   |
|                                  |                  | 2.2 mm)             | 2.2 mm)             |                   |
| Tensile strength @ 2%            | ASTM D6637-10    | 410-720 lb/ft (6.0- | 620-720 lb/ft (9.0- |                   |
| strain                           | Method A         | 10.5 kN/m)          | 10.5 kN/m)          |                   |
| Tensile strength @ 5%            | ASTM D6637-10    | 810-1440 lb/ft      | 1340-1440 lb/ft     |                   |
| strain                           | Method A         | (11.8-21.0 kN/m)    | (19.6-21.0 kN/m)    |                   |
| Ultimate tensile                 | ASTM D6637-10    | 1310-2055 lb/ft     | 1970-2055 lb/ft     |                   |
| strength                         | Method A         | (19.2-30 kN/m)      | (28.8-30 kN/m)      |                   |
| Junction efficiency              | ASTM D7737-11    |                     |                     | 93-95%            |
| Overall flexural rigidity        | ASTM             |                     |                     | 750,000-1,500,000 |
|                                  | D7748/D7748M-14  |                     |                     | mg-cm             |
| Aperture stability               | ASTM             |                     |                     | 0.65-0.75 m-N/deg |
|                                  | D7864/D7864M-15  |                     |                     |                   |
| Resistance to                    | %SC/%SW/%GP      |                     |                     | 95%/93%/90%       |
| installation damage <sup>2</sup> |                  |                     |                     |                   |
| Resistance to long               | EPA9090          |                     |                     | 100%              |
| term degradation                 |                  |                     |                     |                   |
| Resistance to UV                 | ASTM D4355-05    |                     |                     | 100%              |
| degradation                      |                  |                     |                     |                   |

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### **CONSTRUCTION METHODS**

**152541-3.1** Geogrid shall be delivered to the jobsite in such a manner as to facilitate handling and incorporation into the work without damage. Material shall be stored in such a manner as to prevent exposure to direct sunlight and damage by other construction activities.

**152541-3.2** Prior to the installation of the geogrid, the application surface shall be cleared of debris and sharp objects. In the case of subgrades, all wheel tracks or ruts in excess of 75 mm (3 inches) in depth shall be graded smooth or otherwise filled with soil to provide a reasonably smooth surface. Geogrid may be installed on the application surface either by hand or by mechanical methods, provided that the grid is not torn or the surface rutted.

**152541-3.3** Geogrid of insufficient width or length to fully cover the specified area shall be lapped. The minimum laps for lap only areas are (24 inches).

**152541-3.4** The granular embankment shall be constructed to the width and depth required on the plans. The material shall be back dumped on the geogrid in a sequence of operations beginning at the outer edges of the treatment area with subsequent placement towards the middle. Placement of material on the geogrid shall be accomplished by spreading dumped material off of previously placed material with a bulldozer blade or end loader, in such a manner as to prevent tearing or shoving of the fabric. Dumping of material directly on the fabric will only be permitted to establish an initial working platform. No vehicles or construction equipment shall be allowed on the geogrid prior to placement of the granular embankment. The granular material shall be placed to the full required thickness and compacted to the satisfaction of the Resident Engineer before any loaded trucks are allowed on the area covered.

**152541-3.5** Geogrid which is damaged during installation or subsequent placement of granular material, due to failure of the Contractor to comply with these provisions, shall be repaired or replaced at the Contractor's expense, including costs of removal and replacement of the granular material. Torn geogrid may be patched in place by cutting and placing a piece of the same geogrid over the tear. The dimensions of the patch shall be at least 600 mm (2 ft.) larger than the tear in each direction and shall be weighted or otherwise secured to prevent the granular material from causing lap separation.

### METHOD OF MEASUREMENT

**152541-4.1** Stabilization Geogrid will be measured for payment in place and the area computed in square yards. All required overlap and any geogrid patches required due to damage caused by the Contractor shall not be measured for payment but will be incidental to the pay item.

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### **BASIS OF PAYMENT**

**152541-5.1** Payment shall be made at the contract unit price for Stabilization Geogrid installed on the project. This price shall be full compensation for furnishing all materials, labor, equipment and any incidentals necessary to install the fabric as shown on the plans and specified herein.

Payment will be made under:

ITEM AR152541 - STABILIZATION GEOGRID - PER SQUARE YARD

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## PART 4 - BASE COURSES

# Item 208 – Aggregate Base Course BASIS OF PAYMENT

208-5.1 Add the following to this section:

Payment will be made under:

Item AR208515 - POROUS GRANULAR EMBANKMENT - PER CUBIC YARD

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# Item 209 – Crushed Aggregate Base Course BASIS OF PAYMENT

**209-5.1** Add the following to this section:

Payment will be made under:

Item AR209606 - CRUSHED AGGREGATE BASE COURSE - 6" - PER SQUARE YARD

Item AR209608 - CRUSHED AGG. BASE COURSE - 8" - PER SQUARE YARD

\*Item AS209608 – CRUSHED AGGREGATE BASE COURSE - 8" – PER SQUARE YARD

<sup>\*</sup>Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.



## **PART 6 – FLEXIBLE PAVEMENTS**

# Item 401 – Asphalt Mix Pavement Surface Course BASIS OF PAYMENT

401-3.3

ADD:

The mix design shall be reviewed and approved by the IDOT Division of Aeronautics Mixtures Control Engineer.

ADD to note #5:

Option of N30 or N50 mix design will be determined and approved by IDOT Division of Aeronautics Mixtures Control Engineer.

### 401-4.10 JOINTS

ADD: The following at the end of this section:

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

### **401-5.0 CONTRACTOR QUALITY CONTROL (QC)**

ADD:

HMA surface/smoothness control testing to be done in accordance with ITEM 406 (Hot-Mix Asphalt Binder and Surface Course) in the IDOT Standard Specifications for Road and Bridge Construction.

#### 401-7.2

ADD: The following at the end of this section:

Sawcutting shall not be measured for payment and shall be included in the cost of the pavement removal item.

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**401-8.1** Add the following to this section:

Payment will be made under:

Item AR401610 - BITUMINOUS SURFACE COURSE - PER TON

\*Item AS401610 - BITUMINOUS SURFACE COURSE - PER TON

Item AR401900 REMOVE BITUMINOUS PAVEMENT - PER SQUARE YARD

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.

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# Item 403 – Asphalt Mix Pavement Base Course BASIS OF PAYMENT

403-3.3

ADD:

The mix design shall be reviewed and approved by the IDOT Division of Aeronautics Mixtures Control Engineer.

ADD to note #5:

Option of N30 or N50 mix design will be determined and approved by IDOT Division of Aeronautics Mixtures Control Engineer.

**403-8.1** Add the following to this section:

Payment will be made under:

Item AR401610 - BITUMINOUS BASE COURSE - PER TON

\*Item AS401610 - BITUMINOUS BASE COURSE - PER TON

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.



## **PART 7 – RIGID PAVEMENTS**

# Item 501 – Cement Concrete Pavement 501-2.14 GRANULAR BEDDING

ADD:

The crushed aggregate base course shall be in conformance with Section 209 of the Illinois Standard Specifications for Construction of Airports.

### **501-3 CONCRETE MIX**

#### REPLACE ENTIRE SECTION WITH:

"Concrete mixture per the IDOT Standard Specifications for Road and Bridge Construction Item 420 (Portland Cement Concrete Pavement) is required for this item.

In addition, The mix design shall be reviewed and approved by the IDOT Division of Aeronautics Mixtures Control Engineer."

### **501-4.19 PROTECTION OF PAVEMENT**

ADD:

In order that the concrete may be properly protected against the effects of rain before the concrete is sufficiently hardened, the Contractor will be required to have available at all times materials for the protection of the edges and surface of the unhardened concrete. Such protective materials shall consist of standard metal forms or wood plank having a nominal thickness of the pavement at its edge for the protection of the pavement edges and covering material such as curing paper or polyethylene sheeting material for the protection of the surface of the pavement. The metal forms, wood planks and curing paper shall be kept on trucks or towable vehicles, within reasonable hauling distance, at a site shown on the plans, or as designated by the Engineer. Or, as an alternate, rolled polyethylene sheeting of sufficient length and width may be used without the temporary side forms and if properly anchored, to cover the plastic concrete slab and exposed edge. The sheeting may be mounted on either the paver or a separate moveable bridge from which it can be unrolled without dragging over the plastic concrete surface. When rain appears imminent, all paving operations shall stop, and all available personnel shall begin covering the surface of the unhardened concrete with protective covering. All pavement damaged shall be removed and replaced at no additional cost to the contract.

### **501-5 CONTRACTOR QUALITY CONTROL**

ADD:

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PCC surface/smoothness control testing to be done in accordance with ITEM 420 (Portland Cement Concrete Pavement) in the IDOT Standard Specifications for Road and Bridge Construction.

### **501-7.3 METHOD OF MEASUREMENT**

ADD:

Sawcutting shall not be measured for payment and shall be included in the cost of the pavement removal item.

Integral Curb & Gutter as shown on typical sections to be incidental to this item.

All pavement reinforcement shall be included in the cost of the concrete pavement item.

Curb cuts as shown on plans to be incidental to this item. Flexamat adjacent to curb cuts not incidental to this item.

#### **501-8.1 BASIS OF PAYMENT**

Add the following to this section:

Payment will be made under:

Item AR501508 - CEMENT CONCRETE PAVEMENT - 8" - PER SQUARE YARD

Item AR501900 - REMOVE PCC PAVEMENT - PER SQUARE YARD

\*Item AU501910 - REMOVE & REPLACE PCC PAVEMENT – PER SQUARE YARD

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.



## PART 9 - MISCELLANEOUS

# Item 602 – Emulsified Asphalt Prime Coat BASIS OF PAYMENT

**602-5.1** Add the following to this section:

Payment will be made under:

Item AR602510 - BITUMINOUS PRIME COAT - PER GALLON

\*Item AS602510 - BITUMINOUS PRIME COAT - PER GALLON

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.

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# Item 603 – Emulsified Asphalt Tack Coat BASIS OF PAYMENT

**603-5.1** Add the following to this section:

Payment will be made under:

Item AR603510 - BITUMINOUS TACK COAT - PER GALLON

\*Item AS603510 - BITUMINOUS TACK COAT - PER GALLON

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.

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# Item 620 – Runway and Taxiway Marking BASIS OF PAYMENT

**620-2.2 PAINT** 

ADD:

All paint shall be waterborne.

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

**620-5.1** Add the following to this section:

Payment will be made under:

Item AR620520 - PAVEMENT MARKING - WATERBORNE - PER SQUARE FOOT



## **PART 11 – DRAINAGE**

# Item 701 – Pipe for Storm Drain and Culverts BASIS OF PAYMENT

### 701-2.2

Remove section and add the following:

Pipe shall be of the type and diameter indicated and installed at the locations shown on the plans. For reinforced concrete pipe, pipe shall be Class IV reinforced concrete conforming to ASTM C-76 (with joints meeting ASTM C-443) for circular pipe.

### 701-3.5

#### ADD:

At the Contractor's option, Controlled Low Strength Material (CLSM) conforming to Section 701-2.8 may be used to backfill the trench across all paved roadways, as shown on the plans. This material shall meet the requirements of IDOT Standard Specifications for Road and Bridge Construction Section 593, Controlled Low-Strength Material, Backfill.

## 701-3.7

#### ADD:

Pipe removal under existing or proposed pavement areas shall be backfilled per Section 701-3.5. This work shall be considered incidental to the pipe removal. No distinction will be made for different pipe sizes removed.

#### **701-5.1** Add the following to this section:

Payment will be made under:

Item AR701900 - REMOVE PIPE - PER FOOT

Item AR701512 - 12" RCP, CLASS IV - PER FOOT

Item AR701515 - 15" RCP, CLASS IV - PER FOOT

Item AR701548 - 48" RCP, CLASS IV - PER FOOT

Item AR701183 - PRECAST 8' X 3' BOX CULVERT - PER FOOT

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## Item 705 – Pipe Underdrains of Airports BASIS OF PAYMENT

**705-5.1** Add the following to this section:

Payment will be made under:

Item AR705506 - 6" PERFORATED UNDERDRAIN - PER FOOT

Item AR705546 - 6" NON PERFORATED UNDERDRAIN - PER FOOT

Item AR705610 - CONCRETE HEADWALL FOR UNDERDRAIN - PER EACH

Item AR705640 - UNDERDRAIN CLEANOUT - PER EACH



# Item 751 – Manholes, Catch Basins, Inlets, and Inspection Holes BASIS OF PAYMENT

## **751-1.1** Add the following to this section:

Specifically, this item consists of the construction of inlets and manholes as shown on the plans or as directed by the Engineer.

Type A Inlets shall conform to IDOT Standard 602301-04.

Type A manholes with four (4) or six (6) foot diameters shall conform to IDOT Standards 602401-07 or 602406-11.

Type 1 frames and lids (open and closed lids) shall conform to IDOT standard 604001-05.

Type 3 frames and grates shall conform to IDOT Standard 604006-05.

#### 751-3.1 UNCLASSIFIED EXCAVATION

#### ADD:

The Contractor shall, at all times, provide and maintain in operation pumping and/or well point equipment for the complete dewatering of the excavation. No structure shall be permitted to be constructed in an excavated area in which any amount of water flows or is pooled.

#### 751-3.12 INLET/MANHOLE REMOVAL

### ADD:

This work shall consist of the removal of existing concrete drainage inlets and manholes of various types and sizes. Trenches resulting from the inlet and manhole removal shall be backfilled and compacted in accordance with Section 152 Excavation and Embankment for areas in proposed turf or backfilled and compacted in accordance with Section 701-3.5 for areas under proposed pavements. Manholes and inlets shall be disposed of by the Contractor off Airport property.

## **751-5.1** Add the following to this section:

Payment will be made under:

Item AR751900 - REMOVE CURB INLET - PER EACH

Item AR751903 - REMOVE MANHOLE - PER EACH

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Item AR751411 - INLET - TYPE A - PER EACH

Item AR751540 - MANHOLE 4' - PER EACH

Item AR751550 - MANHOLE 5' - PER EACH

Item AR751560 - MANHOLE 6' - PER EACH



# Item 752 – Concrete Culverts, Headwalls, and Miscellaneous Drainage Structures DRSCRIPTION

### METHOD OF MEASURMENT

### **752-1.1** Add the following:

This item shall also consist of concrete headwalls in accordance those associated with the 8'x3' box culvert as shown in the structural sheets of the plans

### **752-4.1** Add the following:

The quantity of concrete headwalls to be paid shall be the number installed, measured as one unit, and accepted by the Resident Engineer.

### **BASIS OF PAYMENT**

### **752-5.1** Add the following to this section:

The accepted number of concrete headwalls will be paid for at the Contract unit price per each, complete and in place.

Payment will be made under:

Item AR752600 - CONCRETE HEADWALL - PER EACH

Item AR752900 - REMOVE END SECTION - PER EACH

Item AR752412 - PRECAST REINFORCED CONC. FES 12" - PER EACH

Item AR752415 - PRECAST REINFORCED CONC. FES 15" - PER EACH

Item AR752448 - PRECAST REINFORCED CONC. FES 48" - PER EACH

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# Item 754 – Concrete Gutters, Ditches, and Flumes BASIS OF PAYMENT

**754-5.1** Add the following to this section:

Payment will be made under:

Item AR754900 - REMOVE CONCRETE CURB - PER FOOT

Item AR754410 - CONCRETE CURB AND GUTTER - PER FOOT



## PART 12 – TURFING

# Item 901 – Seeding BASIS OF PAYMENT

### 901-1.1

ADD:

Restoration, seeding and mulching beyond the limits of seeding and mulching shown in the plans (such staging areas and storage areas) shall be considered incidental to the contract.

### 901-2.1

### ADD:

"Tall Fescue grass seeding with an endophytic infection level of at least 70% recommended. Seeding producing turfgrass or other grass not attractive to hazardous specious of wildlife required. Seeding mixture subject to approval by engineer."

### 901-2.2 LIME

DELETE: Entire Section.

ADD:

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

### 901-3.2 DRY APPLICATION METHOD

DELETE: Paragraph C. Seeding

ADD:

Grass seed shall be sown at the rate shown in 901-2.1 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.

The site will be to grade and shaped to the elevations as shown on the plans. The topsoil will be free of clods, stones, roots, sticks, rivulets, gullies, crusting, caking and have a soil particle size of no larger than 1". Seedbed preparation methods shall be approved by the Engineer. Cultivation shall be accomplished at such a time that seeding may occur immediately and without delay. No seeds shall be sown until the Seedbed has been approved by the Engineer.

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No seed shall be sown during high winds or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used and shows that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified forty-eight (48) hours prior to beginning the seeding operations.

### 901-3.3 WET APPLICATION METHOD

DELETE: Entire Section.

#### 901-4.1

ADD:

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

**901-5.1** Add the following to this section:

Payment will be made under:

Item AR901510 - SEEDING - PER ACRE

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# Item 905 - Topsoil BASIS OF PAYMENT

905-1.1

ADD:

Topsoil shall be placed at a minimum of 4 inches in depth in areas to be seeded.

**905-5.1** Add the following to this section:

Payment will be made under:

Item AR905530 - TOPSOILING - PER SQUARE YARD



## Item 910 – Roadway Signage DESCRIPTION

### 910-1.1

The work shall consist of furnishing and installation of sign panels and sign posts. The work shall also include removal of existing signs as noted on the plans or as directed by the Engineer.

#### **MATERIALS**

#### 910-2.1 SIGNS AND POSTS

Sign face materials shall conform to Section 720 Sign Panels and Appurtenances of IDOT's Standard Specifications for Road and Bridge Construction. Signpost materials shall meet the requirements of Section 729 Metal Post of IDOT's Standard Specifications for Road and Bridge Construction.

The posts shall be telescoping steel signposts as designated on Illinois Department of Transportation Highway Standard 728001-01. Unless otherwise specified, only galvanized posts shall be used.

#### **INSTALLATION REQUIREMENTS**

#### 910-4.1

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

### 910-4.2

The metal posts may be driven by hand or mechanical means to a depth measured from the ground line as shown in the IDOT standard details. The post shall be protected by suitable driving cap and if required by the Engineer, the material around the post will be compacted after driving.

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

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

Sign panels shall be erected in accordance with Illinois Department of Transportation Highway Standards.



### **METHOD OF MEASUREMENT**

### 910-5.1

New singing shall be measured per each furnished and installed in accordance with applicable specifications and accepted by the Engineer. Sign posts and supports shall be incidental to this item. No additional compensation shall be made for additional length of posts required.

Sign posts shall be measured per each. No additional compensation shall be made for additional length of posts required.

Signs to be removed shall be measured per each removed and accepted by the Engineer.

Removal and disposal of sign posts for relocated signs and removed signs shall not be measured separately for payment but shall be included in the unit price for its respective pay item.

### **BASIS OF PAYMENT**

**910-5.1** Add the following to this section:

Payment will be made under:

Item AR910915 - REMOVE ROAD SIGNS - PER EACH

Item AR910200 - ROADWAY SIGN - PER EACH



# Item 910110 – Roadway Lighting DESCRIPTION

**910110-1.1** The work under this Item shall include the furnishing and installation of lighting system components including roadway luminaires, light poles, lighting control cabinet, service disconnect switch, wiring, and conduit. Installation shall include testing of the lighting system. The Item also includes the removal of existing lighting components as shown on the Construction Plans.

**910110-1.2** Light pole locations are indicated on the Construction Plans, and no deviation from these locations shall be permitted without the written approval of the Resident Engineer.

**910110-1.3** The shafts of the light pole foundations shall be cased to overcome unsuitable soil conditions and permit removal of water. The work shall be performed in a manner that will confine disturbance of surrounding materials to a minimum. The light pole foundations shall receive full lateral support from the surrounding materials.

Applicable standards include the current edition of the following:

- ' ACI 336.1 Construction of End Bearing Drilled Piers.
- ' ASTM A 252 Welded and Seamless Steel Pipe Piles.

The installer of the light pole foundations shall not have less than five (5) years of documented experience in similar installations.

Light pole foundation construction shall conform to the requirements of all codes, regulations, ordinances or laws as may apply thereto. The Contractor is also required to be familiar with and to comply with all OSHA, EPA, and any other federal, state or local requirements which pertain to this work. All tests, materials or additional work called for by said requirements shall be provided at no extra expense to the Airport. All poles supplied shall be certified to be vibration-free at all wind loads.

**910110-1.4 SHOP DRAWINGS.** The Contractor shall submit shop drawings for light poles (including the luminaires, poles including brackets, tenons, handholes, mounting methods, colors, finish), conductors, handholes, lighting control cabinet, conduit, service disconnect switch, fuses, and fuse holders, and connectors, procedures, and written warranties, and other incidentals specified for this Item.

### 910110-1.5 BUY AMERICAN PREFERENCES ACT AND DOMESTIC STEEL

**REQUIREMENTS.** All materials used for this item shall be made in USA from raw materials manufactured in the USA. The Contractor shall furnish a certification with the shop drawing attesting to adherence to the Buy American Preferences Act. All steel used on this project meet the requirements of (30 ILCS 565/) Illinois Steel Products Procurement Act, and the Contractor shall furnish a certification of source with each request for materials approval.

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### **EQUIPMENT AND MATERIALS**

**910110-2.1 ROADWAY LUMINAIRE**. The roadway luminaire housing shall be formed from heavy gauge aluminum and shall be internally welded. All external hardware shall be stainless steel. The housing dimensions shall be as shown on the Construction Plans and the unit shall be U.L. listed for wet locations and IP66 rated. Fixture housing shall have a tool-less entry feature.

The fixture shall utilize LED technology. The LED light engines shall be L70 rated, 70+ CRI, and 4000K. The optics shall be sealed to the fixture, with 0% uplight (a BUG U rating of 0) and minimal backlight (and BUG rating of II or lower). LED boards and drivers shall be replaceable in the field. Drivers shall have integral surge protection built in.

The reflector system shall also be fully enclosed. All photometric data shall be certified by an independent testing facility.

The fixture shall be pretreated, primed, baked, covered with a high solid polyester finish and baked again. Contractor shall verify finish color before ordering. The double baked finish shall meet or exceed all AAMA requirements for 1,000-hour salt spray exposure.

Luminaries shall operate at 480VAC.

Units shall have drivers and LED boards capable of operating down to a temperature of -20 F. Drivers shall be an integral but easily replaceable part of the luminaries.

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**910110-2.2 ROADWAY LIGHT POLE.** The proposed round tapered poles shall be of the type and height shown in the Construction Plans and shall be of one section design, unless otherwise shown in the Construction Plans. Each section shall be one-piece construction with a full-length longitudinal weld and shall be square in cross-section having a uniform taper of 0.14 inches per foot of length.

The anchor base shall be fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base shall telescope the pole shaft and shall be circumferentially welded at top and bottom.

Anchor bolts shall also be supplied by the pole manufacturer. Anchor bolts shall be fabricated from a commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 50,000 psi. Four properly sized anchor bolts, each furnished with two regular hex nuts and washers shall be furnished and shipped with the poles. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches.

The pole shall also have a 3" x 5" handhole and opening for receptacle located 18" above the base. Pole color shall be as shown in the Construction Plans. Poles shall come complete with mounting plates for mounting of proposed fixture brackets.

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The Contractor shall verify finish color and size before ordering the proposed poles.

Brackets for light poles shall be as detailed on the Construction Plans and provided with the light fixture. Each bracket shall support one (1) fixture. Contractor to coordinate drilling with pole manufacturer for bracket installation.

**910110-2.3 LIGHT POLE LIGHTNING ARRESTERS.** Each pole shall be furnished with a 480V lightning arrester. Lightning arrester shall have 3,200V impulse sparkover and shall have a minimum of 10,000A discharge current. Lightning arresters shall be installed in the light pole handholes.

**910110-2.4 LIGHT POLE FOUNDATIONS.** Light pole foundations shall be as shown in the Construction Plans. Concrete shall be provided in accordance with Item 610. Reinforcing steel shall be installed as detailed on Construction Plans.

Anchor bolts shall be supplied by the pole manufacturer and shall be installed according to his/her recommendations. Anchor bolts shall be "L" shaped and shall be minimum 1" diameter, 36" long, with 7" "L", unless otherwise recommended by the pole manufacturer.

Light pole foundations shall extend 1" above finished grade.

**910110-2.5 LIGHT POLE INTERNAL WIRING.** All fusing shall be accessible through the pole handhole for the light poles. Contractor shall provide the waterproof splices, fuse holders, fuses and other miscellaneous items necessary for a complete installation. The fuse holders and fuses shall be manufactured by Bussman or equal.

**910110-2.6 GROUNDING SYSTEM.** All light poles and lighting control cabinet shall be furnished with a ground rod as detailed in the Construction Plans. The proposed ground rods shall be ¾" diameter, 10 ft long copper clad. The top of the rod shall be buried min. 12" below finished grade. All the connections to the ground rod shall be buried minimum of 12 inches below finished grade. All the connections to the ground rods shall be one shot exothermic welding as manufactured by Cadweld or equal. Whenever a grounding system does not have a resistance of 25 ohms or less, add additional ground rods to the first and drive to the full depth until required resistance is obtained.

**910110-2.7 LIGHTING CONTROL CABINET.** The lighting control cabinet shall be an industrial Control Panel under UL 508A. Single door design with a NEMA 3R rating. Cabinet shall be fabricated from 0.125 in thick ASTM B 209, Alloy No. 5052-H32 aluminum, or AISI 304 stainless steel. Door frame shall be double flanged on all four sides. Size cabinet to house all required components with arrangement and termination of wiring. Back panel shall not exceed 60 percent of its fill capacity and side panels shall not be used.

The door shall be constructed from the same material and thickness as the cabinet with a three-point latching mechanism with nylon rollers at the top and bottom. The door handle shall be stainless steel, minimum ½ in. and have a padlock provision. Hinge shall be heavy duty, continuous with a ¼ in. diameter stainless steel hinge pin. A linkage-arm system of simple construction shall be attached to the doors to secure them in the open wide position to ensure 43

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safety during field operations. A weatherproof pocket for prints shall be permanently attached inside the door. Equip cabinet with a vent on top the excludes moisture, dirt, and insects.

The aluminum enclosure shall be finished to a #3 polish.

Photocell: Metal electrode molecularly bonded to a ceramic wafer and coated with cadmium-sulfide. The photocell shall be highly corrosion resistant without "plastic dipping" with a nominal 0.75 sq in surface area. Color sensitivity shall be maximum in the green-blue portion of the spectrum. The "ON-OFF" switching operations shall be a normally closed contact operated by an electro-magnetic relay. The response time shall be less than one second time delay for turn-on and three to thirty seconds time delay to prevent "turn-off" due to light flashes of less than 10 foot-candles (108 lux). Photocell shall be capable of tested in full daylight. In event of circuity failure, lights will turn on or remain on. Provide expulsion type surge arrestor passing ANSI c 136.10, except follow current is 10,000A. Photocell shall operate reliably over a temperature range of -40 to 158 Deg F. Calibrate photocell for a 0.5 to 2.1 foot-candle turn-on with a turn-off setting not exceeding 4 time the turn-on setting.

Circuit Breakers: Standard listed, molded case, thermal-magnetic bolt-on type circuit breakers with trip free indicating 480V applications shall have a listed interrupting rating of not less than 14,000 rms symmetrical amperes at rated circuit voltage.

Contactor: Shall be electrically operated, electrically or mechanically held, as specified for the service and operating coil voltage indicated. Ampere rating for contactors shall be as shown. Electrically held contactors shall be used unless mechanically held contactors are specified. 600V rated, open panel mount, and normally open. Double break, silver to silver type contacts there are spring load and provide a wiping action when open and closing. Line and load contacts pressure type terminals of copper and proper size for ampere rating.

Selector switch: Listed switch with contacts rated at 10 amps make/break and continuous at 60 Hz, 600 v. Control circuit shall have overcurrent protection as indicated and as required by NEC requirements.

Surge Arrestor: Shall withstand surges of 20,000 amperes (8 x 20 microseconds) and repetitive surges of 200 amperes for a minimum of 10,000 occurrences. Response time shall be less than 50 nanoseconds. The current drain shall not exceed 100 microamperes, The unit shall not allow holdover current to ground after the surge ends. Surges shall be achieved for both phase and neutral conductors with surges passed to ground, not to neutral.

Insulated back panel: Cabinet shall have a non-conducting, inorganic, non-asbestos subpanel to cover the back of the cabinet on which to mount components.

Panel Wiring and Identification: Wiring shall be RHH/RHW or MTW with jacket, 600 V, and copper. All wiring devices shall be copper. All wiring shall be tagged with self-sticking cable markers.

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Transformers: Dry-type, general purpose transformer with copper windings and insulation rated 180 Deg C or higher. Temperature rise shall be 115 Deg C or lower. Ratings as indicated on the Construction Plans.

**910110-2.8 CONDUCTORS.** All conductors shall be uncoated or coated copper, rated 600V, and 90 Deg C wet/dry, and shall be resistant to oils and chemicals. All conductors shall be stranded, meeting ASTM B.8 (or ASTM B 496) for conductors larger than No. 2 AWG), ICEA S-95-658, NEMA WC 70, and UL44.

Insulated cable designated as XLP shall incorporate cross-linked polyethylene (XLP) insulation and shall meet or exceed the requirements of ICEA S-950658, NEMA WC 70, AND UL 44. Any cable used for service entrance shall be USE-2.

The UL listing mark, cable voltage, insulation type, cable size, and ratings shall be clearly printed on the cable in a color contrasting with insulation color.

Color code all wiring per table below:

|         | 240 V, 208 V, 240/120 V, 208/120 V | 480 V, 480/277 V |
|---------|------------------------------------|------------------|
| Phase 1 | Black                              | Brown            |
| Phase 2 | Red *                              | Orange           |
| Phase 3 | Blue                               | Yellow           |
| Neutral | White                              | White or Gray    |
| Ground  | Green                              | Green            |

<sup>\*</sup> Orange when it is a high leg of a 120/240 V Delta system.

Splices in handholes and light poles shall be either twist/screw on type connectors pre-filled with epoxy for use with No. 8 AWG or smaller conductor or watertight compression or mechanical screw type connectors for use on No. 6 AWG and larger conductor.

**910110-2.9 UNDERGROUND CABLE MARKING TAPE.** The tape shall be 6 in. wide; consisting of 7 mil minimum polyethylene according ASTM D 882, ASTM D 5034, ASTM D 5035, and ASTM D 2103. The tape shall be red with black lettering or red with silver lettering reading "CAUTION – ELECTRICAL LINE BURIED BELOW".

**910110-2.10 HDPE CONDUIT-CABLE SYSTEM.** Factory made cable-in-duct with conductors as shown on the Construction Plans. Duct shall be high density polyethylene Type III, Class C, Category 5, Grade 34 conforming to NEMA TC-7. Duct shall have the manufacturer's name with the year of the manufacture included on the marking. Conductors shall comply with Section 910110-2.8.

**910110-2.11 GALVANIZED STEEL CONDUIT AND FITTINGS.** Rigid galvanized steel conduit shall comply with the requirements of ANSI C 80.1 and UL 6 Type 1 and that each length of

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conduit bears the UL label. Furnish fittings that comply with the requirements of ANSI/NEMA FB 1 and ANSI/UL 514B.

**910110-2.12 HANDHOLES.** Handholes shall be composite concrete type. Handholes shall be constructed of a composite concrete in accordance with Section 7 of ANSI/SCTE 77 for Tier 15 loading and in accordance with plan dimensions and details. Cover shall sit flush with surrounding frame surface. The cover shall contain a cast-in-place legend "LIGHTING" and contain either two lifting rings or two lifting slots.

**910110-2.13 SERVICE DISCONNECT SWITCH.** Switch shall be NEMA Type HD heavy-duty construction, fusible, NEMA 4X metallic enclosure, and service entrance rated. Voltage and amperage shall be as shown on the Construction Plans. Short circuit withstand shall be 200,000 Amps. NEMA 4X enclosure shall be 304 stainless-steel with no knockouts, externa mounting flanges, hinged, and with lockable door. Operating handle shall be red and pad lockable in the OFF position. Quick make/quick break operating mechanism.

#### **CONSTRUCTION METHODS**

**910110-3.1 POLES AND LUMINARIES.** Poles and luminaries shall be assembled and wired on the ground, then lifted and bolted in place plumb. The pole shall be considered plumb when the center of the top is directly over the center of the base. Plumb is to be measured with a transit by the Contractor and checked by the Resident Engineer.

Wiring run from luminaire to pole base shall have a strain relief clamp provided at the entry to the luminaire to prevent the wires from pulling loose from their terminals at the luminaire.

Internal wiring of poles and luminaires including fuses and waterproof splices shall be incidental to this Item.

Poles and luminaires shall be set on their foundations such that the luminaires aim in the direction indicated on the Construction Plans, typically with the arm perpendicular to the roadway and the fixture light spread parallel to the roadway.

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

**910110-3.2 LIGHT POLE FOUNDATIONS.** The Contractor shall be responsible for the necessary concreting and formwork to install the foundations as detailed on the Construction Plans.

The Contractor is referred to Item 610, which covers the proper installation of the concrete.

Foundations shall extend as shown on the Construction Plans below finished grade or pavement. Foundations shall extend one inch (1") above finished grade. Anchor bolts shall be

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

**910110-3.3 LIGHTING CONTROL CABINET.** The lighting control cabinet shall be in accordance with the details, location, and orientation shown on the Construction Plans.

Install a 4 in. thick Portland cement concrete work pad not less than 48 in. shall be installed in front of the cabinet. All conduit entrances into the cabinet shall be sealed with a pliable waterproof material. The cabinet shall be installed on a foundation as shown on the Construction Plans with the Contractor confirming orientation with the Engineer prior to installation. Set enclosure plumb and level on the foundation. Fasten to anchor rods with hot dip galvanized or stainless-steel nuts and washers and caulk at the base. Where cabinet has a metal bottom plate, seal the plate with a rodent and dust/moisture barrier.

**910110-3.4 DUCT (HDPE) INSTALLATION.** Duct shall be installed from the reels on which the unit duct was shipped. Splicing permitted only at handholes. Where the duct passes through handholes, the polyethylene duct shall be cut open and the continuous, uncut and unspliced conductors shall be looped in the handhole. Pulling apparatus shall be attached to the duct and not the conductors and pulling tension shall not exceed 550 lbs. Adhere to Manufacturer minimum bending radius. Do not kink or damage the conduit, ensure internal diameter of conduit is not reduced. There will be no more than equivalent of four quarter bends between pull points and no bends greater than 90 degrees. Immediately after placement, the cable ends shall be sealed to prevent entrance of moisture and contaminates, unless splicing or termination work is performed concurrently.

**910110-3.5 POWER AND CONTROL.** The location of power and control materials and work to be performed shall be as indicated in the Construction Plans. Electrical cable for power is specified in Item 108. The Contractor shall furnish and install identifying tags on all wires at the point where they connect to the breaker indicating which lights the wires serve. The Contractor shall stencil an identifying label on the control panel enclosure.

**910110-3.6 RESTORATION.** All areas disturbed by the light fixture installation shall be restored to its original condition. The restoration shall include any necessary topsoiling, fertilizing, seeding or sodding and shall be performed in accordance with the Standard Turfing Specifications. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance.

**910110-3.7 EXISTING POLE AND FIXTURE REMOVAL.** The location of existing lighting fixture, pole and foundation to be removed is shown in the Construction Plans. Fixture and pole shall be carefully removed and delivered to the Airport Owner's on-airport Maintenance Yard, location to be identified by the Resident Engineer. The foundation shall be removed by the Contractor and disposed of off-site. The Contractor shall protect the existing power cabling that is to be used in powering the new roadway lighting circuit.

The cavity remaining after the foundation's removal shall be backfilled with IDOT FA-2 sand placed in 6-inch lifts and compacted to the satisfaction of the Resident Engineer.

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All areas disturbed by the removal shall be restored to its original condition. The restoration shall include any necessary topsoiling, fertilizing, seeding or sodding and shall be performed in accordance with the Standard Turfing Specifications. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance.

**910110-3.8 TEST ELECTRICAL CIRCUIT.** The following tests shall be performed after the circuit installation is complete and at any other stage of the construction when directed by the Engineer. Included are the following tests:

Insulation resistance measurement: For all underground circuit cables, perform insulation resistance measurements with luminaires disconnected from the circuit and all neutral lines properly grounded. Measure with calibrated 500-volt megohmmeter. Ensure insulation resistance is no less than 100 megaohms. In the insulation resistance report, include measurements from each insulated line to ground, and between all combinations of lines in a given circuit or contained in a single duct.

Voltage measurements: Measure and record the voltages in the cabinet from phase to phase and phase to neutral at no load and at full load. Measure and record voltage readings at the last termination of each circuit. In the voltage measurement report, include measurements for each cabinet and each circuit.

Ground resistance test for each individual grounding installation: Measure ground resistance with the ground rod disconnected from the neutral wire. Measure with a Wheatstone bridge type ground resistance tester according to the manufacturer's instructions. Ensure the ground resistance of each individual grounding installation is no more than 25 ohms. In the ground resistance report, include measurements for each grounding installation identified by light pole number or equipment description.

**910110-3.9 FINAL ACCEPTANCE.** After satisfactorily completion of the required testing, the complete lighting system is to be placed in operation for 30 calendar day trial period and final approval will not be made until the trial period ends. During the trial period, service and maintain the installation and make all necessary adjustments or replacements as are required, at no additional cost. Contactor will not be required to pay for energy and working days will not be charged during this trial period.

### METHOD OF MEASURMENT

**910110-4.1** The quantity of Roadway Light Pole with Fixture to be paid for under this Item shall be the number of units furnished and installed, accepted and ready for operation. Each unit shall consist of the fixtures, poles, brackets, fuses, internal wiring, ground rods, light pole foundations and any miscellaneous items and fittings required to make the unit operational. Each fixture shall consist of the driver, housing, mounting arm, and any other items required for successful operations.

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**910110-4.2** The quantity of Remove Roadway Light Pole with Fixture to be paid for under this Item shall be the number of units removed and disposed of in accordance with these specifications. No separate measurements will be made for any excavation, backfill or restoration required to complete the Item.

**9100110-4.3** The quantity of Remove Control Panel will be paid for under this item shall be the number of units removed and disposed of in accordance with these specifications. No separate measurement shall be made for any associated removal of mounting apparatus.

**9100110-4.3** The quantity of Remove Fusible Service Disconnect will be paid for under this item shall be the number of units removed and disposed of in accordance with these specifications. No separate measurement shall be made for any associated removal of mounting hardware or excavation.

**9100110-4.3** The quantity of Electric Handhole will be paid for under this item shall be the number of units removed and disposed of in accordance with these specifications. No separate measurement shall be made for any associated excavation.

**9100110-4.6** The quantity of Remove Cable will be paid for under this item shall be the number of linear feet of cable removed and disposed of in accordance with these specifications. No separate measurement shall be made for any associated excavation.

**9100110-4.7** The quantity of light pole foundation will be paid for under this item shall be the number of units installed in accordance with these specifications and the Construction Plans.

**9100110-4.8** The quantity of fusible service disconnect,100 amp will be paid for under this item shall be the number of units installed in accordance with these specifications and the Construction Plans. No separate measurement will be made for switch mounting apparatus and associated excavation.

**9100110-4.9** The quantity of lighting control cabinet will be paid for under this item shall be the number of units installed in accordance with these specifications and the Construction Plans. No separate measurement shall be made for associated concrete foundation and required excavation.

**9100110-4.10** The quantity 1/C #8 600 v UG Cable will be measured for payment in feet in place. Measurements will be made in straight lines between changes in direction and to the center of equipment and boxes. 3 ft of extra cable will be allowed when terminating at a controller, light pole, or handhole, 1 ft of extra cable will be allowed at pull boxes, junction boxes, and similar locations

**9100110-4.11** The quantity 1/C #6 600 v UG Cable will be measured for payment in feet in place. Measurements will be made in straight lines between changes in direction and to the center of equipment and boxes. 3 ft of extra cable will be allowed when terminating at a controller, light pole, or handhole, 1 ft of extra cable will be allowed at pull boxes, junction boxes, and similar locations.

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**9100110-4.12** The quantity 1/C #1 600 v UG Cable will be measured for payment in feet in place. Measurements will be made in straight lines between changes in direction and to the center of equipment and boxes. 3 ft of extra cable will be allowed when terminating at a controller, light pole, or handhole, 1 ft of extra cable will be allowed at pull boxes, junction boxes, and similar locations.

**9100110-4.13** The quantity of 2" steel duct will be measured for payment in linear feet installed. Measurements will be made in straight lines along the centerline of the conduit between ends and changes in direction. Vertical conduit will be measured for payment.

**9100110-4.14** The quantity of HDPE duct will be measured for payment in linear feet installed. Measurements will be made in straight lines between changes in direction and to the center of equipment and boxes, 3 ft of extra duct will be allowed when terminating at a controller, light pole, or a handhole. 1 ft of extra duct will be allowed at handholes.

**9100110-4.15** The quantity Handholes will be paid for under this item shall be number of units installed in accordance with these specifications and the Construction Plans.

**900110-4.16** The quantity of test electrical circuit shall be paid as a lump sum upon successful completion of required testing and submission of testing results documentation.

### **BASIS OF PAYMENT**

**910110-5.1** Payment will be made at the Contract unit price for light poles (complete with fixtures, electrical wiring, ground rods, and foundation), handholes, lighting control cabinets (complete with grounding system and foundation), fused service disconnect switch (complete with fusing and mounting apparatus shown), wiring, conduit (including required trenching), and any other accessories completed by the Contractor and accepted by the Engineer. Payment will be made at the Contract unit price for removals of the following items shown for removal on the Construction Plans: light poles with luminaire, lighting control cabinet, service disconnect switch, handholes, conduit (where required), and conductors completed by the Contractor and accepted by the Engineer. These prices shall consist of full compensation for furnishing and installing all material, excavation, backfilling and compaction, and for all labor, equipment, tools, and incidentals necessary to complete this Item.

Payment will be made under:

Item AR910110 - RDWY LIGHT POLE W/FIXTURE - PER EACH

\*Item AT910110 - RDWY LIGHT POLE W/FIXTURE - PER EACH

Item AR910905 - REMOVE RDWY LGT POLE W/ FIXTURE - PER EACH

\*Item AT910905 - REMOVE RDWY LGT POLE W/ FIXTURE - PER EACH

Item AR109909 - REMOVE CONTROL PANEL - PER LUMP SUM.

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Item AR110906 - REMOVE ELECTRIC HANDHOLE - PER EACH

Item AR108960 - REMOVE CABLE - PER FOOT

\*Item AT108960 - REMOVE CABLE - PER FOOT

Item AR108408 - 1/C #8 600 V UG CABLE - PER FOOT

\*Item AT108408 - 1/C #8 600 V UG CABLE - PER FOOT

Item AR108406 - 1/C #6 600 V UG CABLE - PER FOOT

Item AR108401 - 1/C #1 600 V UG CABLE - PER FOOT

Item AR110312 - 2" STEEL DUCT, JACKED - PER FOOT

Item AR110610 - ELECTRICAL HANDHOLE - PER EACH

Item AR108005 - TEST ELECTRICAL CIRCUIT - PER LUMP SUM

Item AR800403 - REMOVE FUSIBLE SERVICE DISCONNECT, 100 - PER EACH

Item AR800404 - LIGHT POLE FOUNDATION - PER EACH

Item AR800405 - FUSIBLE SERVICE DISCONNECT, 100 - PER EACH

Item AR800406 - LIGHTING CONTROL CABINET - PER EACH

Item AR800407 - HDPE DUCT, 600 V - PER FOOT

\*Item AT800408 - 1 1/2 HDPE CONDUIT - PER FOOT

### **END OF ITEM 910110**

<sup>\*</sup>Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.



## Item 910430 – Maintenance of Traffic DESCRIPTION

## 910430-1.1

This work shall consist of furnishing, installing and maintaining all signs, signals, temporary pavement markings, other required traffic control markings, barricades, warning lights, and other devices which are to be used to regulate, warn or guide traffic during construction of the improvements on the airfield and adjacent to public and private roadways. All work shall be as shown in the plans and shall be in conformance with the current edition of the Illinois Department of Transportation's Manual on Uniform Traffic Control Devices for Street and Highways.

## **CONSTRUCTION METHODS**

#### 910430-2.1

The Contractor will be required to furnish all traffic control devices necessary for the convenience and protection of vehicular and pedestrian traffic. Whenever the operation of the Contractor endangers or interferes with vehicular traffic or pedestrians, as determined by the Engineer, the Contractor shall furnish any additional traffic control devices necessary to direct and protect his workmen at no extra cost to satisfy the requirements of the Engineer. The Contractor will be required to furnish the necessary flaggers as specified in the Plans or required by the Engineer on a continuous basis whenever construction operations are in progress.

The Contractor will be responsible for the proper location, installation and arrangement of all traffic control devices furnished by him. Whenever operations indicate that relocation of a proposed or existing traffic control device is advisable, as determined by the Engineer, the Contractor shall remove, relocate and reinstall the device in question.

All advance warning signs for lane closure, intermediate information signs and standard signs shall be installed in accordance with Illinois Highway Standards for Traffic Control 2023. Cones will not be allowed as a traffic control device.

All advance warning signs and traffic control devices shall be removed or covered by the Contractor when such signs and devices are not in effect or at the direction of the Engineer.

The basic layout for traffic control devices will be in accordance with IDOT standards as indicated in the Plans and Specifications.

The Contractor will be responsible for the maintenance of all traffic control devices installed by him as designated in the Plans and Specifications or as required by the Engineer. The Contractor will provide surveillance of all barricades, barrels, warning signs and lights which he has installed on a 24-hour a day basis for each day of this contract. In the event of severe weather conditions, the Contractor shall be required to furnish any additional personnel required

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to maintain all traffic control devices as required by the Engineer. Surveillance shall mean checking control devices periodically, but not less than once every 12 hours.

The Contractor shall provide the Airport with the name, address and telephone number of two (2) persons who will be responsible for maintaining the traffic control devices and who will be available to the City on an immediate basis 24 hours a day. If, for any reason, one or both of the persons become unavailable, the Contractor shall furnish the same information for other individuals who will be available.

The Contractor will be required to remove all traffic control devices which were furnished, installed or maintained by him under this contract and such devices shall remain the property of the Contractor upon said removal. All traffic control devices must remain in place until specific authorization for removal is received from the Engineer.

Traffic control shall be as noted on the plans or as necessary for compliance with the Illinois Department of Transportation's Manual on Uniform Traffic Control Devices for Street and Highways. Any deviation from this requirement shall be approved by the Engineer, with detour signing provided by the Contractor at the request of the Engineer. No extra compensation will be allowed for detour signing.

## **METHOD OF MEASUREMENT**

### 910430-3.1

Measurement for this work will be on a lump sum basis. No distinction shall be made between traffic control on the airfield and traffic control adjacent to public and private roadways.

#### **BASIS OF PAYMENT**

### 910430-4.1

This work will be paid for at the contract lump sum price MAINTENANCE OF TRAFFIC, which price shall be payment in full for all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices as indicated on the Plans or in these Specifications and as directed by the Engineer.

Payment will be under:

ITEM AR910430 - MAINTENANCE OF TRAFFIC - PER LUMP SUM.

### **END OF ITEM 910430**



## Item 800400 – Membrane Waterproofing System for Buried Structures DESCRIPTION

**1.1** This work shall consist of furnishing and placing a membrane waterproofing system on the top slab and sidewalls, or portions thereof, for buried structures as detailed on the contract plans.

All membrane waterproofing systems shall be supplied by qualified producers. The Department will maintain a list of qualified producers.

## **MATERIALS**

- **2.1** The materials used in the waterproofing system shall consist of the following.
  - (a) Cold-applied, self-adhering rubberized asphalt/polyethylene membrane sheet with the following properties:

| Physical Properties  |                                 |
|--|---------------------------------|
| Thickness ASTM D 1777 or D 3767  | 60 mils (1.500 mm) min.         |
| Width  | 36 inches (914 mm) min.         |
| Tensile Strength, Film ASTM D 882  | 5000 lb./in² (34.5 MPa)<br>min. |
| Pliability [180° bend over 1" inch (25 mm) mandrel @ -20 °F (-29 °C)] ASTM D 146 (Modified) or D1970 | No Effect                       |
| Puncture Resistance-Membrane ASTM E 154  | 40 lb. (178 N) min.             |
| Permeability (Perms) ASTM E 96, Method B   | 0.1 max.                        |
| Water Absorption (% by Weight) ASTM D 570  | 0.2 max.                        |
| Peel Strength ASTM D 903   | 9 lb./in (1576 N/m) min.        |

(b) Ancillary Materials: Adhesives, Conditioners, Primers, Mastic, Two-Part Liquid Membranes, and Sealing Tapes as required by the manufacturer of the membrane and film for use with the respective membrane waterproofing system.

### **CONSTRUCTION REQUIREMENTS**

**3.1** The areas requiring waterproofing shall be prepared and the waterproofing shall be installed in accordance with the manufacturer's instructions. The Contractor shall not install any part of a membrane waterproofing system in wet conditions, or if the ambient or concrete surface temperature is below 40° (4° C), unless allowed by the Engineer.

Surfaces to be waterproofed shall be smooth and free from projections which might damage the membrane sheet. Projections or depressions on the surface that may cause damage to the membrane shall be removed or filled as directed by the Engineer. The surface shall be power

## Special Provisions Quad Cities International Airport Rock Island County, IL



washed and cleaned of dust, dirt, grease, and loose particles, and shall be dry before the waterproofing is applied.

The Contractor shall uniformly apply primer to the entire area to be waterproofed, at the rate stated in the manufacturer's instructions, by brush, or roller. The Contractor shall brush out primer that tends to puddle in low spots to allow complete drying. The primer shall be cured according to the manufacturer's instructions. Primed areas shall not stand uncovered overnight. If membrane sheets are not placed over primer within the time recommended by the manufacturer, the Contractor shall recoat the surfaces at no additional cost to the Department.

The installation of the membrane sheet to primed surfaces shall be such that all joints are shingled to shed water by commencing from the lowest elevation of the buried structure's top slab and progress towards the highest elevation. The membrane sheets shall be overlapped as required by the manufacturer. The Contractor shall seal with mastic any laps that were not thoroughly sealed. The membrane shall be smooth and free of wrinkles and there shall be no depressions in horizontal surfaces of the finished waterproofing. After placement, exposed edges of membrane sheets shall be sealed with a troweled bead of a manufacturer's recommended mastic or two-part liquid membrane, or with sealing tape.

Sealing bands at joints between precast segments shall be installed prior to the waterproofing system being applied. Where the waterproofing system and sealing band overlap, the installation shall be planned such that water will not be trapped or directed underneath the membrane or sealing band.

Care shall be taken to protect and to prevent damage to the waterproofing system prior to and during backfilling operations. The waterproofing system shall be removed as required for the installation of slab mounted guardrails and other appurtenances. After the installation is complete the system shall be repaired and sealed against water intrusion according to the manufacturer's instructions and to the satisfaction of the Engineer.

Replace all of section **752.24 Handling holes.** of the Illinois Standard Specifications for Construction of Airports with:

Handling holes shall be filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation nor project above the outside surface to the extent that may cause damage to the membrane. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar compatible with the membrane.

## METHOD OF MEASUREMENT

**4.1** The waterproofing system will be measured in place, in square yards (square meters) of the concrete surface to be waterproofed.

## **BASIS OF PAYMENT**

**5.1** This will work will be paid for at the contract unit price, per square yard (square meter) for MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES.

## Special Provisions Quad Cities International Airport Rock Island County, IL



Payment will be under:

ITEM AR800400 - MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES - PER SQ YD.

**END OF ITEM 800400** 



## Item 800401 – Aggregate Shoulder Removal

### **DESCRIPTION**

**1.1** This work shall consist of the removal of aggregate shoulder behind existing HMA curbs during operation of existing HMA curb removal approved by the Engineer.

## **METHOD OF MEASUREMENT**

**2.1** This work will be measured for payment as cubic yards.

### **BASIS OF PAYMENT**

**3.1** This work will be paid for at the contract unit price per CUBIC YARD for AGGREGATE SHOULDER REMOVAL, which price shall include all labor and materials to complete this work.

Payment will be under:

\*ITEM AS800401 - AGGREGATE SHOULDER REMOVAL – PER MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES - PER SQ YD.

\*Indicates that item is included in an add alternative and therefore does not have the standard "AR" prefix. Prefix utilized varies per add alt.

## **END OF ITEM 800401**



## Item 800402 - Flexamat Plus DESCRIPTION

A Tied Concrete Block Mat with Triple Layered Underlayment. This work shall consist of furnishing and placing the system in accordance with this specification and conforming with the lines, grades, design, and dimensions shown on the plans.

### **MATERIALS**

Flexamat Plus is manufactured from individual concrete blocks tied together with high strength knitted polypropylene bi-axial geogrid. Each block is tapered, beveled and interlocked and includes connections that prevent lateral displacement of the blocks within the mats when they are lifted for placement.

Tied Concrete Block Mats with Triple Underlayment shall be Flexamat Plus, manufactured by Motz Enterprises, Inc., or approved equal.

**2.1** Blocks. Furnish blocks manufactured with concrete conforming to the cement requirements of ASTM C150 and to the aggregate requirements of ASTM C33. Blocks shall have a minimum weight of 3 lb. per block and placed no further than 2 in. apart. Material weight per square foot shall not exceed 10 lbs. Blocks shall have a 2.25" profile, a flat-top pyramid shape, and a coarse finish without protrusions. Concrete shall have a minimum compressive strength requirement of Table1 and certified by a third party.

Table 1
Concrete Compressive Strength Requirements

| Age      | Required Compressive<br>Strength psi |  |
|----------|--------------------------------------|--|
| 7 - Day  | 5000 psi                             |  |
| 14 – Day | 6000 psi                             |  |
| 28 - Day | 6900 psi                             |  |

## **CONSTRUCTION REQUIREMENTS**

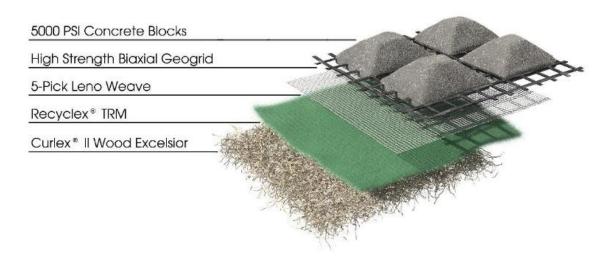
**2.2 Polypropylene Bi-Axial Geogrid.** The interlocking geogrid shall be an open knitted fabric composed of high tenacity, multifilament polypropylene yarns knitted and coated in tension with an acrylic based coating which is designed to resist degradation in environments with exposure to water and low pH (,4 pH) and high pH (>9 pH). Carbon black UV inhibitor shall be blended into the extruded yarns at a rate no less than 0.8% by weight. When combined with the revetment mat, this will yield a high tenacity, low elongating, and continuous filament polypropylene geogrid that is embedded within the base of the concrete blocks. Ensure the geogrid meets the requirements of Table 2.



Table 2 Polypropylene Bi-Axial Geogrid

| Property  | Unit          | Test       | Requirement            |
|---|---------------|------------|------------------------|
| Mass/Unit Area  | oz/yd²        | ASTM D5261 | 6.5 oz/yd <sup>2</sup> |
| Aperture Size   | English units | Measured   | 1.4x 1.4 inch          |
| Ultimate Wide Width<br>Tensile Strength (MD x CMD)    | lb/ft         | ASTM D6637 | 2,055 lb/ft            |
| Elongation at Ultimate<br>Tensile Strength (MD x CMD) | %             | ASTM D6637 | 6%                     |
| Wide Width Tensile<br>Strength @ 2% (MD x CMD)        | lb/ft         | ASTM D6637 | 822 lb/ft              |
| Wide Width Tensile<br>Strength @ 5% (MD x CMD)        | lb/ft         | ASTM D6637 | 1,640 lb/ft            |
| Tensile Modulus<br>@ 2% (MD x CMD)                    | lb/ft         | ASTM D6637 | 41,100 lb/ft           |
| Tensile Modulus<br>@ 5% (MD x CMD)                    | lb/ft         | ASTM D6637 | 32,800 lb/ft           |

**2.3 Underlayment Materials.** A four-layered system includes, in order from top to bottom, 1) Concrete block mat 2) 5-Pick Leno Weave 3) Recyclex TRM-V and 4) Curlex® II. The underlayment materials shall be packaged within the roll of the Flexamat Plus.



## Five-Pick Leno Weave:

This Five-Pick Weave provides added strength and support to the underlayments.

| Index Property | <u>Units</u> | <u>Value</u>    |
|----------------|--------------|-----------------|
| GSM            | g/m²         | 118 (-3~ +3)    |
| Density        | Picks/10cm   | 62 x 24 (+/- 2) |

| Letting Date: April 25th, 2025 |
|--------------------------------|
| Letting Item No. 14A           |

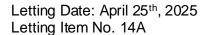


| Warp Strength   | N/5cm | > 350   |
|-----------------|-------|---------|
| Warp Elongation | %     | 20 - 50 |
| Weft Strength   | N/5cm | > 280   |
| Weft Elongation | %     | 20 - 50 |
| Warp Shrinkage  | %     | < 7     |
| Weft Shrinkage  | %     | < 9     |

## Recyclex® TRM:

Recyclex TRM – V is a permanent non-degradable Turf Reinforcement Mat (TRM), consists of 100% post-consumer recycled polyester (green or brown bottles) with 80% five-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the TRM. The top and bottom of each TRM is covered with heavy duty polypropylene net. Fibers are tightly crimped and curled to allow fiber interlock, and to retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0; therefore, the blanket will not float during hydraulic events. Recyclex TRM – V meets Federal Government Executive Order initiatives for use of products made from, or incorporating, recycled materials. Recyclex TRM – V shall be manufactured in the U.S.A. and the fibers shall be made from 100% recycled post-consumer goods.

| Index Property           | Test Method      | <u>Value</u>            |
|--------------------------|------------------|-------------------------|
| Thickness                | ASTM D 6525      | 0.294 in (7.47 mm)      |
| Light Penetration        | ASTM D 6567      | 57%                     |
| Resiliency               | ASTM D 6524      | 86%                     |
| Mass per Unit Area       | ASTM D 6566      | 0.50 lb/yd2 (271 g/m2)  |
| MD-Tensile Strength Max. | ASTM D 6818      | 295.2 lb/ft (4.32 kN/m) |
| TD-Tensile Strength Max. | ASTM D 6818      | 194.4 lb/ft (2.85 kN/m) |
| MD-Elongation            | ASTM D 6818      | 32.2%                   |
| TD-Elongation            | ASTM D 6818      | 40.8%                   |
| Swell                    | ECTC Procedure   | 8%                      |
| Water Absorption         | ASTM D 1117/ECTC | 33.8%                   |
| Specific Gravity         | ASTM D 792       | 1.21                    |





| UV Stability            | ASTM D 4355 (1,000 hr) | 80% minimum                      |
|-------------------------|------------------------|----------------------------------|
| Porosity                | Calculated             | 97.5%                            |
| Bench-Scale Rain Splash | ECTC Method 2          | SLR = 5.86 @ 2 in/hr 1,2         |
| Bench-Scale Rain Splash | ECTC Method 2          | SLR = 5.00 @ 4 in/hr 1,2         |
| Bench-Scale Rain Splash | ECTC Method 2          | SLR = 6.33 @ 6 in/hr 1,2         |
| Bench-Scale Shear       | ECTC Method 3          | 2.41 lb/ft2 @ 0.5 in soil loss 2 |
| Germination Improvement | ECTC Method 4          | 432%                             |

<sup>1</sup> SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. 2 Bench-scale index values should not be used for design purposes

## Curlex® II:

Curlex II erosion control blanket (ECB) consists of a specific cut of naturally seed free Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each blanket is covered with degradable polypropylene netting.

| Index Property           | Test Method          | <u>Value</u>             |
|--------------------------|----------------------|--------------------------|
| Thickness                | ASTM D 6525          | 0.418 in (10.62 mm)      |
| Light Penetration        | ASTM D 6567          | 34.6%                    |
| Resiliency               | ASTM D 6524          | 64%                      |
| Mass per Unit Area       | ASTM D 6475          | 0.57 lb/yd2 (309 g/m2)   |
| MD-Tensile Strength Max. | ASTM D 6818          | 127.0 lb/ft (1.9 kN/m)   |
| TD-Tensile Strength Max. | ASTM D 6818          | 50.9 lb/ft (0.7 kN/m)    |
| MD-Elongation            | ASTM D 6818          | 28.64%                   |
| TD-Elongation            | ASTM D 6818          | 29.84%                   |
| Swell                    | ECTC Procedure       | 89%                      |
| Water Absorption         | ASTM D 1117/ECTC     | 199%                     |
| Bench-Scale Rain         | Splash ECTC Method 2 | SLR = 6.84 @ 2 in/hr 2,3 |
| Bench-Scale Rain         | Splash ECTC Method 2 | SLR = 7.19 @ 4 in/hr 2,3 |
| Bench-Scale Rain         | Splash ECTC Method 2 | SLR = 7.56 @ 6 in/hr 2,3 |
|                          |                      | Project No. MLI-5023     |

## Special Provisions Quad Cities International Airport Rock Island County, IL



Bench-Scale Shear ECTC Method 3 2.6 lb/ft2 @ 0.5 in soil loss 3

Germination Improvement ECTC Method 4 645%

1 Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

- 2 SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. 3 Bench-scale index values should not be used for design purposes.
- **2.4** Mats will be rolled for shipment. Upon delivery, rolls may be left exposed for up to 30 days. If exposure will exceed 30 days, cover or tarp the rolls to minimize UV exposure.

Chipping or missing concrete resulting in a weight loss exceeding 15% of the average weight of a concrete unit is grounds for rejection by the engineer. Replace, repair or patch the damaged areas per the manufacturer's recommendations.

#### **PERFORMANCE**

Full-Scale laboratory testing performed by an independent 3rd party testing facility with associated engineered calculations certifying the hydraulic capacity of the proposed Tied-Concrete Block Erosion Control Mat meets the following requirements:

| Test      | Tested Value | Bed Slope | Soil Classification | Limiting Value |
|-----------|--------------|-----------|---------------------|----------------|
| ASTM 6460 | Shear Stress | 30%       | Sandy Loam (USDA)   | 24lb./ft²      |
| ASTM 6460 | Velocity     | 20%       | Loam (USDA)         | 30 ft./sec     |

### **ALTERNATIVE PRODUCTS**

Such products must be pre-approved in writing by the Engineer prior to bid date. Alternative product packages must be submitted to the Engineer a minimum of fifteen (15) days prior to bid date. Submittal packages for alternate products must include, as a minimum, the following:

- **4.1** Alternative Product Properties Product must be comprised of materials as detailed in Section 2, including both in composition, underlayment layers and performance requirements.
- **4.2** Full-Scale laboratory testing performed by an independent 3rd party testing facility with associated engineered calculations certifying the hydraulic capacity of the proposed Tied-Concrete Block Erosion Control Mat meets the performance requirements listed in Section 3 of this specification.
- **4.3.** A list of 5 comparable projects in terms of project size, application and material dimensions in the United States, where the results of the specific alternative material's use can be verified and reviewed for system integrity and sustained after a minimum of 10 years of service life.

## Special Provisions Quad Cities International Airport Rock Island County, IL



## **EQUIPMENT**

Provide the proper equipment to place the mat that will not damage the mat material or disturb the topsoil subgrade and seed bed.

### CONSTRUCTION

Prior to installing Flexamat Plus, prepare the subgrade as detailed in the plans. All subgrade surfaces to be smooth and free of rocks, roots, debris, or other protrusions that would prevent intimate contact between the block and the subgrade. When seeding is shown on the plans, provide subgrade material that can sustain growth.

Ensure the prepared subgrade provides a smooth, firm, and unyielding foundation for the mats. The subgrade shall be graded into a parabolic or trapezoidal shape to concentrate flow to middle of mat or mats.

When vegetation is required, distribute seed on the prepared topsoil subgrade before installation of the concrete mats in accordance with the specifications.

Install mats to the line and grade shown on the plans and per the manufacturer's guidelines. The manufacturer or authorized representative will provide technical assistance during preparation and installation of the concrete block mats as needed.

Provide a minimum 18 in. deep concrete mat embedment toe trench at all edges exposed to concentrated flows. Recess exterior edges subject to sheet flow a minimum of 6 in.

Provide fastening or anchoring as recommended by the manufacturer or engineer for the site conditions.

## **MEASURMENT**

This Item will be measured by the square foot as shown on the plans, complete in place.

## **PAYMENT**

The work performed, and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for per square yard for "Flexamat Plus". This price is full compensation for loading and transporting, placing concrete block mats; excavation and disposal; furnishing topsoil and bedding; and equipment, labor, materials, tools, and incidentals.

Payment will be under:

ITEM AR800402 - FLEXAMAT PLUS - PER SQ YD

## **END OF ITEM800402**



## Item 800409 - Rockfill

### General

This special provision is based on the IDOT District 1 special provision for road and bridge construction projects, dated April 1, 2022.

## **Description**

This work shall consist of the furnishing and placement of rockfill where unstable and/or unsuitable materials have been removed below the plan bedding grade of proposed cast-in-place and/or precast concrete box culverts. This work shall be done as shown on the plans and as directed by the Engineer.

#### **Materials**

Materials shall meet the following requirements of the IDOT Standard Specifications for Road and Bridge Construction:

| <u>ltem</u>     | <u>Section</u> |
|-----------------|----------------|
| CA 07 and CA 11 | 1004           |
| Rockfill        | 1005           |

The gradation of rockfill shall be selected based on the following table:

Material: Crushed Stone, Crushed Gravel, and Crushed Concrete

|              | Option 1        | Option 2        |
|--------------|-----------------|-----------------|
| Sieve Size   | Percent Passing | Percent Passing |
| 3 inches     | 100             |                 |
| 2 1/2 inches | 95 ± 5          | 100             |
| 2 inches     | 60 ± 15         | 93 ± 7          |
| 1 1/2 inches | 15 ± 15         | 55 ± 20         |

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| 1 inch   | 3 ± 3 | 8 ± 8 |
|----------|-------|-------|
| 1/2 inch |       | 3 ± 3 |

Geotechnical fabric for ground stabilization shall be nonwoven and meeting the requirements of Article 1080.02 of the IDOT Standard Specifications for Road and Bridge Construction may be necessary dependent upon subgrade soil conditions. The Engineer shall make the determination if Geotechnical fabric utilization is necessary.

## **Construction Requirements**

Unstable and/or unsuitable soil shall be excavated according to Article 502.11 of the IDOT Standard Specifications for Road and Bridge Construction. Rockfill shall be placed following the excavation of the unstable and/or unsuitable material. The maximum nominal thickness when compacted shall be 24 in. Each lift of aggregate shall be compacted to the satisfaction of the Engineer.

The rockfill shall be capped with material meeting the aggregate gradations of CA 07 or CA 11 according to Article 1004.01 of the IDOT Standard Specifications for Road and Bridge Construction. The minimum cap thickness shall be 3 in.

The fabric, if required, shall be installed according to the applicable portions of Section 210 of the IDOT Standard Specifications for Road and Bridge Construction.

## **Method of Measurement**

Rockfill will be measured for payment in cubic yards.

Geotechnical fabric for ground stabilization will be measured for payment according to Article 210.05 of the IDOT Standard Specifications for Road and Bridge Construction.

## **Basis of Payment**

Rockfill will be paid for at the contract unit price per cubic yard for ROCKFILL.

Geotechnical fabric for ground stabilization will be paid for according to Article 210.06 of the IDOT Standard Specifications for Road and Bridge Construction. When the contract does not contain a pay item for the fabric and this item is required, it will be paid for according to Article 109.04 of the IDOT Standard Specifications for Road and Bridge Construction.

Payment will be under:

ITEM AR800409 - ROCKFILL - PER CU YD

## Special Provisions Quad Cities International Airport Rock Island County, IL



## **END OF ITEM800409**

## Special Provisions Quad Cities International Airport Rock Island County, IL



## **POLICY MEMORANAM – APPENDIX A**

# 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 <u>saturated surface-dry</u> procedure.

## B. DEFINITIONS.

- 1. Bulk Specific Gravity (G<sub>mb</sub>) 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<sub>mm</sub>) 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 <u>vertical</u> 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.

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

G<sub>mb</sub> = 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:

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

G<sub>mb</sub> = Bulk Specific Gravity

G<sub>mm</sub> = Theoretical Maximum Gravity\*

Note: The Theoretical Maximum Gravity (G<sub>mm</sub>) 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:

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<sub>mb</sub>). The volume of a square yard of pavement <u>one (1) inch</u> 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, <u>one (1) inch</u> thick weighs:

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

# State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

February 20, 2014 Springfield Number: 87-2

TO: CONSULTING ENGINEERS

SUBJECT: DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS

## I. Introduction

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

## II. Sampling

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

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

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

## III. Testing

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

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

E.g. Lot 1 - Use the average of the two (2) tests for Lot 1.

Lot 2 - Use the average of the four (4) tests from Lots 1 and 2.

Lot 3 - Use the average of the four (4) tests from Lots 2 and 3.

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

## IV. Acceptance Calculations

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

## **EXAMPLE**

## 1. Test Data

Lot Quantity = 2000 tons

Sublot Test 1 = 4.35 % Air Voids

Sublot Test 2 = 3.96 % Air Voids

Sublot Test 3 = 6.75 % Air Voids

Sublot Test 4 = 6.25 % Air Voids

## 2. Calculating the Mean and Standard Deviation

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

$$N = 4$$

Mean 
$$\overline{(X)}$$
 = 21.34 / 4 = 5.328

Variance 
$$(S)^2 = Sum (X - X)^2 = 5.699 = 1.900$$
  
3

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

## 3. Test for Outliers

Check for Critical "T" Values

$$T = \left| \frac{X_1 - X}{S} \right|^* = \left| \frac{3.96 - 5.328}{5} \right| = 0.99$$

<sup>\*</sup> Difference between the suspect test value ( $X_1$ ) and the Mean ( $\overline{X}$ ).

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

## TABLE OF CRITICAL "T" VALUES

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

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

## 4. Calculation of Lot Payment

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

$$Q_L = (X - 1) = 5.328 - 1 = 3.141$$
  
S 1.378

$$Q_{\underline{u}} = (7 - X) = 7 - 5.328 = 1.213$$
  
S 1.378

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

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

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

% Adjustment = 0.5 PWL + 55.0 % Adjustment = 0.5 (89.4) + 55.0 % Adjustment = 99.7

Adjusted Quantities = % Adjustment x Lot Quantities Adjusted Quantities = 0.997 x 2000 tons Adjusted Quantities = 1994 tons

## 5. Resampling and Retesting

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

## 6. Reporting

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

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

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

# State of Illinois Department of Transportation Division of Aeronautics

## **POLICY MEMORANDUM**

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 AAHSTO T152.
- d. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- e. Acceptance testing for concrete provided under this item shall have a 14-day compressive strength of not less than 3,500 psi when tested in accordance with AASHTO T22. The testing lab shall be IDOT or AASHTO approved. The Resident Engineer will be responsible for the strength tests on the specimens at no expense to the contractor.
- f. If more than 100 cubic yards of the mix is placed in a given day, additional tests at a frequency of 1 per 100 cubic yards shall be taken for strength, slump, mix temperature, and air.
- g. The Resident Engineer shall collect actual batch weight tickets for every batch of Item 610 concrete used for the project. The actual batch weight tickets shall be kept with the project records and shall be available upon request of the Department of Transportation.

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

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

# State of Illinois Department of Transportation Division of Aeronautics

### **POLICY MEMORANDUM**

February 20, 2014 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. At the option of the Engineer, 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.
- B. 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:

| Test Parameter  | Acceptable Limits of     | Precision |
|---|--------------------------|-----------|
| % 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                                  | $V(G_{mm})$ of Mixture 0 | .026      |
| Bulk Specific Gravity (G <sub>mb</sub> ) of Gyratory Brix |                          | .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 Policy Memorandum 87-2, or according to the acceptance procedure outlined in the Special Provisions.

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

Supersedes Policy Memorandum 96-3, dated January 1, 2004

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:

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.

## 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 redone.

## 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<sub>mm</sub> (AAHSTO T 209)

Bulk Specific Gravity – G<sub>mb</sub> (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<sub>mb</sub>, G<sub>mm</sub>, VMA, Voids (Total Mix), Voids Filled, V<sub>be</sub>, P<sub>be</sub>, P<sub>ba</sub>, G<sub>se</sub>
- 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)
- I) 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 (≥ 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