# 01A

Letting March 10, 2023

# Notice to Bidders, Specifications and Proposal



Springfield, Illinois 62764

Contract No. MA033 Marshall County Airport Lacon, Illinois Marshall County Illinois Project No. C75-5008 SBG Project No. N/A



- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on March 10, 2023, at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. MA033 Marshall County Airport Lacon, Illinois Marshall County Illinois Project No. C75-5008 SBG Project No. N/A

Rehabilitate Aircraft Hangar Pavement and Automobile Parking Lot

For engineering information, please contact Lindsay D. Hausman, P.E. of Hanson Professional Services, Inc. at 217.747.9314.

#### 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 10-18 of the Illinois Standard Specifications for Construction of Airports (Adopted April 1, 2012), 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>6.0</u>%.
- SPECIFICATIONS AND DRAWINGS. The work shall be done in accordance with the Illinois Standard Specifications for Construction of Airports (Adopted April 1, 2012), the Special Provisions dated <u>January 13, 2023</u>, and the Construction Plans dated <u>January 13, 2023</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 44 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

Omer Osman, 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

Area Covered (Statewide)

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.

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	0	
	SMSA Counties: 1600 Chicago, IL -	19.6
	IL - Cook, DuPage, Kane, Lake, McHenry, Will	
	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:	
	1400 Champaign - Urbana - Rantoul, IL - IL - Champaign	7.8
	Non-SMSA Counties - IL - Coles, Cumberland, Douglas,	4.8
	Edgar, Ford, Piatt, Vermilion	
085	Springfield - Decatur, IL: SMSA Counties:	
	2040 Decatur, IL - IL - Macon	7.6
	7880 Springfield, IL - IL - Menard, Sangamon	4.5
	Non-SMSA Counties IL - Cass, Christian, Dewitt, Logan,	4.0
	Morgan, Moultrie, Scott, Shelby	
086	Quincy, IL: Non-SMSA Counties	3.1
	IL - Adams, Brown, Pike MO - Lewis, Marion, Pike, Ralls	0.1
087		
007	SMSA Counties: 1040 Bloomington - Normal, IL -	2.5
	IL - McLean 6120 Peoria, IL -	4.4
	IL - Peoria, Tazewell, Woodford Non-SMSA Counties -	3.3
	IL - Fulton, Knox, McDonough, Marshall,	5.5
088	Mason, Schuyler, Stark, Warren Rockford, IL:	
000	SMSA Counties:	6.2
	6880 Rockford, IL - IL - Boone, Winnebago	6.3
	Non-SMSA Counties - IL - Lee, Ogle, Stephenson	4.6
098		0.5
	Non-SMSA Counties - IL - JoDaviess	0.5
	IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik	
	WI - Crawford, Grant, Lafayette	
099	SMSA Counties:	4.0
	1960 Davenport, Rock Island, Moline, IA - IL - IL - Henry, Rock Island	4.6
	IA - Scott Non-SMSA Counties -	3.4
	IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine	
	MO - Clark	

107	St. Louis, MO:	
	SMSA Counties:	
	7040 St. Louis, MO - IL -	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, Clay,	
	Effingham, Fayette, Franklin, Greene,	
	Jackson, Jasper, Jefferson, Jersey,	
	Johnson, Macoupin, Marion, Montgomery,	
	Perry, Pulaski, Randolph, Richland,	
	Union, Washington, Wayne, Williamson	
	MO - Bollinger, Butler, Cape Girardeau,	
	Carter, Crawford, Dent, Gasconade,	
	Iron, Lincoln, Madison, Maries,	
	Mississippi, Montgomery, Perry,	
	Phelps, Reynolds, Ripley, St. Francois,	
	St. Genevieve, Scott, Stoddard, Warren,	
	Washington, Wayne	
	<b>T</b>	

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:

- (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;
- "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.
- 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.

#### 4. 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

- a. 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. <u>Unions</u>

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, nonminority 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.

- 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 1, 2022

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://icptracker.com/">https://icptracker.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 identical certifications from proposed subcontractors and material suppliers for specific time periods), he/she will obtain identical certifications or material suppliers prior to the award of subcontracts or the consummation of material suppliers provided or subcontracts or the consummation of material suppliers and that (s)he will opportunity clause, and that (s)he will obtain identical 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 April 1, 2012 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.

DELETE: "See contract documents for current schedule of deductions."

ADD:

Schedule of Deductions for Each Day of Overrun in Contract Time			
Original Contract Amount Daily Charges			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

#### 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 April 1, 2012 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 and functional 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.

#### 90-10 TRUST AGREEMENT OPTION.

DELETE: The entire section.

#### STATE OF ILLINOIS

#### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Construction of Airports," adopted April 1, 2012, and the Special Provisions included herein which apply to and govern the airport improvement of: Rehabilitate Aircraft Hangar Pavement and Automobile Parking Lot at Marshall County, Contract MA033, 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 4<u>4</u> 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.

Environmental Deficiency Deduction. 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.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists based on noncompliance 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: March 2, 2019

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

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

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

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

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

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

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 6.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

(a) The bidder documents enough DBE participation has been obtained to meet the goal or,

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(e) DBE as a material supplier:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) The listed DBE subcontractor fails or refuses to execute a written contract;

(2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;

(3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;

(4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;

(5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

(6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;

(7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;

(8) The listed DBE is ineligible to receive DBE credit for the type of work required;

(9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;

(10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

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

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

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

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

#### SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: November 1, 2021

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

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

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

#### SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS

Effective: November 2, 2017 Revised: April 1, 2019

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

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

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

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

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

#### SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS

Effective: November 2, 2017

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

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

provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

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

When progress payments are made to the Contractor according to Article 90-07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractor or material supplier to whom it is due for reasonable cause. If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or 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: September 2, 2021

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. The Contractor may seek from the Department of

Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

#### **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 <u>https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx</u> 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.

## SECTION III

Marshall County Airport Lacon, Illinois Rehabilitate Aircraft Hangar Pavement and Automobile Parking Lot Illinois Project No.: C75-5008

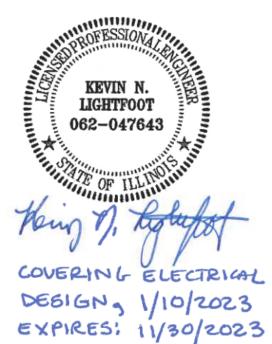


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January 13, 2023

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63 Item 611 Compaction Control Tests

#### **GENERAL**

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

#### Rehabilitate Aircraft Hangar Pavement and Automobile Parking Lot

This project is to rehabilitate a portion of the west hangar pavement and parking lot at Marshall County Airport including, among other incidental work, the following items:

- Placement of temporary soil erosion control measures.
- Mill or removal of existing pavements.
- Crack repair of existing pavements to remain.
- Install gate detector loops and key pad.
- Placement of pavement markings.
- Shoulder adjustment, seeding, and mulching in all disturbed areas, including along pavement edges.

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

The <u>Illinois Standard Specifications for Construction of Airports</u>, State of Illinois Department of Transportation, Division of Aeronautics, adopted **April 1, 2012**, as revised (Standard Specifications), shall govern the Project except as otherwise revised or noted in these Special Provisions dated January 13, 2023. All references to IDOT Specifications refer to <u>Standard Specifications for Road and Bridge Construction</u>, Illinois Department of Transportation, adopted January 1, 2022, as revised. Resolution of conflicts with any part or parts of said Specifications shall be in accordance with Section 50-03 of the Standard Specifications.

#### ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF AERONAUTICS

#### MANUALS, POLICY MEMORANDUMS, AND GUIDES

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

#### Manuals

Title	Modified by Special Provisions
Airport Construction Documentation Manual (Updated 6/2014)	No
Manual for Documentation of Airport Materials (Updated 4/01/2010	No

#### **Policy Memorandums**

<u>No.</u>	Title	Modified By Special Provisions
07-21	Acceptance Procedure for Finely Divided Materials used in Portland Cement Concrete and Other Applications	No
87-2	Density Acceptance of Bituminous Pavements	No
87-4	Determination of Bulk Specific Gravity (d) of Compacted Bituminous M	/ixes No
96-1	Structural Portland Cement Concrete: Job Mix Formula Approval & Production Testing	No
96-3	Requirements for Quality Assurance on Projects with Bituminous Conc	crete Paving No
97-2	Pavement Marking Paint Acceptance	No
2001-1	Requirements for Cold Weather Concreting	No
2003-1	Requirements for Laboratory, Testing, Quality Control, and Paving of S	Superpave No
	Bituminous Concrete Mixtures for Airports	No
	Bituminous Mix Design Memorandum	No
	Comparison Samples Memorandum	No
	Hot Mix Asphalt (HMA) Quality Control Plan	No

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

### DIVISION I GENERAL PROVISIONS SECTION 10 DEFINITION OF TERMS

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

#### SECTION 20

#### ADVERTISEMENT, BIDDING, AWARD, AND CONTRACT EXECUTION

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

#### **SECTION 40**

#### SCOPE OF WORK

Revise Section 40 of the Standard Specifications as follows:

<u>40-05</u> <u>MAINTENANCE OF TRAFFIC</u>. Add the following Paragraphs:

"Prior to the issuance of a construction Notice-to-Proceed (NTP) by the Illinois Division of Aeronautics, the Contractor shall prepare and submit a Safety Plan Compliance Document (SPCD) in accordance with FAA Advisory Circular 150/5370-2 (current issue), paragraph 2.4.2, or equivalent section in subsequent/current issues. The SPCD shall be reviewed and approved by the Airport Manager, who will then submit the document to the Illinois Division of Aeronautics for their approval prior to Notice to Proceed.

"Construction of the project shall be performed by the Contractor in accordance with the guidelines specified in FAA advisory circular 150/5370-2 (current issue) and the airport rules and regulations. Any Contractor activities required for project safety shall be provided by the Contractor and be incidental to the contract.

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

"At the pre-construction conference, the Contractor shall provide a Contractor coordination plan that coordinates his work with the work of his subcontractors and the work of other contractors of other on-going Airport projects.

"No runway closures will be permitted as part of this project.

"The Contractor shall furnish barricades for any airfield or roadway pavement to be closed by his work. It will be the Contractor's responsibility to furnish, place and maintain barricades as shown in the Construction Plans, and as directed by the Resident Engineer and Airport Owner. The cost of these items, and their maintenance, is to be paid for under AR150530 Traffic Maintenance. Any work that requires portions of an active runway, taxiway or apron to be closed must be completed expeditiously to minimize disruption to aircraft operations.

"The Contractor shall erect and maintain, at no cost to the contract, directional and informational signs for the Contractor's access routes at the existing construction entrances and for the Contractor's route within the Airport Operations Area, as noted on the plans or as directed by the Resident Engineer. Where Contractor equipment is operating within active Aircraft Operations Areas, radio-equipped flaggers shall be furnished by the Contractor. Continuous pavement sweeping shall be furnished to remove debris from active aircraft

movement paths. The cost of traffic control/flaggers and pavement sweeping shall be paid under Item AR150530 Traffic Maintenance.

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

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

"The Contractor shall remain within the construction limits line shown in the plans. When outside these limits, all Contractor activities shall remain more than 250 feet from the centerline and 300 feet from the end of active Runway 13-31 and 125 feet from the centerline and 240 feet from the end of active Runway 18-36. For work near taxiways and aprons, the Contractor's personnel and equipment must remain at least 44.5 feet from active Category I taxiways, 65.5 feet from active Category II taxiways and ten (10) feet from active aprons. When construction operations must be conducted within these separations, the pavement must be closed to aircraft activity by the Contractor by providing temporary barricades as shown in the plans, and in the case of runway pavements, closed runway markers. When haul vehicles are permitted to cross active airfield pavements, the Contractor will provide positive control of construction vehicles using radio-equipped flaggers. Contractor shall establish and maintain radio contact with Marshall County Airport CTAF/UNICOM (122.8 MHz). All Contractor's equipment used in active Airport Operations Areas shall be equipped with a FAA-standard flag, as referenced in FAA AC 150/5370-2, current issue. Aircraft shall have the right-of-way.

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

"Open trenches, excavations and stockpiled material at the construction site shall be delineated with the use of barricades during hours of restricted visibility and/or darkness. No open trenches shall be allowed within the Runway Safety Area (RSA) or the Taxiway Safety Area (TSA) when the runway or taxiway is open to air traffic (including overnight). The RSA is defined as 75 feet from the centerline and 300 feet from the end of Runway 13-31 and 60 feet from the centerline and 240 feet from the end of Runway 18-36. The TSA is measured at 24.5 feet from the Category I taxiway centerline and 39.5 feet from the Category II taxiway centerline. No vertical drop of greater than 3-inches in height from pavement edge to earth grade or earth grade within the RSA or TSA will be permitted when the runway or taxiway is open to air traffic.

The Contractor will have steel plates on-site to allow for the rapid covering of trenches or earth drops in the event of unexpected work stoppages for weather or Airport emergencies.

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

"At no time shall the Contractor conduct any activities or operate or park equipment so as to obstruct active part 77 Airport imaginary surfaces or the runway protection zones (RPZ) as delineated in the plans. Contractor's equipment shall extend no higher than 25 feet. Cranes shall not be used during instrument weather conditions or at night. Cranes shall be lowered when not in use.

"Before reopening temporarily closed pavements, the Contractor shall inspect and clean, as necessary, the pavement to assure that no materials or objects that may damage aircraft or vehicles remain. Any required cleaning shall be to the satisfaction of the Resident Engineer and Airport Owner and is incidental to the contract.

"All work shall be completed in accordance with the approved project safety plan, issued by the Illinois Division of Aeronautics.

"Failure to use these prescribed procedures or adhere to the safety requirements will result in the suspension of work.

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

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

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

"The Contractor is to provide an equipment storage and parking area at the locations shown in the plans. It is the Contractor's responsibility to maintain the access roads and the storage area during construction and to restore the areas at project completion to conditions suitable to the Airport Owner and the Resident Engineer. At the Airport Owner's discretion, the temporary facilities may remain, but they must be left in

conditions suitable to the Airport Owner. The cost of providing, maintaining and restoring the temporary facilities is incidental to the contract.

"The Contractor shall provide 3 days prior notice of any outages or shutdowns of utilities to the Owner and the agency owning the affected utility. The Contractor shall provide any temporary connections or other measures as may be required to maintain service as may be required by the owning agency at no cost to the Owner."

# CONTROL OF WORK

Revise Section 50 of the Standard Specifications as follows:

# 50-06 <u>CONSTRUCTION LAYOUT STAKES</u>. Add the following to <u>RESPONSIBILITY OF THE CONTRACTOR</u>, Paragraph G:

"These grades shall be furnished by the Contractor to the Project Engineer and shall include: the "as-milled" surface to be overlain, and; the final pavement surface furnished under Item 401. Surveying shall also be furnished by the Contractor after any constructed surface requested by the Resident Engineer for which deviations from Plan grade elevations and/or slopes that are greater than those allowed in the Standard Specifications or these Special Provisions are identified by the Resident Engineer."

# 50-12 LOAD RESTRICTIONS. Add the following:

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

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

"The Contractor shall erect and maintain directional and informational signs for the Contractor's access routes at the existing construction entrance and for the Contractor's route within the Airport, as noted on the Plans, or as directed by the Resident Engineer. This work is included in Item 150530, Traffic Maintenance, of these Special Provisions."

# CONTROL OF MATERIALS

Revise Section 60 of the Standard Specifications as follows:

# 60-05 <u>RESIDENT ENGINEER'S FIELD OFFICE</u>. Add the following:

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

#### LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

Revise Section 70 of the Standard Specifications as follows:

70-10 BARRICADES, WARNING SIGNS AND HAZARD MARKINGS. Add the following:

"The Contractor shall also meet the requirements of the Standard Specifications and Special Provisions, dated January 13, 2023, contained in Paragraph 40-5, Maintenance of Traffic, and Item 150530, Traffic Maintenance."

# PROSECUTION AND PROGRESS

Revise Section 80 of the Standard Specifications as follows:

# 80-05 LIMITATIONS OF OPERATIONS. Add the following:

"The Contractor shall also meet the requirements of the Standard Specifications and Special Provisions, dated January 13, 2023, contained in Paragraph 40-5, Maintenance of Traffic, and Item 150530, Traffic Maintenance."

# MEASUREMENT AND PAYMENT

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

# DIVISION II PAVING CONSTRUCTION DETAILS EARTHWORK ITEM 150510 ENGINEER'S FIELD OFFICE

Revise Item 150510 of the Standard Specifications as follows:

# **CONSTRUCTION METHODS**

<u>150 2.1</u> Add the following to the first Paragraph:

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

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

"H. One (1) telephone, with touch tone, where available, and telephone answering machine connected to one dedicated phone line, or a cellular phone with voicemail, for exclusive use by the Resident Engineer."

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

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

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

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

Add the following to Item K. in the list of equipment to be furnished by the Contractor:

"Item K in the list of equipment to be furnished by the Contractor is NOT required for this Project."

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

"N. Available for the exclusive use of the Resident Engineer, an Internet service connection using telephone DSL, cable broadband, or wireless (4G LTE minimum speed) technology. Additionally, an 802.11g/n wireless router shall be provided, which will allow connection by the Resident Engineer and up to four engineer staff.

- "O. One (1) 800 watt, 0.8 cubic foot microwave oven.
- "P. Two (2) 28-quart wastebaskets with 8-gallon trash bags.
- "Q. One (1) first aid cabinet fully equipped."

# BASIS OF PAYMENT

<u>150 3.1</u> Revise this Section to read:

"The building fully equipped as specified herein will be paid for at the Contract unit price per lump sum for Engineer's Field Office. The telephone and associated charges will be included in the Contract unit price per lump sum for Engineer's Field Office. This price shall include all utility costs and shall reflect the salvage value of the building, equipment, and furniture, which become the property of the Contractor after release by the Resident Engineer, except the Resident Engineer will pay that portion of the monthly long distance tolls, local tolls, and online data usage that, when combined, exceed \$250.00.

"Payment will be made under:

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

# MOBILIZATION

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

Payment will be made under:

Item AR150520 Mobilization - per lump sum.

#### TRAFFIC MAINTENANCE

# DESCRIPTION

<u>150530 1.1</u> <u>DESCRIPTION</u>. This work shall consist of the furnishing, installation, maintenance, relocation, and removal of work zone traffic control and protection, and will be in accordance to the Plans, Plan details, and the guidelines specified in FAA Advisory Circular 150/5370-2 (current issue). The item shall also include the provision of: sweepers for pavement cleaning, flaggers and radio equipment for traffic control, and provision, set-up, operation, maintenance, and removal of lighted runway closure markers, as shown in the Phasing Plan and as specified in the Special Provisions.

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

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

The Contractor will notify the Resident Engineer in writing three (3) calendar days prior to any activities that will disrupt runway, taxiway and/or apron traffic; a three day notice will be required for road closures and lane closures.

# MATERIALS

- <u>150530 2.1</u> MATERIALS. Materials shall be according to the following:
  - FAA Advisory Circular 150/5370-2 (current issue), <u>Operational Safety on Airports During</u> <u>Construction</u>.
  - Illinois Department of Transportation <u>Standard Specifications for Road and Bridge Construction</u>, adopted January 1, 2022 as modified.

# CONSTRUCTION METHODS

<u>150530 3.1</u> <u>GENERAL</u>. All work zone traffic control and protection shall be according to: the Construction Phasing Plan and the Plan details; FAA Advisory Circular 150/5370-2 (current issue), <u>Operational Safety on</u> <u>Airports During Construction</u>, and; Highway Standards (latest issue), as published by the Illinois Department of Transportation.

The traffic control shown on the Plans represents the minimum required combination of traffic control devices needed for a particular construction operation. Conditions created by the Contractor's operation which are not covered by the Plans shall be delineated by devices as directed by the Engineer at no additional cost to the Project.

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

The traffic control should remain in place only as long as needed and shall be removed when directed by the Resident Engineer. All existing pavement markings to be temporarily removed in accordance with FAA Advisory Circular 150/5370-2 (current issue), Operational Safety on Airports During Construction may "black-out" those markings, to be restored at the end of the project, using a black paint compatible with the existing and proposed paint composition.

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

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

# METHOD OF MEASUREMENT

<u>150530 4.1</u> Traffic control and protection required under Traffic Maintenance will be measured for payment on a lump sum basis. Where the Contractor's operations result in daily changing, or two or more work areas each of which requires traffic control according to one of the above standards, each work area installation will not be paid for separately, but shall be included in the lump sum price for Traffic Maintenance.

# BASIS OF PAYMENT

<u>150530 5.1</u> Traffic control and protection will be paid for at the Contract lump sum price for Traffic Maintenance. This unit price shall be full compensation for furnishing all labor, materials, tools, equipment and incidentals, including that for relocation, removal and maintenance of the materials, and necessary to complete the item as specified.

Payment will be made under:

Item AR150530

Traffic Maintenance - per lump sum.

#### EXCAVATION AND EMBANKMENT

Revise Item 152 of the Standard Specifications as follows:

<u>152 1.1</u> <u>DESCRIPTION.</u> Add the following to the end of paragraph 4:

"For purposes of shoulder adjustment, No proctor or sieve analysis will be required."

Add the following to the end of this section:

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

"This item shall consist of placing the earth shoulder adjacent to the bituminous surface course overlay in order to produce an edge drop of 1-1/2 inches. The shoulder shall be placed in accordance with the dimensions shown on the Construction Plans."

#### 152-1.2 CLASSIFICATION.

Delete the second and third Paragraphs.

Add the following to the fourth Paragraph:

"The material for the shoulder adjustment will be a topsoil material obtained from an off-site location. The material shall be approved by the Resident Engineer."

Add the following:

"Earthwork cut as required in the Plans may result in unsuitable/unstable material that cannot be incorporated into the work as fill material when constructing the lines and grades shown in the Plan. All such unsuitable/unstable material, that cannot be used in the Work, as determined by the Resident Engineer, shall be loaded and hauled to an off-site disposal site authorized to accept the debris. Excess but suitable material shall be used elsewhere in the Work to the extent possible. Any excess suitable material that cannot be incorporated into the Work shall be lawfully disposed of off-site. The loading, hauling and disposal off-site, including any regulatory testing/documentation, shall **not** be paid for separately, but shall be included in the Contract unit price for "Remove Tie down" or "Tie down".

# CONSTRUCTION METHODS

# <u>152-2.1</u> <u>GENERAL.</u> Add the following:

"The shoulder adjustment will be constructed to achieve the prescribed edge drop of 1-1/2 in., and will match the existing earth grade as shown on the Proposed Grading Plan and Cross Sections. Prior to the placement of the shoulder adjustment material, the existing shoulder area will be mowed

and disked/pulverized until the existing sod has been completely cut up. After the material is placed, it will be lightly shaped and rolled to achieve minimal compaction."

# "Existing pipe underdrain and associated structures, edge lights and cable are in the direct vicinity of excavation. Such facilities shall be protected throughout the project. Any damage to such facilities shall be repaired at the Contractor's Expense."

#### <u>152-2.2</u> <u>EXCAVATION</u>. Add the following to the fifth Paragraph:

"Unsuitable/unstable material, as determined by the Resident Engineer", and any excess suitable material not used in the Work shall be loaded, hauled, tested/documented as may be required by state law, and disposed of at an off-site disposal site authorized to accept the debris. Only material identified by the Resident Engineer for haul and disposal shall be hauled from the Work and disposed of at the off-site location. Contractor shall provide for all materials testing and suitability documentation as required by State law for the disposal of suitable material or unsuitable construction debris. Loading, haul, testing and disposal of the excess material to the off-site disposal site shall **not** be paid for separately, but shall be included in the Contract unit price for "Remove Tie down" or "Tie down"."

Add the following:

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

- 152-2.3 BORROW EXCAVATION. Delete this Section.
- 152-2.6 FORMATION OF EMBANKMENTS: Add the following:

"No compaction control tests are required for work associated with 152480 Shoulder Adjustment."

<u>152-2.8</u> <u>HAUL:</u> Add the following:

"The Contractor shall take special precautions when hauling so as not to create ruts in adjacent earth areas. All existing graded or turfed areas outside the grading limits, which are disturbed or rutted by the Contractor during the hauling/excavating operation, shall be regraded and returfed at his own expense to the satisfaction of the Engineer. No claim for hauling will be allowed."

Add:

<u>152-2.15</u> <u>DUST CONTROL WATERING.</u> This Work shall consist exclusively of the control of dust from construction operations and not for use in the compaction of earth embankment.

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

#### METHOD OF MEASUREMENT

- <u>152-3.2</u> Delete this Section.
- <u>152-3.3</u> Revise this section to read as follows:

"Shoulder adjustment shall be paid for at the measured number of square yards of graded shoulder completed in accordance with this specification."

Add:

<u>152-3.4</u> <u>DUST CONTROL WATERING</u>. Dust control watering will not be measured for payment, but shall be considered incidental to the Contract items for earthwork.

# **BASIS OF PAYMENT**

- <u>152-4.2</u> Delete this Section.
- <u>152-4.3</u> Delete this Section.

Add the following:

"Payment will be made under:

"Item AR152480 Shoulder Adjustment – per square yard."

#### **EROSION CONTROL**

Revise Item 156000 of the Standard Specifications as follows:

# MATERIALS

# <u>156 2.1</u> <u>SILT FENCE</u>. Delete this section and replace with the following:

"This fence shall be of either a pre-fabricated type or shall be constructed in the field, and regardless of the fabrication method, shall be of materials meeting the dimensions and material requirements shown in the Plans. The fabric for silt fence shall be a woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence with less than 50 percent geotextile elongation."

#### BASIS OF PAYMENT

Add:

"Payment will be made under:

"Item AR156510

Silt Fence - per linear foot."

# PAVEMENT SURFACE PREPARATION

# ITEM 201661

# CLEAN & SEAL BITUMINOUS CRACKS

Revise Item 201661 of the Standard Specifications as follows:

# MATERIALS

# 201-2.2 <u>CRACK SEALANT</u>. Delete this Sentence and replace with: "The crack sealant shall meet the requirements of ASTM D 6690 - Type II."

# BASIS OF PAYMENT

<u>201-6.1</u> Add:

"Payment will be made under:

"Item AR201661 Clean & Seal Bituminous Cracks - per linear foot."

# CRACK CONTROL FABRIC

Revise Item 201671 of the Standard Specifications as follows:

# MATERIALS

- <u>201-2.1</u> <u>REFLECTIVE CRACK CONTROL SYSTEM A</u>. Delete this Section.
- 201-2.2 <u>REFLECTIVE CRACK CONTROL SYSTEM B</u>. Delete this Section and replace with the following:
  - "201-2.2 <u>CRACK CONTROL FABRIC</u>. Crack control fabric shall be a high strength, open fiberglass grid knitted in a stable construction and coated with elastomeric polymer and self-adhesive glue. As a minimum the material must meet the following specific properties:

Specification for Use in Asphalt Reinforcement	
Material	Custom-knitted fiberglass mesh with elastomeric polymer coating and pressure sensitive adhesive backing
Tensile Strength, Test Method ASTM D 6637 (A)	Across Width = 1,120 Lbs/Inch Across Length = 560 Lbs/Inch
Elongation at Break, Test Method ASTM D 6637 (A)	Less than 3 Percent
Melting Point, Test Method ASTM D 276	Greater than 450° F
Mass/Unit Area, Test Method ASTM D 5261-92	18.0 (oz/sy)
Grid Aperture Size	0.5 inch by 0.5 inch
Roll Dimensions	197.0 feet x 5.0 feet
Roll Area	109 sy
Adhesive Backing	Pressure Sensitive

#### **BASIS OF PAYMENT**

- <u>201-5.1</u> Delete this Section and replace with the following:
  - "201-5.1 The work shall be paid for at the Contract unit price per square yard for Crack Control Fabric. These prices shall be full compensation for all materials, labor and equipment, and all incidental items necessary to complete the item in accordance with these specifications.

"Payment will be made under:

"Item AR201670 Crack Control Fabric - per square yard."

# FLEXIBLE BASE COURSES

# ITEM 209

# CRUSHED AGGREGATE BASE COURSE

Revise Item 209 of the Standard Specifications as follows:

# <u>209-1.1</u> <u>DESCRIPTION</u>. Add the following:

"The Crushed Aggregate Base Course shall be placed upon a prepared subgrade in lifts of limited thickness as required in the Standard Specifications and to the total uniform compacted thicknesses shown in the Plans. In accordance with Section 209-3.2, the material used in this item shall be pugmilled with water at a central mixing plant or traveling plant and placed at the material's optimum moisture content."

#### MATERIALS

# <u>209-2.1</u> <u>GRADATION</u>. Add the following:

"The Gradation B column in Table 1, Requirements for Gradation of Aggregate, shall be used."

#### **CONSTRUCTION METHODS**

<u>209-3.4</u> <u>FINISHING AND COMPACTING</u>. Revise this section as follows:

Add the following after the first paragraph:

"For the purpose of compaction control testing, this item is to be constructed for aircraft weighing less than 60,000 pounds (Standard Proctor)."

Add the following after the third paragraph:

"The Contractor shall furnish the Resident Engineer with the size and type of straightedge required to check the pavement components as directed in the various sections of the specifications."

#### METHOD OF MEASUREMENT

- <u>209-4.1</u> Delete this Section. Section 209-4.2 of the Standard Specifications shall be used.
- <u>209-4.3</u> Delete this Section.

#### **BASIS OF PAYMENT**

<u>209-5.1</u> Add the following:

"Payment will be made under:

"Item AR209606 Crushed Agg. Base Course - 6" - per square yard.

# FLEXIBLE SURFACE COURSES

# ITEM 401

# **BITUMINOUS SURFACE COURSE - SUPERPAVE**

# (Central Plant Hot Mix)

Revise Item 401 (Superpave) of the Standard Specifications as follows:

# <u>401-1.1</u> <u>DESCRIPTION</u>. Add the following paragraphs:

"Item 603 Bituminous Tack Coat shall be placed between this item and the newly milled surface, and between the first and any subsequent lifts for this item, if applicable, in accordance with Item 603, and as approved by the Resident Engineer. **Tack Coat shall Not be deleted**.

"For purposes of materials, design and testing criteria, this item is to be constructed for Traffic Mix Aircraft Under 60,000 Pounds – Parking Apron, and for Method I – Less Than 2,500 tons/pay item.

"This item shall include a survey by the Contractor of the milled Bituminous pavement surface, after repairs are completed, for review by the Project Engineer, and a survey of the final grades, as specified under Section 50-06 (Responsibility of the Contractor Paragraph G).

"This item shall also include the requirements prescribed in Illinois Division of Aeronautics Policy Memorandums 87-2, Density Acceptance of Bituminous Pavements; 87-4, Determination of Bulk Specific Density of Compacted Bituminous Mixes; 96-3, Requirements for Quality Assurance on Projects with Bituminous Concrete Paving, and; 2003-1, Requirements for Laboratory, Testing, Quality Control, and Paving of Superpave Bituminous Concrete Mixes for Airports, current issues."

# **COMPOSITION**

<u>401-3.2</u> <u>JOB MIX FORMULA</u>. Add the following:

"This item is to be designed for Traffic Mix Aircraft Under 60,000 Pounds – Parking Apron.

# **CONSTRUCTION METHODS**

<u>401-4.15</u> <u>ACCEPTANCE TESTING OF HMA MIXES FOR DENSITY</u>. Add the following as the first Paragraph:

"Acceptance of the surface mix shall be performed in accordance with requirements for Method I: Less Than 2,500 tons/pay item."

# <u>401-4.16</u> <u>SURFACE TESTS</u>. Add the following:

"To verify conformance with Plan final grades, the Contractor shall furnish grade elevations for the final surface lift to the Project Engineer for review, as specified under Section 50-06 (Responsibility of the Contractor Paragraph G)."

<u>401-4.17</u> <u>SAMPLING PAVEMENT</u>. Add the following to the end of this Section:

"The paving shall be furnished under Method I procedures, and only coring for thickness verification shall be performed."

# BASIS OF PAYMENT

<u>401-6.1</u> Add the following:

"Payment will be made under:

"Item AR401613 Bit. Surf. Cse. - Method I, Superpave - per ton.

# **BITUMINOUS PAVEMENT MILLING**

Revise Item 401650 of the Standard Specifications follows:

# **DESCRIPTION**

<u>401-1.1</u> Add the following:

"Pavement milling necessary for butting new pavement with existing pavement to remain will be measured for pavement under this item."

# METHOD OF MEASUREMENT

<u>401-4.1</u> Delete the last sentence of this Section and replace with the following:

"Pavement milling necessary for butting new pavement with existing pavement to remain will be measured for pavement under this item."

# BASIS OF PAYMENT

<u>401-5.1</u> Add the following:

"Payment will be made under:

"Item AR401650 Bituminous Pavement Milling - per square yard."

#### SAW AND SEAL BITUMINOUS JOINTS

# DESCRIPTION

401660 1.1 This item shall consist of a resilient and adhesive joint sealing filler capable of effectively sealing joints in bituminous asphalt pavement at the locations shown in the Plans or as directed by the Resident Engineer.

# MATERIALS

401660-2.1 The joint sealing materials shall conform to ASTM D6690 - Type II.

# CONSTRUCTION METHODS

401660 3.1 The Contractor shall mark true lines for each joint sealant location. Each location shall then be sawed to the depth shown on the Plans and the Saw and Seal Joints detail. The costs for sawing for joint sealant placement shall be included in the Contract unit price for Item AR401660. Prior to filling, the joint shall be thoroughly cleaned of all laitance, protrusions, dirt, dust, and other objectionable material and the faces of the joints shall be dry. The filler may then be placed at the depths shown on the Plans and in accordance with manufacturer=s recommendations for this type of installation. At the time of application of the sealing compound, the atmospheric and pavement temperature shall be above 50° F. The weather shall not be rainy or foggy. The temperature requirements may be waived only when so directed by the Engineer in writing. The Contractor shall not install any joint sealer material until the Resident Engineer has inspected and approved the condition of the joints immediately prior to the installation of the sealer.

Before sealing the joints, the Contractor shall be required to demonstrate that the equipment and procedures for preparing, mixing and placing the sealing compound will produce a satisfactory joint seal. During the course of the work, any batches that do not have good consistency for application shall be rejected.

# METHOD OF MEASUREMENT

<u>401660 4.1</u> The joint sealing filler to be paid for shall be the linear feet of filler or sealer as specified, sawed and placed, complete and accepted.

#### **BASIS OF PAYMENT**

<u>401660 4.1</u> Payment will be made at the Contract unit price per linear foot for Saw and Seal Bituminous Joints, which price shall be full compensation for the materials, labor, equipment, tools and incidentals necessary to complete the item as specified and to the satisfaction of the Engineer.

Payment will be made under:

Item AR401660 Saw & Seal Bit. Joints - per linear foot.

# REMOVE BITUMINOUS PAVEMENT

Revise Item 401900 of the Standard Specifications as follows:

#### DESCRIPTION

#### <u>401900-1.1</u> Revise the second Paragraph as follows:

"Within the limits shown in the Plans or as directed by the Resident Engineer, the Contractor shall remove all of the existing bituminous concrete pavement. No separate measurements will be made for various HMA thicknesses that may be encountered. Existing Crushed Aggregate Base Course removal that may be required shall be paid under "Unclassified Excavation"."

#### CONSTRUCTION METHODS

<u>401900-2.1</u> Add the following to the first Paragraph:

"Sawcutting under this item shall be incidental to Item 401900."

Add the following to the second Paragraph:

"Material removed shall include all of the existing bituminous concrete."

Add the following as a fifth Paragraph:

"The Contractor may use a power-operated mechanical scarifier, roto-mill, planing machine, grinder or other device to remove the asphalt surface in the area for Remove Pavement. However, this milling and disposal shall not be separately measured for payment, but shall be included in the Contract unit price for Remove Bituminous Pavement."

# BASIS OF PAYMENT

<u>401900-4.1</u> Add the following:

"Payment will be made under:

"Item AR401900 Remove Bituminous Pavement - per square yard."

#### REMOVE AND REPLACE BITUMINOUS PAVEMENT

# **DESCRIPTION**

<u>401910-1.1</u> This item consists of milling and removing the existing pavement associated with a large area of pavement distress and recompacting crushed aggregate (type B only), crack control repair fabric, tack coat, and bituminous surface course mix back into the removal area. The pavement repair areas will be identified in the field by the Resident Engineer/Resident Technician.

#### MATERIALS

- <u>401910-2.1</u> Bituminous Surface Course. The proposed bituminous surface course shall be an approved Item 401 Bituminous Surface Course Mix.
- <u>401910-2.2</u> Bituminous Tack Coat. The proposed bituminous tack coat shall conform to Item 603.
- 401910-2.3 Crack Control Fabric. The proposed crack control system shall conform to Item 201671.
- <u>401910-2.4</u> Crushed Aggregate Base Course. The proposed crushed aggregate base course shall conform to Item 209.

# **CONSTRUCTION METHODS**

<u>401910-3.1</u> (Type B) The Contractor shall remove each proposed repair area to the length, width and depths shown in the Plans. The equipment used must be approved for use on this project by the

Resident Engineer. The edge of the trench formed will have a vertical face prior to the placement of the bituminous surface mix. An additional partial depth area will be milled on both sides of the proposed patch to provide a smooth surface for the crack control fabric to be placed over, as shown in the Plans. This area is incidental to the overall patch and will not be measured for payment.

The subbase will be checked for stability following the initial excavation and then backfilled as needed with crushed aggregate conforming to Item 209, followed by the placement of multiple lifts of bituminous material conforming to Item 401. Each lift shall be of thickness as shown in the plans and compacted to a minimum density of 93%. The final lift shall be installed flush with the existing adjacent (milled) pavement.

The crack control material shall be installed according to the manufacturer's directions on the surface of the pavement following the milling operations and prior to the application of the two lifts of bituminous surface material. The bituminous tack coat shall be installed with the crack control repair material per the installation directions of the crack control repair material manufacturer. The tack coat shall also be applied to the vertical edges of the milled area.

All milled/removal material will be disposed of by the Contractor off the Airport site, unless otherwise directed by the Airport Director at the time of construction.

# METHOD OF MEASUREMENT

<u>401910-4.1</u> The removal and replacement quantity to be paid for shall be the number square yards completed, accepted, and measured in place by the Resident Engineer. Areas wider than the nominal width or length specified will not be measured for payment. The area of the fabric used concurrent with this task will be measured separately under Item 201671.

# **BASIS OF PAYMENT**

<u>401910-5.1</u> This Item of work will be paid for at the contract unit bid price per square yard for removal and replacement of bituminous pavement. The price shall include full compensation for all sawing (if utilized), milling, excavation, disposal of waste material, application of tack coat material, placement of bituminous material; for furnishing all materials, labor, equipment, and incidentals necessary to complete this Item of work. The fabric will be paid for separately under Item 201671.

Payment will be made under:

Item AR401916 Rem & Rep Bit Pavement – Type B --- per square yard

# **RIGID PAVEMENT**

# ITEM 501605

# PORTLAND CEMENT CONCRETE SIDEWALK

501605-1.1 This item shall consist of Portland Cement concrete sidewalk constructed on a prepared subgrade, at the locations shown in the Plans. The concrete thickness shall be four (4) inches, as shown in the Plans.

# MATERIALS AND EQUIPMENT

- 501605-2.1 MATERIALS. Concrete materials shall meet the requirements of Item 610, Structural Portland Cement Concrete. Preformed fiber joint filler shall meet the requirements of Section 1051 of the IDOT Specifications, Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised. Hot-poured joint sealer shall be ASTM D 6690, Type II, Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
- 501605-2.2 EQUIPMENT. Equipment shall meet the requirements of Section 424.03 of the IDOT Specifications, Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised.

# **CONSTRUCTION REQUIREMENTS**

501605-3.1 The construction shall be completed as shown in the details and notes shown in the Plans and in accordance with Sections 424.04 through 424.11 of the IDOT Specifications, Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised.

In addition, all expansion and sawed contraction joints shall be sealed with hot-poured joint sealer, meeting requirements of ASTM D 6690, Type II, Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.

# METHOD OF MEASUREMENT

501605-4.1 Portland Cement concrete sidewalk will be measured for payment in place, and the area computed in square feet. Joint filler and sealant shall not be measured separately for payment but shall be incidental to the Contract unit price for sidewalk.

# BASIS OF PAYMENT

501605-5.1 This work will be paid for at the Contract unit price per square foot for Portland Cement Sidewalk of the thickness specified, which price shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including all required expansion joints, sawed or tooled joint sealing, special texturing, and variable height edge treatment at sidewalk aprons and accessibility ramps, necessary to complete the item as specified.

Payment will be made under:

Item AR501605 5" PCC Sidewalk - per square foot.

#### MISCELLANEOUS

#### ITEM 603

# BITUMINOUS TACK COAT

Revise Item 603 of the Standard Specifications as follows:

# DESCRIPTION

#### <u>603-1.2</u> <u>QUANTITIES OF BITUMINOUS MATERIAL</u>. Add the following:

"The quantity of tack coat shown in the Plans is based upon the application of 0.15 gallon per square yard of area, per lift. Each specified tack coat application SHALL be required, regardless of condition of the underlying pavement."

# **CONSTRUCTION METHODS**

Add:

603-3.6 INDEPENDENT WEIGHT CHECKS. Although this item is documented for payment in gallons, it is based on a measurement of weight which requires any placement of this material be subject to IDOT, Division of Aeronautics, requirement for independent weight checks for asphalt tonnage items. The Contractor shall cooperate with the Resident Engineer in conducting and furnishing any and all before and after weight checks that are required under these policies. The costs for these weight checks shall not be paid for separately, but shall be included in the Contract unit price for this item.

# METHOD OF MEASUREMENT

<u>603-4.1</u> Add the following paragraph to this Section:

"Although this item is documented for payment in gallons, it is based on a measurement of weight which requires any placement of this material be subject to IDOT, Division of Aeronautics, requirement for independent weight checks for asphalt tonnage items. The Contractor shall cooperate with the Resident Engineer in conducting and furnishing any and all before and after weight checks that are required under these policies. The costs for these weight checks shall not be paid for separately, but shall be included in the Contract unit price for this item."

# BASIS OF PAYMENT

<u>603-5.1</u> Add the following:

"Payment will be made under:

"Item AR603510

Bituminous Tack Coat - per gallon."

# STRUCTURAL PORTLAND CEMENT CONCRETE

Revise Item 610 of the Standard Specifications as follows:

# DESCRIPTION

610-1.1 Add the following:

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

# BASIS OF PAYMENT

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

#### PAVEMENT MARKING

Revise Item 620 of the Standard Specifications as follows:

#### MATERIALS

<u>620-2.2</u> <u>PAINT</u>. Add the following as the first Paragraph:

"Permanent yellow and black markings shall be of waterborne material. Yellow paint shall conform to Federal Standard No. 595, color 33655 or 33538. Black paint shall conform to Federal Standard No. 595, color 37038."

#### CONSTRUCTION METHODS

620-3.3 PREPARATION OF SURFACE. Add the following:

"Surface preparation methods shall also adhere to the recommendations of Chapter 4 of Airfield Marking Handbook, Report IPRF 01-G-002-05-1, Innovative Pavement Research Foundation, September, 2008."

<u>620-3.5</u> <u>APPLICATION</u>. Revise the first sentence in the second Paragraph of this Section to read:

"The waterborne paint shall be mixed in accordance with the manufacturer=s instructions and applied to the pavement with a marking machine in two applications, each at the rate(s) shown in TABLE 1. The addition of thinner will not be permitted."

# BASIS OF PAYMENT

620-5.1 Add the following:

"Payment will be made under:

"Item AR620520	Pavement Marking - Waterborne - per square foot.

Item AR620525 Pavement Marking – Black Border – per square foot."

# ROADWAY SIGNAGE

#### **GENERAL**

<u>910-1.1</u> This work shall consist of furnishing, fabricating, and/or installing sign panels, complete with sign faces, legend, and supplemental panels, as detailed and shown in the Plans.

# MATERIALS

910-2.1 Materials for sign panels shall be in according to Article 720.02 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2022 for sign panels, and Article 729.02 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2022, for metal post. Metal post shall be Type B.

#### CONSTRUCTION REQUIREMENTS

- <u>910-3.1</u> <u>SIGN PANEL AND ASSEMBLY TYPES</u>. The three types of individual panels are defined by surface area according to the following descriptions:
  - Type 1 9 square feet (0.84 sq m) or less.
  - Type 2 Over 9 square feet (0.84 sq m) and less than 24 square feet (2.2 sq m).
  - Type 3 24 square feet (2.2 sq m) or more.

The surface area is determined by calculating the area of the smallest rectangle, measured from edgeto-edge (horizontally and vertically), that will circumscribe an individual sign, except in the case of a triangular sign. The area of a triangular sign shall be the net triangular area.

A sign panel assembly is composed of one or more sign panels mounted individually or as a group. The two types of sign panel assemblies are defined by the total surface area of the individual sign panels according to the following descriptions:

- Type A assemblies are composed of Type 1 sign panels with a total sign panel area of 9 square feet (0.84 sq m) or less.
- Type B assemblies are composed of Type 1 or Type 2 sign panels with a total sign panel area over 9 square feet (0.84 sq m).

Where any sign legend dimensions shown in the plans conflict with the sign legend manufacturer's recommendations, the dimensions shown in the plans or as determined by the Engineer shall govern.

The backs of all sign panels shall be metal stamped, engraved, etched, decal, or otherwise marked in a manner designed to last as long as the sign face material, in letters and numerals at least 3/8 inch (9.5 mm) but no more than 3/4 inch (19 mm) in height with the month and year of manufacture, the name of the sign manufacturer, and the initials IDOT.

When standard signs designated by letters and numbers are to be furnished, they shall be according to the MUTCD. Detailed drawings of signs with an "I" preceding the sign designation code are available from the Engineer of Operations. Detailed drawings of all other standard signs are available from the Federal Highway Administration (HTO-20), Washington, D.C. 20590.

<u>910-3.2</u> <u>SIGN PANEL INSTALLATION</u>. Sign panels shall be installed using all required mounting hardware specified.

All sheet aluminum sign panels and supporting panels shall be mounted to the supporting channels with 5/16 inch (M8) stainless steel, zinc, or cadmium plated steel hex head bolts with lock nuts. For design panels 9 square feet (0.84 sq m) or greater in area, flat steel fender washers shall be placed next to the bolt head and the nut. A 1/8 inch (3 mm) thick nylon washer shall be placed between the metal washer and the sign face. For sign panels less than 9 square feet (0.84 sq m) in area, standard steel flat washer shall be placed next to the bolt head and nut. A nylon washer shall be placed between the metal washer and the sign face.

Horizontal supporting channels used to brace individual signs shall be located using the mounting holes pre-punched in the sign blank.

All bolts and nuts shall have National Coarse Thread (UNC).

When a Type 2 panel is to be installed above or below a Type 3 panel, all materials shall be the same as those used for the Type 3 panel. The Contractor shall use the same type of sign base material and sign legend throughout this work.

When the plans require auxiliary sign panels or route shields to be installed on a Type 3 sign panel, they shall be fabricated using a sign base according to Article 1090.01 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2022, and a sign face according to Article 1091.01 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2022.

# METHOD OF MEASUREMENT

910-4.1 The number of Handicap Sign to be paid shall be the number of signs counted and measured as one unit, in place, accepted and completed, by each unit. A sign with more than one sign panel and/or more than one metal post will be counted as one sign.

#### **BASIS OF PAYMENT**

<u>910-5.1</u> Payment for Handicap Sign will be made at the Contract unit price per each, measured as one unit and accepted. The price shall be full compensation for furnishing all materials and for the preparation, hauling, and placing of these materials, for furnishing equipment, and for all labor, equipment, tools and incidentals necessary to complete the items as specified.

Payment will be made under:

Item AR910230 Handicap Sign - per each.

# DIVISION III FENCING (WIRE FENCES) ITEM AR162570 DETECTOR LOOP

# DESCRIPTION

<u>162570-1.1</u> This item shall consist of the removal and replacement of safety/detector loops to an existing electric slide gate installation. The interior loop detector shall also provide free exit activating the gate when a vehicle pulls up to exit. This item will include all labor, equipment, and materials required to put the safety/detector loops in proper working order. This item shall also include furnishing and installing all conduits, ducts, wire, and all other associated equipment and materials; all testing; all lockout/tagout safety procedures for protection of personnel, and all other incidentals as detailed the Plans and specified herein, necessary for the completion of the safety/detector loops as detailed on the Construction Plans and within the Specifications.

# 162570-1.2 REFERENCES

- A. ANSI C80.1 Rigid Steel Conduit, Zinc Coated.
- B. ANSI C80.4 Fittings Rigid Metal Conduit and EMT.
- C. FAA AC No. 150/5370-2F (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- D. Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022.
- E. State of Illinois Department of Transportation, Division of Aeronautics Standard Specifications for Construction of Airports, Adopted April 1, 2012 (or respective issue in effect)
- F. NFPA 70 National Electrical Code (most current issue in force).
- G. NFPA 70E Standard for Electrical Safety in the Workplace.
- H. OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures.
- I. UL Standard 6 Rigid Metal Conduit.

<u>162570-1.3 SHOP DRAWINGS.</u> The Contractor shall furnish shop drawings for approval before ordering material and equipment for the following system components. Shop drawings are required for the electric gate. Note shop drawings that are submitted that do not include all of the following listed requirements will be rejected and will require resubmittal. Contractor shall use the following as a check list and shall verify all information noted below is included with the respective electric gate shop drawing prior to submitting the shop drawing for review. Shop drawing shall be clear and legible. Copies that are illegible will be rejected. Contractor shall submit pdf electronic copies of shop drawings. Shop drawings shall include the following information:

- A. In order to expedite the shop drawing review, inspection and/or testing of materials and equipment, the Contractor shall furnish complete statements to the Project Engineer as to the origin and manufacturer of all materials and equipment to be used in the work. Such statements shall be furnished promptly after execution of the Contract but, in all cases, prior to delivery of such materials and equipment.
- B. Provide data sheets on the detector loop wire.
- C. Provide cut sheets and specifications for the sealant.

# EQUIPMENT AND MATERIALS

<u>162570-2.1 GENERAL.</u> All equipment and materials used in the construction shall be in accordance with the Specifications and detailed instructions as furnished by the manufacturer.

<u>162570-2.2 DETECTOR AMPLIFIERS</u>. Detector amplifiers are existing devices located in the existing gate operator control panel.

<u>162570-2.3 DETECTOR LOOP WIRING</u>. Detector loop wires shall conform to the requirements Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Section 1079 DETECTOR LOOP. Detector loop wiring shall be compatible with the respective detector amplifiers.

1-inch Galvanized Rigid Steel conduit will be required for all control wires from the operator to the detector loops. All metal conduits entering the gate operator shall be bonded to the frame of the gate operator. Adjust conduit sizes where applicable to interface to existing conduits.

<u>162570-2.4 GALVANIZED RIGID STEEL CONDUIT.</u> Galvanized rigid steel conduit (GRSC) shall be heavy wall hot dipped galvanized steel pipe bearing the UL label and conforming to UL-6 and ANSI Specification C80.1. Couplings, connectors, and fittings for rigid steel conduit shall be threaded galvanized steel or galvanized malleable iron specifically designed and manufactured for the purpose. All fittings shall be threaded type. Fittings shall conform to ANSI C80.4. Set screw type fittings are not acceptable. Steel used to manufacture conduits shall be 100 percent domestic steel. Contractor shall provide certification that the respective steel conduits used on this project are manufactured from 100 percent domestic steel. **Existing conduit may be reused in place where determine suitable for use.** 

# CONSTRUCTION METHODS

<u>162570-3.1 CONTRACTOR QUALIFICATIONS</u>. The contractor responsible for installing the detector loops shall be familiar with and qualified to perform the respective work.

<u>162570-3.2 AIRPORT SECURITY.</u> The Contractor will place temporary fencing (minimum height to match existing fence) across the gate opening whenever the proposed gate cannot be closed at the end of the construction day. Security at the Airport shall be maintained at all times and coordinated with the Airport Director/Manager.

<u>162570-3.3 SPLICES</u>. Splices, where allowed, shall be the resin encapsulating type, suitable for direct burial, and be as manufactured by 3 M, Burndy, or approved equal.

<u>162570-3.4 MATERIALS FURNISHED BY THE CONTRACTOR.</u> All materials used in the work shall meet the requirements of the respective Specifications, and no material shall be used until it has been approved by the Project Engineer by means of shop drawings. All materials not otherwise specifically indicated shall be furnished by the Contractor. All materials furnished by the Contractor shall be new.

162570-3.5 STORAGE OF MATERIALS. Materials shall be so stored as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and they shall be placed under cover. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the Owner or lessee.

162570-3.6 LOCATE EXISTING UTILITIES: The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient or complete. Neither the Owner nor the Engineer assumes any responsibility whatsoever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer/Resident Technician shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility. Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123. Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

<u>162570-3.7 MANUFACTURER'S DIRECTIONS.</u> Manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer unless herein specified to the contrary. Any installations which void the UL listing, Intertek Testing Services Verification/ETL listing, (or other third-party listing), and/or the manufacturer's warranty of a device will not be permitted.

<u>162570-3.8 CUTTING AND PATCHING.</u> The Contractor shall do all necessary cutting and patching of the pavement that may be required by the drawings and Specifications to complete the structure. He shall restore all such cut or patched areas as directed by the Resident Engineer/Resident Technician. Cutting of existing structures that may endanger the work, adjacent property, workmen or the public shall not be done unless approved by the Owner and under his direction.

<u>162570-3.9 CLEAN UP.</u> The Contractor shall remove from the Owner's property and from all public and private property, all temporary structures, rubbish, and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials, leaving the site smooth, clean, and true to line and grade.

<u>162570-3.10 WARRANTY PERIOD</u>: Neither the final certificate of payment nor any provision in the contract, not partial or entire use of the improvements embraced in this contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the contract, or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay any damage to other work resulting there from which shall appear within a period of twelve (12)

months from the date of final acceptance of the work. The Owner shall give notice of defective materials and work with reasonable promptness. The warranty applies to equipment furnished, as well as to all other work and materials.

<u>162570-3.11 GATE CONTROL EQUIPMENT.</u> Installation of all electrical equipment and all gate control equipment shall be in conformance with the requirements of the NFPA 70- National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and in strict accordance with the requirements of all local authorities having jurisdiction.

<u>162570-3.12 INSTALLATION OF DETECTOR LOOPS</u>: The existing gate operator includes loop detectors with a free exit feature. Two loops (one exterior and one interior) shall be provided. The exterior loop shall serve as an "obstruction/safety" loop. The interior loop gate shall also serve as an "obstruction/safety" loop and additionally serve as a "free exit" loop for automatic opening to exit upon detection of a vehicle. New loop detector wiring shall be as specified by the manufacturer furnishing the detector amplifiers. The induction loops shall be equipped with appropriate equipment to operate properly for large trucks and not activate closure of the gate onto vehicles parked in the gate opening. Induction loops shall be installed in saw cut grooves created by the Contractor in the road surface; such grooves of length, width, and depth as required by the manufacturer of the loop control equipment. Loop detector wiring shall be installed in accordance with the respective gate operator and/or loop detector manufacturer instructions. Contractor shall saw cut approximately 6" minimum depth at the pavement edge such that the conduit for the loop detector lead-in wiring will not be less than 6" below grade at the interface point to the pavement. Loop wires shall be held in place in the bituminous/concrete pavement by completely backfilling and covering slot with a sealer rated suitable for the respective application. Sealer shall conform to the requirements Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Section 1079 DETECTOR LOOP. The cured material shall be highly resistant to oil, gasoline, slats, acids, and alkalis.

<u>162570-3.13 ELECTRICAL GENERAL.</u> The Contractor shall furnish and install all electrical equipment and materials necessary for complete and operational installation of the gate operator, as stipulated in the respective item and as shown on the Plans. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the NFPA 70-National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and all other applicable local codes, laws, ordinances, and requirements in force. Electrical equipment and materials shall be installed in conformance with the respective manufacturer's directions for the respective application. Any installations which void the UL listing, Intertek Testing Services Verification/ETL listing, (or other third-party listing), and/or the manufacturer's warranty of a device will not be permitted.

- A. The Contractor should examine the proposed site to evaluate the complexity of the work.
- B. Contractor shall keep a copy of the latest NEC in force on site at all times during construction for use as a reference.
- C. Contractor shall keep a copy of the Plans, Special Provision Specifications including any addenda, and copies of any change orders on site at all times during construction.
- D. Contractor shall coordinate work and any power outages to buildings located on the airport with the Airport Director/Manager and/or the respective building personnel. Any shutdown of existing systems shall be scheduled with and approved by the Airport Director prior to shutdown. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures, including, but not limited to, 29 CFR Section 1910.147 The Control of Hazardous Energy (lockout/tagout).

- E. Contractor shall comply with the requirements of FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- F. Contractor shall comply with the applicable requirements of NFPA 70E Standard for Electrical Safety in the Workplace.
- G. Only splices between loop lead in wires and the loop detector wiring are approved.

<u>162570-3.14 CABLE AND CONDUIT INSTALLATION</u>: Installation of cable in duct and/or conduit shall conform to Item 108 INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS of the IDOT Division of Aeronautics Standard Specifications for Construction of Airports and as detailed on the Plans. Installation of conduit shall conform to Item 110 INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT of the IDOT Division of Aeronautics Standard Specifications for Construction of Airports, as detailed on the Plans and as specified herein.

<u>162570-3.15 GROUNDING REQUIREMENTS:</u> The Contractor shall furnish and install all grounding shown on the Plans and/or as may be necessary or required to make a complete grounding system as required by the latest National Electrical Code (NFPA 70) in force.

<u>162570-3.16 TESTING:</u> The Contractor shall make at his own expense any tests of equipment, wiring, or insulation deemed necessary by any inspection department or by the Owner's Representative and/or Resident Engineer/Resident Technician and shall provide all apparatus, meters, materials, and labor required to make such tests. **All tests shall be conducted in the presence of the Owner and the Resident Engineer/Resident Technician.** 

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

- A. Check operation of safety loops. Does gate remain open if vehicle stays on the exit loop?
- B. Check operation of free exit.
- C. Check to see if gate stops if an obstruction is detected.
- D. All tests shall be recorded, stating the test results, date, and field conditions.

#### METHOD OF MEASUREMENT

<u>162570-4.1</u> The quantity of this item to be furnished and installed shall be measured for payment as a unit price per lump sum for the removal and replacement of the detector loops and shall include all materials, equipment, wiring, conduit, ducts, labor, coordination, tools, connections, and other incidentals as required to perform the specified work and testing the units for satisfactory operation.

## BASIS OF PAYMENT

<u>162570-5.1</u> Payment will be made at the contract unit price per lump sum for the detector loops and shall be full compensation for all materials, labor, and equipment required to perform the specified work and testing the units for satisfactory operation, and no additional compensation will be allowed.

Payment will be made under:

Item AR162570 Detector Loop – per lump sum

## ITEM AR800578

#### CARD READER/KEYPAD PEDESTAL

## DESCRIPTION

<u>800578-1.1</u> This item shall consist of removing the existing card reader/access control unit and replacing it with a new keypad access control unit in accordance with these Specifications and at the location shown on the Construction Plans. This item will include all labor, equipment, and materials required to put the keypad access control unit into proper working order. This item shall also include removal of the card reader access control unit and hardware, furnishing and installing a new keypad access control unit, mounting pedestal, foundation, concrete work, bollards, conduits, wiring, interface to the respective gate operator, training, testing, startup, and all incidentals necessary for the completion of the access control system for the gate operator as detailed on the Construction Plans and as specified herein.

#### 800578-1.2 REFERENCES

- A. ANSI C80.1 Rigid Steel Conduit, Zinc Coated.
- B. ANSI C80.4 Fittings Rigid Metal Conduit and EMT.
- C. ASTM Specification B3 Standard Specification for Soft or Annealed Copper Wire.
- D. ASTM Specification B8 Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft.
- E. Federal Specification A-A-59544 Cable and Wire, Electrical (Power, Fixed Installation).
- F. FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- G. State of Illinois Department of Transportation, Division of Aeronautics Standard Specifications for Construction of Airports, Adopted April 1, 2012 (or respective issue in effect)
- H. NFPA 70 National Electrical Code (most current issue in force).
- I. NFPA 70E Standard for Electrical Safety in the Workplace.
- J. OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures.
- K. UL Standard 6 Rigid Metal Conduit.
- L. UL Standard 83 Thermoplastic-Insulated Wires and Cables.
- M. UL 325, (Fourth Edition), Standard for Safety for Door, Drapery, Gate, Louver and Window Operators and Systems.
- N. UL Standard 651 Schedule 40 and 80 Rigid PVC Conduit.

<u>800578-1.3 SHOP DRAWINGS</u>. The Contractor shall furnish shop drawings for approval before ordering material and equipment for the following system components. Shop drawings are required for the electric gate. Note shop drawings that are submitted that do not include all of the following listed requirements will be rejected and will require resubmittal. Contractor shall use the following as a check list and shall verify all information noted below is included with the respective electric gate shop drawing prior to submitting the shop drawing for review. Shop drawing shall be clear and legible. Copies that are illegible will be rejected. Separate shop drawings shall be prepared for each electric gate. Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus 4 copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. Provide certification of compliance with the Steel Products Procurement Act (30 ILCS 565) for steel products including but not limited to reinforcing steel, bollard pipes, steel conduits, ground rods. Provide certification that the respective steel products are made in the United States of America from domestic steel.
- B. In order to expedite the shop drawing review, inspection and/or testing of materials and equipment, the Contractor shall furnish complete statements to the Project Engineer as to the origin and manufacturer of all materials and equipment to be used in the work. Such statements shall be furnished promptly after execution of the Contract but, in all cases, prior to delivery of such materials and equipment.
- C. Cut sheets and specifications for the keypad access control unit and pedestal.
- D. Provide concrete mix design.
- E. Provide shop drawing for bollard pipes. Included certification that bollard pipes are made with 100 percent domestic steel.

## EQUIPMENT AND MATERIALS

<u>800578-2.1 GENERAL</u>. All equipment and materials used in the construction shall be in accordance with the Specifications and detailed instructions as furnished by the manufacturer.

<u>800578-2.2 KEYPAD ACCESS CONTROL UNIT</u>. Keypad access control unit shall be capable of accepting up to 100 (or more) different 4-digit codes. Input operating voltage shall be 12 to 24 VAC or VDC (and/or compatible with the respective gate operator control voltage). Keypad access control unit shall be suitable for outdoor installation with a weatherproof housing and operating temperature range of -15°F to +160°F. Contractor shall ensure compatibility between the gate operator control voltages, the keypad access control unit input voltage and output contact ratings, and the respective control interface. Contractor shall include interfacing relays and/or transformers as applicable. Keypad access control unit shall be surface mount housing with appropriate adapters and hardware to install on a gooseneck type pedestal. The pedestal shall be adequate to accommodate the keypad access control unit shall be constructed as detailed on the Construction Plans and in accordance with the manufacturer's Specifications. The keypad housing and pedestal shall be powder-coated finish in black. Keypad access control unit shall be American Access Systems, Inc. Advantage DKE 26-100SG, Advantage DKE 26-500, Advantage DK ADV-1000 Series, Summit Access Control S-XL-660, or approved equal.

The concrete foundation for the keypad access control unit shall be a minimum of 48 inches below ground level and to the dimensions recommended by the manufacturer. The concrete shall conform to Item 610.

Contractor shall ensure compatibility between the gate operator control voltages, the keypad access control unit input voltage and output contact ratings, and the respective control interface.

<u>800578-2.3 CONTROL WIRING</u>. Control wires between devices shall be Copper, Type THWN, or Type XHHW-2 No. 14 AWG minimum, or as recommended by the respective equipment manufacturer, color coded and tagged with wire markers for easy identification.

THWN Cable shall comply with Underwriters' Laboratories Standard UL-83 and Federal Specification A-A-59544. Conductor shall be soft-annealed, uncoated Copper and shall comply with ASTM B3 and B8. Insulation shall be rated for 600-Volt. Insulation shall be polyvinyl-chloride conforming to Underwriters' Laboratories requirements for Type THW. The outer covering shall be nylon-conforming to Underwriters' Laboratories for type THHN or THWN. Cable shall be UL-listed and marked THWN-2.

XHHW Cable shall be UL-listed as Type XHHW-2 per UL Standard 44. Cable shall also conform to ICEA S-95-658/NEMA WC70 and Federal Specification A-A-59544. Conductors shall be Class B stranded, annealed, uncoated Copper per UL Standard 44. Insulation shall be rated for 600-Volt. Insulation shall be cross-linked polyethylene complying with the physical and electrical requirements of UL Standard 44 for Type XHHW-2. XHHW wire may be used in place of THWN wire for all applications.

The control wiring between the keypad access control unit and the gate operator shall include a #12 AWG THWN or XHHW-2 copper conductor with green colored insulation equipment ground wire.

Provide 1-inch Galvanized Rigid Steel conduit for control and power wiring from the keypad access control unit to the gate operator. Interface to existing conduits where applicable. Adjust conduit sizes to accommodate existing site conditions where applicable.

800578-2.4 GALVANIZED RIGID STEEL CONDUIT. Galvanized rigid steel conduit (GRSC) shall be heavy wall hot dipped galvanized steel pipe bearing the UL label and conforming to UL-6 and ANSI Specification C80.1. Couplings, connectors, and fittings for rigid steel conduit shall be threaded galvanized steel or galvanized malleable iron specifically designed and manufactured for the purpose. All fittings shall be threaded type. Fittings shall conform to ANSI C80.4. Set screw type fittings are not acceptable. Steel used to manufacture conduits shall be 100 percent domestic steel. Contractor shall provide certification that the respective steel conduits used on this project are manufactured from 100 percent domestic steel. **Existing conduit may be reused in place where determine suitable for use.** 

<u>800578-2.5 CONCRETE</u>. Concrete for use with the keypad access control unit and bollards and/or associated equipment shall conform to Item 610 Portland Cement Concrete of the Standard Specifications for Construction of Airports. Concrete shall be 4,000 psi at 28 days.

<u>800578-2.6 BOLLARDS</u>. Bollards shall be minimum 4-inch O. D. Schedule 40 Steel pipe as detailed on the Plans. Steel for bollard pipes shall be produced from 100 percent domestic steel.

800578-2.7 LEGEND PLATES. Legend plates shall be required for all safety switches, individual circuit breakers, disconnects, panelboards, load centers, control panels, etc. Legend plates shall be provided to identify the equipment controlled, the power source, the voltage system, and the function of each device. Legend plates shall be weatherproof and abrasion resistant phenolic material. Lettering shall be black letters on a white background, unless otherwise noted.

<u>800578-2.8 SIGNAGE</u>. The gate shall include signage as detailed on the Plans. Note: UL requires that all installation must have warning signs placed in plain view on both sides of the gate to warn pedestrians of the dangers of motorized gate systems. Furnish and install warning signs at gate exterior face and interior face noting "WARNING – MOVING GATE CAN CAUSE SERIOUS INJURY OR DEATH". Signage shall be secured to the gate with corrosion resistant metal connectors. Additional signage shall be provided as detailed on the Plans and/or as specified herein.

800578-2.9 ARC FLASH HAZARD WARNING. Furnish and install weatherproof warning label for each meter socket, enclosed circuit breaker, disconnect switch, switchboard, cutout, panelboard, load center, motor control center, and control panel to warn persons of potential electric arc flash hazards, per the requirements of NEC 110.16 "Arc-Flash Hazard Warning". Labels shall also conform to ANSI Z535.4-2002 "American National Standard for Product Safety Signs and Labels". NEC 110.16 requires that switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers that are likely to require examination, adjustment, servicing, or maintenance while energized shall be field marked to warn qualified persons of potential arc flash hazards. The markings shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment. This new requirement is intended to help reduce the occurrence of serious injury or death due to arcing faults to those working on or near energized electrical equipment. The warning labels are to indicate to a qualified worker who intends to open the equipment for analysis of work that a serious hazard exists, and that the worker should follow appropriate work practices and wear appropriate personal protective equipment (PPE) for the specific hazard. Labels shall be as detailed on the Plans or shall include at least the following information: "Warning - Potential Arc-Flash Hazards exist while working on this energized equipment. Appropriate PPE Required.

800578-2.10 ARC FLASH RISK LABELS. Provide appropriate labels on electrical equipment in accordance with NFPA 70E "Standard for Electrical Safety in the Workplace", Article 130 Work Involving Electrical Hazards, Part 130.5 Arc Flash Risk Assessment, (H) Equipment Labeling. Where maximum calculated fault current exceeds 25,000 Amps at 240 VAC, contact the Project Engineer for further direction.

## CONSTRUCTION METHODS

<u>800578-3.1 CONTRACTOR QUALIFICATIONS</u>. The contractor responsible for installing the keypad access control unit shall be familiar with and qualified to perform this type of work.

<u>800578-3.2 AIRPORT SECURITY</u>. The Contractor will place temporary fencing (minimum height to match existing fence) across the gate opening whenever the proposed gate cannot be closed at the end of the construction day. Security at the Airport shall be maintained at all times and coordinated with the Airport Director/Manager.

<u>800578-3.3 MATERIALS FURNISHED BY THE CONTRACTOR</u>. All materials used in the work shall meet the requirements of the respective Specifications, and no material shall be used until it has been approved by the Project Engineer by means of shop drawings. All materials not otherwise specifically indicated shall be furnished by the Contractor. All materials furnished by the Contractor shall be new.

<u>800578-3.4 STORAGE OF MATERIALS</u>. Materials shall be so stored as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and they shall be placed under cover. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the Owner or lessee.

800578-3.5 LOCATE EXISTING UTILITIES: The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient or complete. Neither the Owner nor the Engineer assumes any responsibility whatsoever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies for removal or adjustment where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer/Resident Technician shall

also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility. **Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123**. Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

<u>800578-3.6 MANUFACTURER'S DIRECTIONS</u>. Manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer unless herein specified to the contrary. Any installations which void the UL listing, Intertek Testing Services verification/ETL listing, (or other third-party listing), and/or the manufacturer's warranty of a device will not be permitted.

<u>800578-3.7 CUTTING AND PATCHING</u>. The Contractor shall do all necessary cutting and patching of the pavement that may be required by the drawings and Specifications to complete the structure. He shall restore all such cut or patched areas as directed by the Resident Engineer/Resident Technician. Cutting of existing structures that may endanger the work, adjacent property, workmen or the public shall not be done unless approved by the Owner and under his direction. Contractor shall coordinate with the respective surrounding pavement work.

<u>800578-3.8 CLEAN UP</u>. The Contractor shall remove from the Owner's property and from all public and private property, all temporary structures, rubbish, and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials, leaving the site smooth, clean, and true to line and grade.

<u>800578-3.9 WARRANTY PERIOD</u>: Neither the final certificate of payment nor any provision in the contract, not partial or entire use of the improvements embraced in this contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the contract, or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay any damage to other work resulting there from which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner shall give notice of defective materials and work with reasonable promptness. The warranty applies to equipment furnished, as well as to all other work and materials.

<u>800578-3.10 GATE CONTROL EQUIPMENT</u>. Installation of all electrical equipment and all gate control equipment shall be in conformance with the requirements of the NFPA 70- National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and in strict accordance with the requirements of all local authorities having jurisdiction.

800578-3.11 ELECTRICAL GENERAL. The Contractor shall furnish and install all electrical materials necessary for complete and operational installation of the gate operator, as stipulated in the respective item and as shown on the Plans. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the NFPA 70-National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and all other applicable local codes, laws, ordinances, and requirements in force. Electrical equipment shall be installed in conformance with the respective manufacturer's directions and recommendations for the respective application. Any installations which void the UL listing, Intertek Testing Services verification/ETL listing, (or other third-party listing), and/or the manufacturer's warranty of a device will not be permitted.

- A. The Contractor should examine the proposed site to evaluate the complexity of the work.
- B. Contractor shall keep a copy of the latest NEC in force on site at all times during construction for use as a reference.

- C. Contractor shall keep a copy of the Plans, Special Provision Specifications including any addenda, and copies of any change orders on site at all times during construction.
- D. Contractor shall coordinate work and any power outages to buildings located on the airport with the Airport Director/Manager and/or the respective building personnel. Any shutdown of existing systems shall be scheduled with and approved by the Airport Director/Manager prior to shutdown. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures, including, but not limited to, 29 CFR Section 1910.147 The Control of Hazardous Energy (lockout/tagout).
- E. Contractor shall comply with the requirements of FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- F. Contractor shall comply with the applicable requirements of NFPA 70E Standard for Electrical Safety in the Workplace.
- G. Splices in conductors will be allowed only within the specified junction boxes or splice cans. Only splices between loop lead in wires and the Twin Twisted Shielded conductors are approved. Circuit conductors for power wiring shall be continuous from source of power to connected device (from the respective panelboard or load center to the safety switch or disconnecting means at the gate operator).
- H. The Contractor shall be responsible for furnishing and setting all anchor bolts required to install his equipment.
- I. Where concrete mounting pads are required for equipment mounting, the Contractor shall furnish all concreting and form work necessary to complete the installation.
- J. Where electrical equipment is located on damp or wet walls or locations as directed, it shall be "stand-off" mounted ½ in. from the wall in a manner so that the rear of the equipment is freely exposed to the surrounding air. The Resident Engineer/Resident Technician shall approve the method of mounting before equipment is mounted.

800578-3.12 CONDUIT INSTALLATION: Cable in conduit or duct for the gate operator power and/or control shall be buried minimum 18 inches deep below finished grade in turf areas inside the secure area of the Airport. Cable in conduit or duct below roadways and walks shall be buried minimum 24 inches below finished grade. Adjust burial depths where applicable to accommodate site conditions and to avoid interferences. Installation of cable in duct and/or conduit shall conform to Item 108 INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS of the IDOT Division of Aeronautics Standard Specifications for Construction of Airports and as detailed on the Plans. Installation of conduit shall conform to Item 110 INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT of the IDOT Division of Aeronautics Standard Specifications for Construction of Airports, as detailed on the Plans and as specified herein.

- A. All conduit(s) under walks shall be pushed.
- B. Conduit size and fill requirements shall comply with Appendix C, conduit fill tables, of the NEC. It should be noted these are minimum requirements and larger conduit sizes or smaller fill requirements shall be used whenever specified or detailed on the drawings.
- C. Liquid-tight flexible conduit shall be provided as a connection between each motor junction box (or any other piece of equipment subject to movement or vibration) and the rigid conduit system.

- D. Ream conduits only after threads are cut. Cut joints square to butt solidly into couplings. Where necessary to join two pieces of conduit, and it is impossible to use standard couplings, use 3-piece malleable iron conduit coupling. The use of running thread is prohibited. This applies to all rigid conduit installations, underground or otherwise.
- E. Make all joints in steel underground conduit watertight with approved joint compound. Temporarily plug conduit openings to exclude water, concrete, or any foreign materials during construction. Clean conduit runs before pulling in conductors.
- F. A run of conduit between outlet and outlet, between fitting and fitting, or between outlet and fitting shall not contain more than the equivalent of four quarter bends, including bends immediately at an outlet or fitting.
- G. Where conduits enter a box or fitting, provide a steel locknut and an insulated metallic bushing. Use this method to terminate conduit in panels, pull boxes, safety switches, etc.
- H. Provide NEMA four hubs for all conduit entries into enclosures rated NEMA 4, 4X to maintain NEMA 4, 4X rating.
- I. Do not run conduit below or adjacent to water piping.
- J. Run exposed conduits parallel with walls and at right angles to the building lines, not diagonally. Make bends and turns will pull boxes or cadmium plated or hot-dipped galvanized malleable iron fittings and covers.

<u>800578-3.13 GROUNDING REQUIREMENTS</u>: Grounding shall conform to the following as applicable: The Contractor shall furnish and install all grounding shown on the Plans and/or as may be necessary or required to make a complete grounding system as required by the latest National Electrical Code (NFPA 70) in force. The reliability of the grounding system is dependent on careful, proper installation and choice of materials. Improper preparation of surfaces to be joined to make an electrical path, loose joints, or corrosion can introduce impedance that will seriously impair the ability of the ground path to protect personnel and equipment and to absorb transients that can cause noise in communications circuits. The following functions are particularly important to ensure a reliable ground system:

- A. All products associated with the grounding system shall be UL-listed and labeled.
- B. Ground rods shall be UL listed copper-clad steel 3/4-inch nominal diameter by 10 feet long with 10 mils minimum copper coating. Ground rods shall be manufactured in the United States of America from domestic steel.
- C. All bolted or mechanical connections shall be coated with a corrosion preventative/conductive grease and lubricant suitable for electrical connections and grounding connections, before joining; Sanchem Inc. "NO-OX-ID "A-Special" compound, Burndy Penetrox E, or approved equal.
- D. Metallic surfaces to be joined shall be prepared by the removal of all non-conductive material, per 2020 National Electrical Code Article 250-12.
- E. Raceway fittings shall be made up tight to provide a permanent low impedance path for all circuits. Metal conduit terminations in enclosures shall be bonded to the enclosure with UL listed fittings suitable for grounding. Provide grounding bushings with bonding jumpers for all metal conduits entering an enclosure through concentric or eccentric knockouts that are punched or otherwise formed so as to impair the electrical connection to ground. Standard locknuts or bushings shall not be the sole means for bonding where a conduit enters an enclosure through a concentric or eccentric knockout.

- F. All connections, located above grade, between the different types of grounding conductors shall be made using UL-listed double compression crimp type connectors or UL-listed bolted ground connectors. For ground connections to enclosures, cases and frames of electrical equipment not supplied with ground lugs the Contractor shall drill required holes for mounting a bolted ground connector. All bolted ground connectors shall be Burndy, Thomas and Betts, Penn-Union, or approved equal. Tighten connections to comply with tightening torques in UL Standard 486A to assure permanent and effective grounding.
- G. All metal equipment enclosures, conduits, cabinets, boxes, receptacles, motors, etc. shall be bonded to the respective grounding system.
- H. The equipment ground wire from equipment shall not be smaller than allowed by 2020 NEC Table 250-122 "Minimum Size Conductors or Grounding Raceway and Equipment." When conductors are adjusted in size to compensate for voltage drop, equipment-grounding conductors shall be adjusted proportionately according to circular mil area. All equipment ground wires shall be Copper either bare or insulated green in color. Where the equipment grounding conductors are insulated, they shall be identified by the color green and shall be the same insulation type as the phase conductors.
- I. Bond the main electrical service neutral to ground at the main service disconnect. Bond the service neutral to ground at one location only per the National Electrical Code. A grounding connection shall not be made to any neutral circuit conductor on the load side of the service disconnecting means, except as permitted by 2020 NEC 250-24.
- J. All exterior metal conduit, where not electrically continuous because of manholes, handholes, non-metallic junction boxes, etc., shall be bonded to all other metal conduit in the respective duct run, and at each end, with a Copper bonding jumper sized in conformance with 2020 NEC 250-102. Where metal conduits terminate in an enclosure (such as a motor control center, switchboard, etc.) where there is not electrical continuity with the conduit and the respective enclosure, provide a bonding jumper from the respective enclosure ground bus to the conduit sized per 2020 NEC 250-102.
- K. Install grounding electrode conductors and/or individual ground conductors in Schedule 80 PVC conduit. Where grounding electrode conductors or individual ground conductors are run in PVC conduit, Do Not completely encircle conduit with ferrous and/or magnetic materials. Use non-metallic reinforced fiberglass strut support. Where metal conduit clamps are installed, use nylon bolts, nuts, washers and spacers to interrupt a complete metallic path from encircling the conduit.

<u>800578-3.14 INSTALLATION OF BOLLARDS</u>: Bollards shall be installed as detailed on the Plans. The Installation of the keypad access control unit and bollards shall include a concrete pad as detailed on the Plans. Concrete shall conform to the requirements of Item 610 Structural Portland Cement Concrete of the Standard Specifications for Construction of Airports.

<u>800578-3.15 TESTING</u>: The Contractor shall make at his own expense any tests of equipment, wiring, or insulation deemed necessary by any inspection department or by the Owner's Representative and/or Resident Engineer/Resident Technician and shall provide all apparatus, meters, materials, and labor required to make such tests. **All tests shall be conducted in the presence of the Owner and the Resident Engineer/Resident Technician.** 

Contractor shall test the existing gate operator and keypad access unit system in the presence of the Airport Manager/Director and/or Resident Engineer/Resident Technician to confirm proper operation prior to removal, adjustment, modifications, and work affecting the electric slide gate installation.

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

- A. That all power and control circuits are continuous and free from short circuits.
- B. That all circuits are free from unspecified grounds.
- C. That the insulation resistance to ground of all ungrounded conductors of multiple circuits is not less than 50 megohms.
- D. That all circuits are properly connected in accordance with applicable wiring diagrams.
- E. Test and adjust keypad access control unit, gate operator, and other operable components. Confirm that all circuits operate properly.
- F. Verify keypad access control unit includes a ground wire to it. Record size and type.
- G. All tests shall be recorded, stating the test results, date, and field conditions.

## METHOD OF MEASUREMENT

<u>800578-4.1</u> The quantity of this item to be furnished and installed shall be measured for payment as a unit price per each for the removal of the existing card reader/access control unit and replacing it with a new keypad access control unit in accordance with these Specifications and at the location shown on the Construction Plans. This item will include all labor, equipment, and materials required to put the keypad access control unit into proper working order. This item shall also include removal of the card reader access control unit and hardware, furnishing and installing a new keypad access control unit, mounting pedestal, foundation, concrete work, bollards, conduits, wiring, labeling, labor, coordination, tools, connections, interface to the respective gate operator, training, testing, startup, and all incidentals necessary for the completion of the access control system for satisfactory operation. All concrete work associated with the keypad access control unit and bollards will be considered incidental to this item and no additional compensation will be allowed.

All lockout/tagout procedures to ensure and maintain safety of personnel will be considered incidental to the respective item of work for which it applies, and no additional compensation will be allowed.

## BASIS OF PAYMENT

<u>800578-5.1</u> Payment will be made at the contract unit price per each for the removal of the existing card reader and replacement with the keypad access control unit and bollards and shall be full compensation for all materials, labor, and equipment required to perform the specified work and testing the system for satisfactory operation, and no additional compensation will be allowed.

Payment will be made under:

Item AR800578 Card Reader/Keypad Pedestal – per EACH

# DIVISION V TURFING ITEM 901

SEEDING

## Revise Item 901 of the Standard Specifications as follows:

## MATERIALS

<u>901 2.1</u> <u>SEED</u>. Delete the seed mixture listed in the table and replace with the following:

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

Delete the third and fourth Paragraphs.

Add the following:

"Planting times shall be between August 20 and October 20. If fall planting is not possible, the mixture may be planted between March 15 and May 15. Seeding between June 1 and August 15 will not be permitted. If planted in the spring, the Contractor shall furnish additional measures beyond that otherwise required in these Special Provisions to prevent weed growth as recommended by a registered nurseryman at no additional cost to the Contract.

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

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

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

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

- <u>901 2.2</u> <u>LIME.</u> Replace this Section with the following:
  - "901-2.2 SOIL TESTING AND MODIFICATION. The Contractor shall perform a soil analysis of all on-site and off-site topsoil types at be used in the seedbed. The pH of the topsoil shall be between 5.5 pH and 6.5 pH. Should the pH be less than 5.5, the Contractor shall add agricultural lime of a type and source approved by IDOT, at application rates appropriate to achieve the required pH. Should the pH be greater than 6.5, the Contractor shall add sulfur of a type and source approved by IDOT, at rates appropriate to achieve the required pH. The Contractor shall furnish the test reports and proposed soil modifications for approval to the Engineer prior to any soil modification. All soil testing and modification shall be incidental to seeding."
- <u>901 2.3</u> <u>FERTILIZER</u>. Delete this Section.

#### **CONSTRUCTION METHODS**

<u>901 3.1</u> ADVANCE PREPARATION AND CLEANUP. Add the following as the first Paragraph:

"ALL perennial weeds and spontaneous vegetation shall be eliminated within the seedbed prior to seeding, using mowing/raking and herbicide. Herbicides used for weed removal shall be as recommended by the seed producer. Based upon actual conditions, it may be necessary for this weed removal to begin up to eight weeks before planting. When all vegetation is dead, the soil shall be tilled and otherwise prepared for planting as specified herein. Weed removal prior to acceptance of the lawn shall be incidental to the Contract."

Add the following sentence to the second Paragraph:

"Soil shall be prepared to have clods no more than 12 inches on any side to ensure adequate seed soil contact."

Add the following paragraphs:

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

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

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

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

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

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

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

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

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

#### <u>901 3.4</u> <u>MAINTENANCE OF SEEDED AREAS</u>. Add the following:

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

#### BASIS OF PAYMENT

<u>901 5.1</u> Add the following:

"Payment will be made under:

"Item AR901510 Seeding - per acre."

## ITEM 908

#### MULCHING

Revise Item 908 of the Standard Specifications as follows:

## **DESCRIPTION**

#### <u>908 1.1</u> Add the following:

"Material used for mulching shall be Heavy Duty hydraulic mulch, applied and secured as otherwise provided in the Standard Specifications, regardless of the grade slopes to be mulched."

#### MATERIALS

#### <u>908-2.1</u> MULCH MATERIAL. Delete the first Paragraph and replace with the following:

"Material used for mulching shall be Heavy Duty hydraulic mulch, as specified herein, regardless of the grade slopes to be mulched."

Delete Subparagraphs A, B and C.

Add the following to Paragraph D., Hydraulic Mulch:

"Material used for mulching shall be Heavy Duty hydraulic mulch, as specified herein, regardless of the grade slopes to be mulched."

#### CONSTRUCTION METHODS

#### <u>908 3.1</u> <u>MULCHING.</u> Add the following:

"Hydraulic mulch shall be applied as specified herein for Heavy Duty applications."

#### **BASIS OF PAYMENT**

<u>908-5.1</u> Add the following:

"Payment will be made under:

"Item AR908510 Mulching - per acre."

## DIVISION VII TESTING ITEM 611 COMPACTION CONTROL TESTS

The Work shall be provided in accordance with Item 611 of the Standard Specifications.