

# 03A

**Letting June 16, 2023**

## **Notice to Bidders, Specifications and Proposal**



**Illinois Department  
of Transportation**

**Springfield, Illinois 62764**

**Contract No. WI060  
Veterans Airport of Southern Illinois  
Marion, Illinois  
Williamson County  
Illinois Project No. MWA-5048  
AIP Project No. N/A**



## NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on June 16, 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. WI060  
Veterans Airport of Southern Illinois  
Marion, Illinois  
Williamson County  
Illinois Project No. MWA-5048  
AIP Project No. N/A**

**Extend Fixed Base Operator Access Road.**

**For engineering information, please contact Matt Wiggins of Horner & Shifrin, Inc. at 618.992.2140.**

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 5.0%.

7. **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 April 21, 2023, and the Construction Plans dated April 21, 2023 as approved by the Illinois Department of Transportation, Division of Aeronautics.

**9. 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 90 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

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

Area Covered (Statewide)

Goals for Women apply nationwide.

GOAL	Goal (percent)
Female Utilization	6.9

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.

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

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

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;
  - (c) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
  - (d) "Minority" includes:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000. the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction Contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - (a) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working as such sites or in such facilities.
  - (b) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
  - (c) Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractors may have taken.
  - (d) Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - (e) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
  - (f) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreements; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
  - (g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
  - (h) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
  - (i) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
  - (j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
  - (k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

- (l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
  - (m) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
  - (n) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - (o) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractors and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.
  - (p) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
  9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specified minority group of women is underutilized).
  10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
  11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
  12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
  13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
  14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy his requirement, Contractors shall not be required to maintain separate records.
  15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).



State of Illinois  
Department of Transportation

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

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

1. General

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

2. Equal Employment Opportunity Policy

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

3. Equal Employment Opportunity Officer

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

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. Unions

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

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

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

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

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

10. Records and Reports

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

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

State of Illinois  
Department of Transportation

SPECIAL PROVISION  
FOR  
REQUIRED PROVISIONS – STATE CONTRACTS

Effective: April 1 1965  
Revised: January 1, 2017

I. SELECTION OF LABOR

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

EMPLOYMENT OF ILLINOIS WORKERS DURING PERIODS OF  
EXCESSIVE UNEMPLOYMENT

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

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

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

II. EQUAL EMPLOYMENT OPPORTUNITY

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

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

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (in accordance with the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.
4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
5. That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
6. That it will permit access to all relevant books, records, accounts and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

III. SUBLETTING OR ASSIGNING THE CONTRACT

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

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

All requests to subcontract shall contain a certification that the subcontract agreement exists in writing and physically contains the required Federal and State Equal Employment Opportunity provisions and Labor compliance provisions, including the contract minimum wage requirements. The Contractor shall permit Department or Federal representatives to examine the subcontract agreements upon notice.
4. Any items that have been selected as "Specialty Items" for the contract are listed as such in the Special Provisions, bid schedule, or elsewhere in the contract documents.
5. No portion of the contract shall be sublet, assigned or otherwise disposed of, except with the written consent of the State highway department contracting officer, or his/her authorized representative, and such consent when given shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract. Request for permission to sublet, assign or otherwise dispose of any portion of the contract shall be in writing and accompanied by (a) a showing that the organization which will perform the work is particularly experienced and equipped for such work, and (b) an assurance by the Contractor that the labor standards provisions set forth in this contract shall apply to labor performed on all work encompassed by the request.

#### IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

1. **Prevailing Wages.** All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions. Current wage rate information shall be obtained by visiting the Department of Labor website at <http://www.illinois.gov/idol/Pages/default.aspx>. 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 <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx>. 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 <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

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

#### V. NONSEGREGATED FACILITIES

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

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

State of Illinois  
Department of Transportation

SPECIAL PROVISION  
FOR  
SECTION 80 PROSECUTION AND PROGRESS

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports, adopted 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	
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 shall not be entitled to additional payment in consideration of the offset.

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

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

90-10 TRUST AGREEMENT OPTION.

DELETE: The entire section.



## STATE OF ILLINOIS

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### 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: Extend Fixed Base Operator Access Road at Veterans Airport of Southern Illinois, Contract WI060, 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 90 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

Diesel Vehicle Emissions Control. 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 non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

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

#### **SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

Effective: September 1, 2000

Revised: March 2, 2019

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

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

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

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

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

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

**CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR.** This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 5.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

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

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

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

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

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

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

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

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

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

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

- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

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

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

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

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

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

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

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

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

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

(e) DBE as a material supplier:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS**

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

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

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

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

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

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

**SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS**

Effective: November 2, 2017

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

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

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

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

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

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

### **SPECIAL PROVISION FOR SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)**

Effective: April 2, 2018

#### Subcontractor and Disadvantaged Business Enterprise Payment Reporting

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

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

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

### **SPECIAL PROVISION FOR NPDES CERTIFICATION**

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

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

The Airport Owner or its Agent will:

- 1) prepare, sign and submit the Notice of Intent (NOI)
- 2) conduct site inspections and complete and file the inspection reports
- 3) submit Incidence of Non-Compliance (ION) forms
- 4) submit Notice of Termination (NOT) form

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

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

**SPECIAL PROVISIONS**  
**FOR**  
**EXTEND FIXED BASE OPERATOR ACCESS ROAD**

**VETERANS AIRPORT OF SOUTHERN ILLINOIS**  
**MARION – HERRIN, WILLIAMSON COUNTY, ILLINOIS**

ILLINOIS PROJECT NO.: MWA-5048  
LETTING CONTRACT NO.: WI060  
LETTING ITEM NO.: 03A

April 21, 2023



*W. Brian Ziegler  
4/24/23  
Exp 11/30/23*

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## **GENERAL**

The “Illinois Standard Specifications for Construction of Airports” dated April 1, 2012, State of Illinois Department of Transportation, Division of Aeronautics shall govern the project except as otherwise noted in these Special Provisions. In cases of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern. When noted within the Special Provisions, the “Illinois Department of Transportation Standard Specifications for Road and Bridge Construction”, adopted January 1, 2022, with the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids may apply.

The “2012 Standard Specifications for Construction of Airports” are incorporated by reference and are available online at the below link under Aeronautics / Design / Manuals.

<https://idot.illinois.gov/doing-business/procurements/construction-services/contractors-resources/index>

## **DESCRIPTION OF WORK**

The proposed improvements consist of construction of a new Fixed Base Operator (FBO) access road at the Veterans Airport of Southern Illinois. The project consist of, but is not limited to, portland cement concrete (PCC) pavement, construction of sidewalks, borrow excavation, aggregate subbase, reinforced concrete pipe culverts, street lighting, and stairway and sidewalk construction. This new access road will be built entirely outside of the airport security fence and Air Operations Area (AOA).

## **IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA**

The following Aeronautics Policy Memoranda’s are incorporated by reference.

- |        |   |
|--------|---|
| 90-01  | Resampling and Retesting of PCC Pavement  |
| 22-1   | Accepted Cement Types   |
| 87-3   | Mix Design, Test Batch, Quality Control, and Acceptance Testing of PCC Pavement Mixture |
| 97-2   | Pavement Marking Paint and Glass Beads Acceptance                                       |
| 2001-1 | Requirements for Cold Weather Concreting  |

**DIVISION I - GENERAL PROVISIONS**

**SECTION 40. SCOPE OF WORK**

**40-05 MAINTENANCE OF TRAFFIC**

**Add the following:**

Lane closure required during construction shall require flaggers in accordance with IDOT Road Standards. At the end of each day's construction operations, provisions shall be made for two-way traffic maintained until construction commences. The Contractor shall submit to the Resident Engineer for approval a traffic control plan which details locations and methods for lane closures.

The Contractor shall be responsible for cleaning and maintaining all haul roads used to access the project site. This shall include use of a vacuum truck or street sweeper on all pavements. The cost thereof shall not be paid for separately but shall be considered incidental to the contract unit prices.

**DIVISION II – PAVING CONSTRUCTION DETAILS**

**ITEM 150510 - ENGINEER'S FIELD OFFICE**

**150-2.1**

**REVISE the following:**

- C. One free standing four drawer legal size file cabinets with lock and an Underwriters' Laboratories insulated file device 350 degrees one hour rating.
- G. One electric water cooler dispenser or bottled water with water supply as needed.
- H. Not required
- I. One dry process copy machine (including maintenance and operating supplies) capable of both collating and reproducing prints up to a tabloid size (11" x 17") and capable of copying field books.
- J. Not required
- K. Not required

**ITEM 501507 - 7" PCC PAVEMENT**

**501-5.1**

**DELETE the following:**

The Test Batch shall be paid at the contract unit price per each, which price shall include all materials, equipment, labor and engineering necessary to complete this section.

**ADD the following:**

The Test Batch shall be paid for by the Contractor.

**DIVISION IV – DRAINAGE**

**ITEM 701230 - 701530 - CMP & RCP**

**701-5.1**

**DELETE the following:**

Backfill required for pipe installed under proposed or future pavements will not be paid for separately, but shall be considered incidental to the pipe.

**ADD the following:**

Backfill required for pipe installed under proposed or future pavements will be paid for separately under item AR701830 TRENCH BACKFILL.

**DIVISION V – TURFING**

**ITEM 901510 - SEEDING**

**901-2.1**

**DELETE the following:**

The seed mixtures shall be as follows:

Seeds	Lbs./Acre
Inferno Tall Fescue or Tarheel II Fescue	60
Annual Ryegrass	20
Audubon Red Fescue	30

Rescue 911 Hard Fescue	30
Endophytic Fescue Cultivar	60

**ADD the following:**

Seed mixture shall be Class 2A Salt Tolerant Roadside Mixture meeting the requirements of Article 250 of the Illinois Department of Transportation Standard Specification for Road and Bridge Construction, Adopted January 1, 2022.

**REVISE the following:**

Seed mixes may be planted March 1 to June 1 and August 1 to November 15, provided that the ground is not frozen or in any way detrimental to the seed.

**ROADWAY LIGHTING SPECIFICATIONS**

**ITEM 801359 - ROADWAY LIGHTING**

DESCRIPTION

**801-1.1** This item shall consist of furnishing all materials and labor for installation of roadway lighting as shown on the plans. It shall consist of installation of roadway lighting on concrete foundations, trenching/boring of conduit with cable, handhole installation and all necessary electrical connections to provide power for the roadway lighting.

**801-2.2** This item shall be constructed with the following MasterSpecs and industry standard Specifications Divisions and Sections.

**SECTION 26 05 03**

EQUIPMENT WIRING CONNECTIONS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes electrical connections to equipment.
- B. Related Sections:
  - 1. Section 26 05 19 - Low-Voltage Electrical Power Conductors and Cables.
  - 2. Section 26 05 33 - Raceway and Boxes for Electrical Systems.

1.2 REFERENCES

- A. National Electrical Manufacturers Association:

1. NEMA WD 1 - General Requirements for Wiring Devices.
2. NEMA WD 6 - Wiring Devices-Dimensional Requirements.

### 1.3 ABBREVIATIONS

- A. OCPD; Overcurrent protection device.

### 1.4 SUBMITTALS

- A. Division 1 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit wiring device manufacturer's catalog information showing dimensions, configuration, and construction.
- C. Manufacturer's installation instructions.

### 1.5 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution and Closeout Requirements: Submittal procedures.
- B. Project Record Documents: Record actual locations, sizes, and configurations of equipment connections.

### 1.6 COORDINATION

- A. Division 1 - Administrative Requirements: Coordination and project conditions.
- B. Obtain and review shop drawings, product data, manufacturer's wiring diagrams, and manufacturer's instructions for equipment furnished under other sections.
- C. Determine connection locations and requirements.
- D. Sequence rough-in of electrical connections to coordinate with installation of equipment.
- E. Sequence electrical connections to coordinate with start-up of equipment.

PART 2 PRODUCTS - not used

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Division 1 - Administrative Requirements: Coordination and project conditions.
- B. Verify equipment is ready for electrical connection, for wiring, and to be energized.

#### 3.2 EXISTING WORK

- A. Extend existing equipment connections using materials and methods compatible with existing electrical installations, or as specified.



### 3.3 INSTALLATION

- A. Make electrical connections.
- B. Make conduit connections to equipment using flexible conduit. Use liquid-tight flexible conduit with watertight connectors in damp or wet locations.
- C. Connect heat producing equipment using wire and cable with insulation suitable for temperatures encountered.
- D. Install receptacle outlet to accommodate connection with attachment plug.
- E. Install cord and cap for field-supplied attachment plug.
- F. Install suitable strain-relief clamps and fittings for cord connections at outlet boxes and equipment connection boxes.
- G. Install disconnect switches, controllers, control stations, and control devices to complete equipment wiring requirements.
- H. Install terminal block jumpers to complete equipment wiring requirements.
- I. Install interconnecting conduit and wiring between devices and equipment to complete equipment wiring requirements.
  - 1. No branch circuits shall share a common grounded (neutral) conductor.
  - 2. Branch circuits routed in a common conduit or raceway and sharing a bonding (fault-current) conductor shall have that bonding conductor sized per NEC requirements for the largest circuit.

### 3.4 ADJUSTING

- A. Division 1 - Execution and Closeout Requirements: Testing, adjusting, and balancing.
- B. Cooperate with utilization equipment installers and field service personnel during checkout and starting of equipment to allow testing and balancing and other startup operations. Provide personnel to operate electrical system and checkout wiring connection components and configurations.

### 3.5 EQUIPMENT CONNECTION SCHEDULE

- A. Direct-Connected Equipment:
  - 1. Electrical Connection:
    - a. Outdoor: Liquid-tight flexible conduit where final connection is exposed. Where concealed, ensure splices are sealed and all connections are waterproof.
  - 2. Voltage, circuit ampacity, and OCPD as required by factory nameplate of installed equipment.

## SECTION 26 05 19

### LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section includes wire and cable, conduit and tubing, boxes, wiring connectors, and connections.
- B. Related Sections:
  - 1. Section 26 05 53 - Identification for Electrical Systems: Product requirements for wire identification.
  - 2. Division 31 – Trenching & Backfill requirements.

##### 1.2 REFERENCES

- A. International Electrical Testing Association:
  - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- B. National Fire Protection Association:
  - 1. NFPA 70 - National Electrical Code.

##### 1.3 SYSTEM DESCRIPTION

- A. Wiring Products:
  - 1. Stranded conductor for feeders and branch circuits.
  - 2. Stranded conductors for control circuits.
  - 3. Conductor not smaller than 12 AWG for final branch runouts to power and lighting circuits.
  - 4. 10 AWG conductors for 20 ampere, 277/480 volt branch circuits longer than 200 feet.
  - 5. 8 AWG conductors for 20 ampere, 277/480 volt branch circuits longer than 400 feet.
- B. Wiring Methods:
  - 1. Dry Interior Locations: Building wire, Type THHN/THWN insulation, in raceway.
  - 2. Wet or Damp Interior Locations: Building wire, Type THHN/THWN/XHHW insulation, in raceway, or metal clad cable.
  - 3. Exterior Locations: Building wire, Type THHN/THWN/XHHW, in raceway, liquid-tight metal clad cable.
  - 4. Underground Locations: Building wire, Type THHN/THWN/XHHW or direct burial insulation, in raceway.

##### 1.4 DESIGN REQUIREMENTS

- A. Conductor sizes are based on copper; 75C for service/feed conductors, 60C per NEC for all equipment and branch loads 100A and below.
  - 1. When aluminum conductor is substituted by Contractor for copper conductor; Contractor shall size conductors to match circuit requirements for conductor ampacity and voltage drop, and resize conduit to match and to ensure equivalent spare raceway available cross-sectional area.
  - 2. Aluminum substitution only allowed with Owner consideration and Engineer pre-approval.
- B. Raceway and boxes are located as indicated on Drawings, and at other locations where required for splices, taps, wire pulling, equipment connections, and compliance with regulatory requirements.
- C. Raceway Components:
  - 1. Underground More than 5 feet outside Foundation Wall: Provide thin wall non-metallic conduit rated for direct burial.
    - a. Provide cast metal or nonmetallic vault with secure, sealed access cover with molded label to match service.
  - 2. Underground Within 5 feet from Foundation Wall: Provide thin wall non-metallic conduit rated for direct burial.
  - 3. Outdoor Locations, Above Grade: Provide rigid steel conduit, threaded fittings. Provide cast metal outlet, pull, and junction boxes.
  - 4. In Slab Above Grade: Provide electrical metallic tubing or conduit. Provide sheet metal boxes.
  - 5. Wet and Damp Locations: Provide thick wall non-metallic conduit. Provide cast metal or nonmetallic outlet, junction, and pull boxes to match raceway used.
  - 6. Concealed Dry Locations: Provide electrical metallic tubing conduit. Provide sheet-metal boxes. Provide flush mounting outlet box in finished areas. Provide hinged enclosure for large pull boxes.
  - 7. Exposed Dry Locations: Provide intermediate metal conduit. Provide sheet-metal boxes. Provide flush mounting outlet box in finished areas. Provide hinged enclosure for large pull boxes.
  - 8. Lighting Connections: Flexible metal conduit sized for conductors. Provide sheet-metal boxes. Provide hinged enclosure for large pull boxes

A. Minimum Raceway Size: 3/4 inch unless otherwise specified.

## 1.5 QUALITY ASSURANCE

- A. Provide wiring materials located in plenums with peak optical density not greater than 0.5, average optical density not greater than 0.15, and flame spread not greater than 5 feet (1.5 m) when tested in accordance with NFPA 262.

## 1.6 COORDINATION

- A. Division 1 - Administrative Requirements: Requirements for coordination.
- B. Where wire and cable destination is indicated and routing is not shown,

determine routing and lengths required.

## PART 2 PRODUCTS

### 2.1 BUILDING WIRE

- A. Product Description: Single conductor insulated wire.
- B. Conductor:
  - 1. Equipment or branch conductors: Copper unless otherwise pre-approved.
- C. Insulation Voltage Rating: 600 volts.
- D. Insulation and Terminal Temperature Rating:
  - 1. 60°C for all branch and equipment circuits less than 100 Amp capacity.
  - 2. 75°C for all other circuits unless otherwise noted.

### 2.2 METAL CLAD CABLE

- A. Conductor: Copper.
- B. Insulation Voltage Rating: 600 volts.
- C. Insulation Temperature Rating: 75 degrees C.
- D. Armor Material: Steel.
- E. Armor Design: Interlocked metal tape or Corrugated tube.
- F. Jacket: Where required by application.

### 2.3 SURFACE METAL RACEWAY

- A. Product Description: Sheet metal channel with fitted cover, suitable for use as surface metal raceway, with manufacturer's standard enamel finish. Furnish manufacturer's standard accessories; match finish on raceway.

### 2.4 WIRING CONNECTORS

- A. Permitted types:
  - 1. Split Bolt Connectors
  - 2. Solderless Pressure Connectors
  - 3. Spring Wire Connectors
  - 4. Compression Connectors
- B. Use connector type listed for the application.

### 2.5 TERMINATIONS

- A. Terminal Lugs for Wires 6 AWG and Smaller: Solderless, compression type copper.
- B. Lugs for Wires 4 AWG and Larger: Color keyed, compression type copper, with insulating sealing collars.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Division 1 - Administrative Requirements: Coordination and project conditions.
- B. Verify interior of building has been protected from weather.
- C. Verify mechanical work likely to damage wire and cable has been completed.
- D. Verify raceway installation is complete and supported.

### 3.2 PREPARATION

- A. Completely and thoroughly swab raceway before installing wire.

### 3.3 INSTALLATION

- A. Route raceway and cable to meet Project conditions.
- B. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- C. Set wall mounted boxes at elevations to accommodate mounting heights indicated.
  - 1. Adjust box location up to 10 feet prior to rough-in when required to accommodate intended purpose.
- D. Identify [and color code] wire and cable under provisions of Section 26 05 53. Identify each conductor with its circuit number or other designation indicated.
- E. Special Techniques--Building Wire in Raceway:
  - 1. Pull conductors into raceway at same time.
  - 2. Install building wire 4 AWG and larger with pulling equipment.
- F. Special Techniques - Wiring Connections:
  - 1. Clean conductor surfaces before installing lugs and connectors.
  - 2. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
  - 3. Tape uninsulated conductors and connectors with electrical tape to 150 percent of insulation rating of conductor.
  - 4. Install split bolt connectors for copper conductor splices and taps, 6 AWG and larger.
  - 5. Install solderless pressure connectors with insulating covers for copper conductor splices and taps, 8 AWG and smaller.
  - 6. Install insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.
  - 7. Terminate aluminum conductors with tin-plated, aluminum-bodied compression connectors only. Fill with anti-oxidant compound before installing conductor.
  - 8. Install suitable reducing connectors or mechanical connector adaptors for connecting aluminum conductors to copper conductors.
- G. Install stranded conductors for branch circuits 10 AWG and smaller. Install crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under screws.

- H. Install terminal lugs on ends of 600-volt wires unless lugs are furnished on connected device, such as circuit breakers.
- I. Size lugs in accordance with manufacturer's recommendations terminating wire sizes. Install 2- hole type lugs to connect wires 4 AWG and larger to copper bus bars.
- J. For terminal lugs fastened together such as on motors, transformers, and other apparatus, or when space between studs is small enough that lugs can turn and touch each other, insulate for dielectric strength of 2-1/2 times normal potential of circuit.

### 3.4 WIRE COLOR

- A. Where not otherwise stated:
  - 1. For ungrounded current carrying conductors of wire sizes 10 AWG and smaller, install wire with insulation of the colors below. For wire sizes 8 AWG and larger, identify wire either with insulation of these colors or equivalently colored tape at terminals, splices and boxes, in accordance with the following:
    - a. 277/480V/3PH - brown, yellow, (orange or purple).
  - 2. For Grounded (neutral) current carrying conductors of wire sizes 10 AWG and smaller, install wire with insulation of the colors below. For wire sizes 8 AWG and larger, identify wire either with insulation of these colors or equivalently colored tape at terminals, splices and boxes, in accordance with the following:
    - a. 277/480V/3PH - Gray.
    - b. When two or more neutrals are located in one conduit, individually identify each with proper circuit number or equivalent NEC-compliant method.
    - c. No branch circuits shall share a common grounded (neutral) conductor.
- B. Branch Circuit Conductors: Install three or four wire home runs with each phase uniquely color coded.
- C. Feeder Circuit Conductors: Uniquely color code each phase.
- D. Bonding (fault current) Conductors:
  - 1. For 6 AWG and smaller: Green.
  - 2. For 4 AWG and larger: Identify with green tape at both ends and visible points including junction boxes.

## **SECTION 26 05 26**

### GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Wire.
  - 2. Mechanical connectors.
  - 3. Exothermic connections.
- B. Related Sections:
  - 1. Division 3 - Concrete Reinforcing: Bonding or welding bars when reinforcing steel is used for electrodes.

## 1.2 REFERENCES

- A. Institute of Electrical and Electronics Engineers:
  - 1. IEEE 142 - Recommended Practice for Grounding of Industrial and Commercial Power Systems.
  - 2. IEEE 1100 - Recommended Practice for Powering and Grounding Electronic Equipment.
- B. International Electrical Testing Association:
  - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- C. National Fire Protection Association:
  - 1. NFPA 70 - National Electrical Code.

## 1.3 SYSTEM DESCRIPTION

- A. Grounding systems use the following elements as grounding electrodes:
  - 1. Concrete-encased electrode.
  - 2. Existing service Grounding Electrode Conductor network.

## 1.4 SUBMITTALS

- A. Division 1 - Submittal Procedures: Requirements for submittals.

## 1.5 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Record actual locations of connection to service GEC.

## 1.6 QUALITY ASSURANCE

- A. Provide grounding materials conforming to requirements of NEC, IEEE 142, and UL labeled.

## 1.7 PRE-INSTALLATION MEETINGS

- A. Division 1 - Administrative Requirements: Pre-installation meeting.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Division 1 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Accept materials on site in original factory packaging, labeled with manufacturer's identification.
- C. Protect from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original packaging.
- D. Do not deliver items to project before time of installation. Limit shipment of bulk and multiple-use materials to quantities needed for immediate installation.

1.9 COORDINATION

- A. Division 1 - Administrative Requirements: Requirements for coordination.
- B. Complete grounding and bonding of reinforcing steel prior to concrete placement.

PART 2 PRODUCTS

2.1 WIRE

- A. Material: Stranded or solid Copper.
- B. Foundation Electrodes: Minimum 4 AWG.
- C. Bonding Conductor: Copper conductor, bare or insulated (green), sized for circuit per NEC.
- D. Equipment Grounding conductors with all feeders and branch circuits shall be insulated, sized for circuit per NEC.

2.2 MECHANICAL CONNECTORS

- A. Manufacturers:
  - 1. Erico, Inc.
  - 2. ILSCO Corporation.
  - 3. O-Z Gedney Co.
  - 4. Panduit
  - 5. Thomas & Betts, Electrical.
  - 6. Substitutions: Preapproval prior to bid per Division 1 - Product Requirements.
- B. Description: Bronze connectors, suitable for grounding and bonding applications, in configurations required for particular installation.

2.3 EXOTHERMIC CONNECTIONS

- A. Manufacturers:
  - 1. Burndy
  - 2. Copperweld, Inc.



3. ILSCO Corporation
  4. O-Z Gedney Co.
  5. Thomas & Betts, Electrical
  6. Substitutions: Preapproval prior to bid per Division 1 - Product Requirements.
- B. Product Description: IEEE Std 837-2002 compliant; Exothermic materials, accessories, and tools for preparing and making permanent field connections between grounding system components below grade.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Division 1 - Administrative Requirements: Verification of existing conditions before starting work.

#### 3.2 PREPARATION

- A. Remove paint, rust, mill oils, surface contaminants at connection points.

#### 3.3 EXISTING WORK

- A. Modify existing grounding system to maintain continuity to accommodate work.
- B. Extend existing grounding system using materials and methods compatible with existing electrical installations, or as specified.

#### 3.4 INSTALLATION

- A. Install grounding and bonding conductors concealed from view.
1. Electrically bond between existing and new construction.
- B. Connections: Grounding system components and building elements to be bonded below grade or which will be concealed by construction shall be connected to Conductors using Exothermic connections.
1. Exceptions:
    - a. Mechanical (bolted) connections may be used where above grade and accessible.
    - b. Permanent mechanical embossed crimp connections may be made at any location above or below grade, accessible or concealed, only where fitting and system used to create bond are IEEE Std 837-2002 compliant and UL 467 Listed.
- C. Equipment Grounding/Bonding Conductor: Install separate, insulated conductor within each feeder circuit raceway. Terminate each end on suitable lug, bus, or bushing.
- D. Permanently ground entire light and power system in accordance with NEC, including service equipment, distribution panels, lighting

panelboards, switch and starter enclosures, motor frames, grounding type receptacles, and other exposed non-current carrying metal parts of electrical equipment.

- E. Accomplish bonding of electrical system by using insulated grounding/bonding conductor installed with feeders and branch circuit conductors in conduits.
  - 1. Size grounding conductors in accordance with NEC.
  - 2. Install from grounding bus of serving panel to ground bus of served panel, grounding screw of receptacles, lighting fixture housing, light switch outlet boxes or metal enclosures or poles throughout equipment.
  - 3. Ground raceway, enclosures, and boxes by means of grounding bushings at terminations with installed grounding/bonding conductor.
- F. Permanently attach equipment and grounding conductors prior to energizing equipment.

### 3.5 FIELD QUALITY CONTROL

- A. Comply with Division 1 - Quality Requirements and Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.

## **SECTION 26 05 33**

### RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section includes conduit, raceways, wireways, outlet boxes, pull and junction boxes, and vaults/handholes.
- B. Related Sections:
  - 1. Section 26 05 03 - Equipment Wiring Connections.
  - 2. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
  - 3. Section 26 05 29 - Hangers and Supports for Electrical Systems.
  - 4. Section 26 05 53 - Identification for Electrical Systems.

##### 1.2 REFERENCES

- A. American National Standards Institute:
  - 1. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
  - 2. ANSI C80.3 - Specification for Electrical Metallic Tubing, Zinc Coated.
  - 3. ANSI C80.5 - Aluminum Rigid Conduit - (ARC).
- B. National Electrical Manufacturers Association:
  - 1. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

2. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.
3. NEMA OS 1 - Sheet Steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
4. NEMA OS 2 - Nonmetallic Outlet Boxes, Device Boxes, Covers, and Box Supports.
5. NEMA RN 1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit.
6. NEMA TC 2 - Electrical Polyvinyl Chloride (PVC) Tubing and Conduit.
7. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing.
- C. National Fire Protection Association (NFPA):
  1. NFPA 70 - National Electrical Code (NEC).
- D. International Mechanical Code (IMC).
- E. Underwriters Laboratories (UL).
  1. UL-6A - Electrical Rigid Metal Conduit - Aluminum, Red Brass, and Stainless Steel
  2. UL-797A - Standard for Electrical Metallic Tubing - Aluminum and Stainless Steel

### 1.3 SYSTEM DESCRIPTION

- A. Raceway and boxes located as indicated on Drawings, and at other locations required for splices, taps, wire pulling, equipment connections, and compliance with regulatory requirements. Raceway and boxes are shown in approximate locations unless dimensioned. Provide raceway to complete wiring system. Underground: Provide rigid steel conduit, intermediate metal conduit, plastic coated conduit, or thick wall nonmetallic conduit coated and/or rated for direct burial. Provide cast metal boxes or nonmetallic handholes as needed.
- B. Outdoor Locations, Above Grade: Provide rigid steel or aluminum conduit, intermediate metal conduit or electrical metallic tubing. Provide cast metal pull and junction boxes.
- C. Wet and Damp Locations: Provide rigid steel or aluminum conduit, intermediate metal conduit, electrical metallic tubing, thick wall nonmetallic conduit. Provide cast metal or nonmetallic outlet, junction, and pull boxes to match conduit. Provide flush mounting outlet box in finished areas.
- D. Concealed Dry Locations: Provide rigid steel or aluminum conduit, intermediate metal conduit, electrical metallic tubing. Provide sheet-metal boxes. Provide hinged enclosure for large pull boxes.
  1. MC cabling may be used for accessible branch circuits where permissible by Code and with approval of local/municipal AHJ.
- E. Exposed Dry Locations: Provide rigid steel or aluminum conduit, intermediate metal conduit, electrical metallic tubing. Provide cast or sheet-metal boxes. Provide flush mounting or surface-mount 'finish' type outlet box in finished areas where recessed box for flush mounting cannot be installed. Provide hinged enclosure for large pull boxes.

### 1.4 DESIGN REQUIREMENTS

- A. Minimum raceway size: 3/4 inch unless otherwise specified.

## 1.5 SUBMITTALS

- A. Division 1 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit for the following:
  - 1. Conduit.
  - 2. Fittings and bodies.
  - 3. Wireway.
  - 4. Pull and junction boxes.
  - 5. Vaults/Handholes.
- C. Manufacturer's Installation Instructions: Submit application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

## 1.6 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution and Closeout Requirements: Closeout procedures.
- B. Project Record Documents:
  - 1. Record actual routing of conduits larger than 2 inches.
  - 2. Record actual locations and mounting heights of outlet, pull, and junction boxes.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Division 1 - Product Requirements: Product storage and handling requirements.
- B. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering.
- C. Protect PVC conduit from sunlight.

## 1.8 COORDINATION

- A. Division 1 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate installation of outlet boxes for all equipment to be connected.
- C. Coordinate mounting heights, orientation and locations of outlets mounted above counters, benches, and backsplashes.

## PART 2 PRODUCTS

### 2.1 GENERAL

- A. Manufacturers:
  - 1. Carlon Electrical Products
  - 2. Cooper/B-Line.
  - 3. Hubbell Wiring Devices
  - 4. Thomas & Betts Corp.
  - 5. Walker Systems Inc.

6. The Wiremold Co.
7. Substitutions: Division 1 - Product Requirements.

## 2.2 METAL CONDUIT

- A. Rigid Steel Conduit: ANSI C80.1.
  1. Stainless Steel: UL-6A
- B. Rigid Aluminum Conduit: ANSI C80.5, UL-6A.
- C. Intermediate Metal Conduit (IMC): Rigid steel.
- D. Fittings and Conduit Bodies: NEMA FB 1; material to match conduit.

## 2.3 PVC COATED METAL CONDUIT

- A. Product Description: NEMA RN 1; rigid steel conduit with external PVC coating, 20 mil minimum thickness.
- B. Fittings and Conduit Bodies: NEMA FB 1; steel fittings with external PVC coating to match conduit.

## 2.4 FLEXIBLE METAL CONDUIT

- A. Product Description: Interlocked construction.
- B. Fittings: NEMA FB 1.

## 2.5 LIQUIDTIGHT FLEXIBLE METAL CONDUIT

- A. Product Description: Interlocked construction with PVC jacket.
- B. Fittings: NEMA FB 1.

## 2.6 ELECTRICAL METALLIC TUBING (EMT)

- A. Product Description: ANSI C80.3; galvanized tubing.
  1. Stainless Steel or Aluminum: UL-797A.
- B. Fittings and Conduit Bodies: NEMA FB 1; steel or malleable iron.

## 2.7 NONMETALLIC CONDUIT

- A. Product Description: NEMA TC 2; Schedule 80 for thickwall applications; PVC.
- B. Fittings and Conduit Bodies: NEMA TC 3.

## 2.8 SURFACE METAL RACEWAY

- A. Product Description: Sheet metal channel with fitted cover, suitable for use as surface metal raceway.
- B. Size: selected based on NEC fill capacity requirements for the application.
- C. Fittings, Boxes, and Extension Rings: Furnish manufacturer's standard accessories; match finish on raceway.

## 2.9 WIREWAY

- A. Product Description: General purpose, Oiltight and dust-tight, or Raintight type wireway to match application/location installed.
- B. Knockouts: Manufacturer's standard, field created as required.
- C. Cover: Hinged or Screw cover. Full gaskets where used in damp or wet location.
- D. Connector: Slip-in or Flanged.
- E. Fittings: Lay-in type with removable top, bottom, and side; captive screws drip shield.
- F. Finish: Rust inhibiting primer coating with gray enamel finish.

## 2.10 OUTLET BOXES

- A. Sheet Metal Outlet Boxes: NEMA OS 1, galvanized steel, or stainless steel.
  - 1. Luminaire and Equipment Supporting Boxes: Rated for weight of equipment supported; furnish 1/2 inch male fixture studs where required.
  - 2. Concrete Ceiling Boxes: Concrete type.
- B. Cast Boxes: NEMA FB 1, Type FD, Furnish gasketed cover by box manufacturer. Furnish threaded hubs where exposed outdoors.
- C. Wall Plates for Unfinished Areas: Furnish gasketed cover.

## 2.11 PULL AND JUNCTION BOXES

- A. Sheet Metal Boxes: NEMA OS 1, galvanized steel.
- B. Hinged Enclosures: As specified in Section 26 27 16.
- C. Surface Mounted Cast Metal Box: NEMA 250, Type determined by location and application; flat-flanged, surface mounted junction box:
  - 1. Material: Galvanized cast iron or Cast aluminum.
  - 2. Cover: Furnish with ground flange, neoprene gasket, and stainless-steel cover screws.
- D. In-Ground Cast Metal Box: NEMA 250, Type 6, outside or inside flanged to match application, recessed cover box for flush mounting:
  - 1. Material: Galvanized cast iron or Cast aluminum.
  - 2. Cover: Smooth Nonskid cover with neoprene gasket and stainless-steel cover screws.
  - 3. Cover Legend to match type of circuits served.
- E. Fiberglass or Concrete composite Vaults or Handholes: Die-molded, glass-fiber concrete composite hand holes:
  - 1. Cable Entrance: Cable entrance from bottom, drainable.
  - 2. Cover: Glass-fiber concrete composite, weatherproof cover with nonskid finish, molded label to match type of circuits served.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Division 1 - Administrative Requirements: Coordination and project conditions.
- B. Verify outlet locations and routing and termination locations of raceway prior to

rough-in.

### 3.2 EXISTING WORK

- A. Maintain access to existing boxes and other installations remaining active and requiring access. Modify installation as required or provide access panel.
- B. Extend existing raceway and box installations using materials and methods compatible with existing electrical installations, or as specified.
- C. Clean and repair existing raceway and boxes to remain or to be reinstalled.

### 3.3 INSTALLATION

- A. Ground and bond raceway and boxes in accordance with Section 26 05 26.
- B. Fasten raceway and box supports to structure and finishes in accordance with Section 26 05 29.
- C. Identify raceway and boxes in accordance with Section 26 05 53.
- D. Arrange raceway and boxes to maintain headroom and present neat appearance.

### 3.4 INSTALLATION - RACEWAY

- A. All flexible raceway methods shall be fully supported from structure or clipped/secured to structural elements and shall not rest on or be supported by other systems.
- B. Any raceway routing shown is approximate location only unless dimensioned. Route to complete wiring system.
- C. Arrange raceway supports to prevent misalignment during wiring installation.
- D. Support raceway using coated steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers.
- E. Group related raceway; support using conduit rack. Construct rack using steel channel; provide space on each for 25 percent additional/future raceways.
- F. Do not support raceway with wire or perforated pipe straps. Remove wire used for temporary supports.
- G. Do not attach raceway to ceiling support wires or other piping systems.
- H. Construct wireway supports from steel channel.
- I. Route exposed raceway parallel and perpendicular to walls.
- J. Route raceway installed above accessible ceilings parallel and perpendicular to walls.
- K. Where installing conduit in and under slab, route from point-to-point where possible.
- L. Maintain clearance between raceway and piping for maintenance purposes.
- M. Maintain 12-inch clearance between raceway and surfaces with temperatures exceeding 104 degrees F.
- N. Cut conduit square using saw or pipe cutter; de-burr cut ends.
- O. Bring conduit to shoulder of fittings; fasten securely.
- P. Join nonmetallic conduit using cement as recommended by manufacturer. Wipe nonmetallic conduit dry and clean before joining. Apply full even coat of

cement to entire area inserted in fitting. Allow joint to cure for minimum 20 minutes.

- Q. Install conduit hubs or sealing locknuts to fasten conduit to sheet metal boxes in damp and wet locations and to cast boxes.
- R. Install no more than equivalent of three 90-degree bends between boxes. Install conduit bodies to make sharp changes in direction, as around beams.
- S. Avoid moisture traps; install junction box with drain fitting at low points in conduit system.
- T. Install fittings to accommodate expansion and deflection where raceway crosses seismic, control, and expansion joints.
- U. Install suitable pull string or cord in each empty raceway except sleeves and nipples.
- V. Install suitable caps to protect installed conduit against entrance of dirt and moisture.
- W. Surface Raceway: Install flat-head screws, clips, and straps to fasten raceway channel to surfaces; mount plumb and level. Install insulating bushings and inserts at connections to outlets and corner fittings.
- X. Close ends and unused openings in wireway.

### 3.5 INSTALLATION - BOXES

- A. Adjust box location up to 8 feet prior to rough-in to accommodate intended purpose.
- B. Orient boxes to accommodate wiring devices oriented as specified in other Sections.
- C. Locate flush mounting box in masonry wall to require cutting of masonry unit corner only. Coordinate masonry cutting to achieve neat opening.

### 3.6 INTERFACE WITH OTHER PRODUCTS

- A. Install conduit to preserve fire resistance rating of partitions and other elements, using materials and methods in accordance with UL and FM requirements and, where specified, compliant with Division 7 Sections.
- B. Locate boxes to allow luminaires positioned as indicated on Drawings.

### 3.7 ADJUSTING

- A. Division 1 - Execution and Closeout Requirements: Testing, adjusting, and balancing.
- B. Install knockout closures in unused openings in boxes.

### 3.8 CLEANING

- A. Division 1 - Execution and Closeout Requirements: Final cleaning.
- B. Clean interior of boxes to remove dust, debris, and other material.
- C. Clean exposed surfaces and restore finish.



**SECTION 26 05 53:**

IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Nameplates.
  - 2. Labels.
  - 3. Wire markers.
  - 4. Conduit markers.
  - 5. Underground Warning Tape.
  - 6. Lockout Devices.

1.2 SUBMITTALS

- A. Division 1 - Submittal Procedures: Submittal procedures.

1.3 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Record actual locations of tagged devices; include tag numbers.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Division 1 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Accept identification products on site in original containers. Inspect for damage.
- C. Accept materials on site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.
- D. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Division 1 - Product Requirements: Environmental conditions affecting products on site.
- B. Install labels and nameplates only when ambient temperature and humidity conditions for adhesive are within range recommended by manufacturer.

PART 2 PRODUCTS

2.1 GENERAL

- A. Manufacturers:

1. 3M, Inc.
  2. Brady Worldwide, Inc.
  3. Brimar Industries, Inc.
  4. Craftmark Identification Systems
  5. Kolbi Pipe Markers Co.
  6. Marking Services Incorporated.
  7. Master Lock Company
  8. Safety Sign Co.
  9. Seton Identification Products
  10. Substitutions: Per Division 1; Product Requirements.
- B. Products of approved manufacturers to match system or device to be identified, using code or industry standard color schemes where applicable.

## 2.2 NAMEPLATES

- A. Product Description: Laminated three-layer plastic with engraved black letters on light contrasting background color.
- B. Letter Size:
1. 1/8 inch high letters for identifying individual equipment and loads.
  2. 1/4 inch high letters for identifying grouped equipment and loads.
- C. Minimum nameplate thickness: 1/8 inch.

## 2.3 LABELS

- A. Labels: Embossed adhesive tape, with 3/16 inch white letters on black background.

## 2.4 WIRE MARKERS

- A. Description: Cloth tape, split sleeve, or tubing type wire markers.
- B. Legend:
1. Power and Lighting Circuits: Branch circuit or feeder number as indicated on Drawings.

## 2.5 CONDUIT AND RACEWAY MARKERS

- A. Description: Nameplate fastened with straps, Nameplate fastened with adhesive, or Labels fastened with adhesive.
- B. Color:
1. 480 Volt System: Black lettering on white background.
- C. Legend:
1. 480 Volt System: 480 VOLTS.

## 2.6 UNDERGROUND WARNING TAPE

- A. Description: 4-inch-wide plastic tape, detectable type where used over non-detectable conduit, colored red with suitable warning legend describing buried electrical lines.

## 2.7 LOCKOUT DEVICES

- A. Anodized aluminum or Reinforced nylon hasp with erasable label surface; size minimum 7-1/4 x 3 inches.

## PART 3 EXECUTION

### 3.1 PREPARATION

- A. Degrease and clean surfaces to receive adhesive for identification materials.

### 3.2 EXISTING WORK

- A. Install identification on all unmarked existing [equipment] scheduled to remain and affected by the scope of work of this project, in accordance with this section.
- B. Replace lost [nameplates,] [labels,] and/or [markers].

### 3.3 INSTALLATION

- A. Install identifying devices after completion of painting.
- B. Nameplate Installation:
  - 1. Install nameplate parallel to equipment lines.
  - 2. Install nameplate for each electrical distribution and control equipment enclosure with corrosive-resistant mechanical fasteners, or adhesive.
  - 3. Install nameplates for each control panel and major control components located outside panel with corrosive-resistant mechanical fasteners, or adhesive.
  - 4. Secure nameplate to equipment front using rivets or adhesive.
  - 5. Secure nameplate to inside surface of door on recessed panelboard in finished locations.
  - 6. Install nameplates for the following:
    - a. Panelboards.
    - b. Disconnects.
- C. Label Installation:
  - 1. Install label parallel to equipment lines.
  - 2. Install labels for permanent adhesion and seal with clear lacquer.
- D. Wire Marker Installation:
  - 1. Install wire marker for each conductor at panelboard gutters, pull boxes, outlet and junction boxes, and each load connection.
  - 2. Mark data cabling at each end. Install additional marking at accessible locations along the cable run.
  - 3. Install labels at data outlets identifying patch panel and port designation.
- E. Raceway Marker Installation:

1. Install raceway marker for each raceway longer than 6 feet.
  2. Raceway Marker Spacing: 20 feet on center.
    - a. Raceway may be identified by color-coded conduit (entire length) or by field painting by colored band on each conduit longer than 6 feet, with a band every 20 feet on center and on each side of every penetration.
    - b. Color: 480 Volt System: Blue. 208 Volt System: Yellow.
- F. Underground Warning Tape Installation:
1. Install underground warning tape along length of each underground conduit, raceway, or cable 6 to 8 inches below finished grade, directly above buried conduit, raceway, or cable.
- G. Panelboard Directories:
1. Install laminated, printed directory after all circuits have been completed, clearly identifying the equipment, area, or devices served by each breaker, for each panel affected by the work.

## **SECTION 26 09 23**

### LIGHTING CONTROL DEVICES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
1. Photocells.
- B. Related Sections:
1. Section 26 05 03 - Equipment Wiring Connections: Execution requirements for electric connections specified by this section.
  2. Section 26 05 19 - Low-Voltage Electrical Power Conductors and Cables.
  3. Section 26 05 33 - Raceway and Boxes for Electrical Systems: Product requirements for raceway and boxes for placement by this section.
  4. Section 26 05 53 - Identification for Electrical Systems: Product requirements for electrical identification items for placement by this section.
  5. Section 26 24 16 - Panelboards.
  6. Section 26 27 26 - Wiring Devices: Product requirements for wiring devices for placement by this section.

##### 1.2 REFERENCES

- A. National Electrical Manufacturers Association:
1. NEMA ICS 2 - Industrial Control and Systems: Controllers, Contractors, and Overload Relays, Rated Not More Than 2000 Volts AC or 750 Volts DC.
  2. NEMA ICS 4 - Industrial Control and Systems: Terminal Blocks.

3. NEMA ICS 5 - Industrial Control and Systems: Control Circuit and Pilot Devices.
4. NEMA ICS 6 - Industrial Control and Systems: Enclosures.

### 1.3 SYSTEM DESCRIPTION

- A. Distributed switching control as indicated on Drawings.
- B. Where indicated on drawings or required by applicable code, provide automatic control (activation and shutoff) for lighting fixtures identified on Drawings or as Scheduled.
  1. Control shutoff by method conforming to ICC IECC.

### 1.4 SUBMITTALS

- A. Division 1 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer's standard product data for each system component.
- C. Manufacturer's Installation Instructions: Submit for each system component.

### 1.5 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Record the following information:
  1. Actual locations of components.
- C. Operation and Maintenance Data:
  1. Submit replacement parts numbers.
  2. Submit manufacturer's published installation instructions and operating instructions.
  3. Recommended renewal or replacement parts list.

### 1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section.

### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Division 1 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Accept components on site in manufacturer's packaging. Inspect for damage.
- C. Protect components by storing in manufacturer's containers indoor protected from weather.

### 1.8 WARRANTY

- A. Division 1 - Execution and Closeout Requirements: Requirements for warranties.
- B. Furnish one year manufacturer warranty for components.

## 1.9 EXTRA MATERIALS

- A. Division 1 - Execution and Closeout Requirements: Requirements for extra materials.
- B. Furnish one space photocell unit to match those installed.

## PART 2 PRODUCTS

### 2.1 GENERAL

- A. Manufacturers:
  - 1. Automatic Switch Co.
  - 2. Cutler-Hammer
  - 3. Douglas
  - 4. Hubbell Incorporated
  - 5. Leviton Manufacturing Co., Inc.
  - 6. Novitas
  - 7. Pass and Seymour/Legrand
  - 8. SensorSwitch
  - 9. Square D
  - 10. Watt Stopper
  - 11. Substitutions: Division 1 - Product Requirements.

### 2.2 PHOTOCELLS

- A. General:
  - 1. Photocells to be mounted as indicated on exterior fixture manufacturer's installation instructions.
  - 2. Time delay between switching outputs shall be enabled to avoid nuisance switching.
- B. Sensor Devices: Each sensor employs photo diode technology to allow linear response to daylight within illuminance range.
  - 1. Exterior Lighting: Hooded sensor, horizontally mounted, employing flat lens. Entire sensor encased in optically clear epoxy resin or equivalent.
  - 2. Configuration shall be selected to match fixture connection type.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Mount photocell on each fixture or as indicated on Drawings.
- B. Install wiring in accordance with Section 26 05 19

### 3.2 ADJUSTING

- A. Division 1 - Execution and Closeout Requirements: Requirements for starting and adjusting.
- B. Test each system component after installation to verify proper operation.
  - 1. Test relay/contactor activation after installation to confirm proper operation.

### 3.3 DEMONSTRATION

- A. Division 1 - Execution and Closeout Requirements: Requirements for demonstration and training.
- B. Demonstrate proper operation of Photocell control of each fixture to owner.
- C. Furnish instruction for Owner's personnel in maintenance and servicing of system.

## SECTION 26 24 16

### PANELBOARDS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section includes work at existing branch circuit panelboard.
- B. Related Sections:
  - 1. Section 26 05 26 - Grounding and Bonding for Electrical Systems.
  - 2. Section 26 05 53 - Identification for Electrical Systems.

##### 1.2 REFERENCES

- A. Institute of Electrical and Electronics Engineers:
  - 1. IEEE C62.41 - Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
- B. National Electrical Manufacturers Association:
  - 1. NEMA AB 1 - Molded Case Circuit Breakers and Molded Case Switches.
  - 2. NEMA PB 1 - Panelboards.
  - 3. NEMA PB 1.1 - General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less.
- C. International Electrical Testing Association:
  - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- D. National Fire Protection Association:
  - 1. NFPA 70 - National Electrical Code.
- E. Underwriters Laboratories Inc.:
  - 1. UL 67 - Safety for Panelboards.

##### 1.3 SUBMITTALS

- A. Division 1 - Submittal Procedures: Requirements for submittals.
- B. Shop Drawings: Indicate voltage, ampacity, integrated short circuit ampere rating for circuit breaker with final arrangement and panel directory changes.

C. Product Data: Submit catalog data

#### 1.4 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents:
  - 1. Record actual locations of panelboard and record final circuiting arrangements.
  - 2. Provide owner's record copy of all typewritten panel Directories.
- C. Operation and Maintenance Data: Submit spare parts listing; source and current prices of replacement parts and supplies; and recommended maintenance procedures and intervals.

#### 1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section.

#### 1.6 MAINTENANCE MATERIALS

- A. Division 1 - Execution and Closeout Requirements; Requirements for maintenance products.

### PART 2 PRODUCTS

#### 2.1 GENERAL

- A. Manufacturer – existing. All new components shall be selected to match existing.

#### 2.2 BRANCH CIRCUIT PANELBOARDS

- A. Product Description: Existing to remain.
- B. Molded Case Circuit Breakers:
  - 1. NEMA AB 1
  - 2. Bolt-on type thermal magnetic trip circuit breakers
  - 3. Common trip handle for all multi-pole breakers
  - 4. Listed as Type SWD for lighting circuits
- C. Current Limiting Molded Case Circuit Breakers: NEMA AB 1, circuit breakers with integral thermal and instantaneous magnetic trip in each pole, coordinated with automatically resetting current limiting elements in each pole. Interrupting rating 100,000 symmetrical amperes, let-through current and energy level less than permitted for same size NEMA FU 1, Class RK-5 fuse.

### PART 3 EXECUTION

#### 3.1 EXISTING WORK



- A. Coordinate with owner to schedule work to ensure no panelboard work interrupts operational hours for the portion of the facility affected by work.
- B. Maintain access to existing panelboards remaining active and requiring access. Modify installation or provide access panel where required for Code-compliance.
- C. Install new circuit breakers in existing panel using available slots or, where necessary, by removing or relocating existing breakers as necessary.
  - 1. Return any unused spare breakers to owner.
- D. Install filler plates for unused spaces in panelboards.
- E. Provide typed final circuit directory for each panelboard within the scope of this project.
  - 1. Revise and reprint directory to reflect final circuiting changes.
- F. Ground and bond fault-current carrying conductor to buss in existing panelboard enclosure according to NEC and Section 26 05 26.

### 3.2 FIELD QUALITY CONTROL

- A. Division 1 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Perform circuit breaker inspections and tests listed in NETA ATS, Section 7.6.

### 3.3 ADJUSTING

- A. Division 1 - Execution and Closeout Requirements: Requirements for starting and adjusting.

## **SECTION 26 56 00**

### EXTERIOR LIGHTING

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section includes exterior luminaries, poles, and accessories.

##### 1.2 REFERENCES

- A. American National Standards Institute
  - 1. Applicable standard for poles and associated accessories used for installation.

##### 1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit dimensions, ratings, and performance data.

#### 1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Store and handle poles in accordance with ANSI and manufacturer's recommendations.

#### 1.6 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Furnish bolt templates and pole mounting accessories to installer of pole foundations.

#### 1.7 MAINTENANCE MATERIALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Spare parts and maintenance products.
  - 1. Provide owner with any touch-up finish paint remaining at completion.

### PART 2 PRODUCTS

#### 2.1 LUMINAIRES

- A. Product Description: Complete exterior luminaire assemblies, with features, options, and accessories as scheduled.
- B. Refer to Section 01 60 00 - Product Requirements for product options.

#### 2.2 SOLID STATE LIGHTING FIXTURES

- A. Product Description:
  - 1. Electronic solid state (LED) lighting engine with integral ballast and heat rejection.
  - 2. Delivered lumens and color temperature shall be as scheduled, and selected to match throughout any occupied space or sight-lines.
  - 3. Socket for photo-eye relay/cell control at each fixture.
  - 4. Fixture body to be secured to armature extended from pole as noted on Drawings.
  - 5. Grey finish to match existing.

#### 2.3 METAL POLES

- A. Material and Finish: Steel with prime finish for field painting or prefinished to match existing.
- B. Section Shape and Dimensions: Round, sized to match existing.
- C. Height: Approximately 25 feet, to match existing.
- D. Base: Direct embedded type, cast in place concrete.
- E. Accessories:
  - 1. Handhole.
  - 2. Anchor bolts.
  - 3. Cover over bolts, secured to base.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and Project conditions.
- B. Verify foundations are ready to receive fixtures.

#### 3.2 INSTALLATION

- A. Install concrete bases for lighting poles at locations as indicated on Drawings, and in accordance with Division 03.
- B. Install poles plumb. Install double nuts as necessary to adjust pole orientation to achieve plumb. Grout around each base.
- C. Install luminaires on appropriate armature oriented to align lighting distribution with roadway.
- D. Bond and ground luminaries, metal accessories, and metal poles in accordance with Section 26 05 26 to ensure continuity of fault current conductor to source panelboard.

#### 3.3 FIELD QUALITY CONTROL

- A. Division 01 - Quality Requirements; Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Operate each luminaire after installation and connection. Inspect for improper connections and operation.
- C. Lighting systems shall be tested to ensure proper calibration, adjustment, controls, and operation.
- D. Measure illumination levels and submit closeout document for owner reference.
  - 1. Take measurements during night sky, without moon or with heavy overcast clouds effectively obscuring moon.

#### 3.4 ADJUSTING

- A. Section 01 70 00 - Execution and Closeout Requirements: Testing, adjusting, and

balancing.

B. Aim and adjust luminaries to provide even illumination levels and distribution.

### 3.5 CLEANING

A. Section 01 70 00 - Execution and Closeout Requirements: Final cleaning.

B. Clean photometric control surfaces as recommended by manufacturer.

C. Clean finishes and touch up damage.

### 3.6 PROTECTION OF FINISHED WORK

A. Section 01 70 00 - Execution and Closeout Requirements: Protecting finished work.

B. Replace light engine for any luminaries having failed at Substantial Completion.

### 3.7 SCHEDULES - As noted on Drawings.

## BASIS OF PAYMENT

**801-2.3** Payment for Roadway Lighting will be made at the contract LUMP SUM unit price for ROADWAY LIGHTING and shall include all materials and labor to install lighting per the contract documents.

## STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

### ITEM 801360 - REFLECTIVE DELINEATOR – FLEXABLE

#### DESCRIPTION

**801-1.1** This item shall include all work for installation of vertical reflective delineators. The vertical delineators must be made of high impact resistant plastic. The delineators shall be between 30” and 48” in height and be attached to the existing pavement in a manner that allows it to return to a vertical position when struck from any angle. Delineator shall be orange with white reflective sheeting applied to all sides of the delineator for nighttime visibility. Delineators shall be installed per the manufacturer’s specifications.

#### BASIS OF PAYMENT

**801-2.1** This work will be paid for at the contract unit price per each for REFLECTIVE DELINEATOR - FLEXIBLE.

**ITEM 801361 - CONCRETE STRUCTURES-STAIRWAY**

DESCRIPTION

**801-1.1** This work shall consist of the cast in place installation of concrete stairs per the project plans and shall be constructed in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022 Article 503 along with the Concrete Stair Detail in the project plans. Concrete shall be Class SI per Article 1020.

BASIS OF PAYMENT

**801-2.2** This work will be paid for at the contract unit price per lump sum for CONCRETE STRUCTURES-STAIRWAY and shall include all materials and labor to install stairs per the contact documents.

**ITEM 801362 - DETECTABLE WARNING SURFACE**

DESCRIPTION

**801-1.1** This work shall consist of installation of a surface of truncated domes meeting accessibility standards in accordance with Article 424 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, adopted January 1, 2022.

BASIS OF PAYMENT

**801-2.2** This work will be paid for at the contract unit price per SQUARE FOOT for DETECTABLE WARNING.

**ITEM 801363 - PORTLAND CEMENT CONCRETE, 4 INCH**

DESCRIPTION

**801-1.1** This work shall consist of constructing portland cement concrete sidewalk and sidewalk accessibility ramps on a prepared subgrade. This item shall be in accordance with Article 424 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, adopted January 1, 2022.

BASIS OF PAYMENT

**801-2.2** This work will be paid for at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRET, 4 INCH.

**ITEM 801365 - ROADWAY SIGNAGE**  
**ITEM 801366 - TELESCOPING STEEL SIGN SUPPORT**

DESCRIPTION

**801-1.1** This item shall consist of furnish, fabricating, and/or installing sign panels, complete with sign faces, legend, and supplemental panels, on telescoping steel sign support. This item shall be in accordance with Article 720 for Roadway Signage and Article 728 for Telescoping Steel Sign Support, of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, adopted January 1, 2022.

BASIS OF PAYMENT

**801-2.2** This work will be paid for at the contract unit price per SQUARE FOOT for ROADWAY SIGNAGE and per FOOT for TELESCOPING STEEL SIGN SUPPORT.

**SOIL BORINGS AND PAVEMENT  
DESIGN RECOMMENDATIONS VETERANS  
AIRPORT FBO ACCESS ROAD EXTENSION  
MARION, ILLINOIS**

Prepared for:  
**Clarida & Ziegler Engineering Company**  
410 N. Court Street  
Marion, IL 62959

Prepared by:  

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**HFE**  

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**Holcomb Foundation Engineering**  
Carbondale, Illinois  

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618-529-5262

**September 28, 2022**

**HFE File Number: H-22176**

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# Holcomb Foundation Engineering Co., Inc.

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September 28, 2022

Clarida and Ziegler Engineering Co.  
410 North Court St.  
Marion, Illinois 62959

Attention: Mr. Matt Wiggins, Project Engineer

Re: Subsurface Exploration and Pavement Design Recommendations  
Veterans Airport FBO Access Road  
Marion, Illinois  
HFE File H-22176

Dear Sir:

Clarida and Ziegler Engineering is designing a new access road at Veterans Airport in Marion Illinois. This report presents the results of a subsurface exploration and pavement design recommendations for the proposed roadway.

On September 16, 2022, we drilled four soil borings in locations as indicated on the enclosed Boring Location Diagram. The soil borings were advanced with hollow stem augers, sampling the subsoils with split barrel samplers to five feet in depth. Standard penetration tests were performed in conjunction with the split barrel sampling.

In our laboratory, the soil samples were subjected to visual classifications and moisture content determinations. Cohesive soil samples were subjected to unconfined compressive strength tests.

Subsoils encountered at this site consist of four to six inches of topsoil overlying gray mottled brown silty clay (CL classification) with a trace of sand. The borings were terminated at five feet in depth in the silty clay soils. The silty clay ranges from firm to stiff, with unconfined compressive strengths ranging from 0.6 to 2.3 tons per square foot, averaging 1.1 tsf. Standard penetration test values of 2 to 9 blows per foot were encountered in these soils, averaging 5 bpf. Moisture contents vary from 21 to 29 percent, averaging 25 percent. When subjected to a standard Proctor test, the soils have a maximum dry density of 107.2 pounds per cubic foot at an optimum moisture content of 16.1 percent. We understand the site will be filled with two to three feet of fill soil, therefore, an Illinois Bearing Ratio test was not performed on the existing subsoils, however typical silty clay soils in this area have an IBR value of about 3.0.

Prior to construction, it is recommended the topsoil is stripped and wasted off site. After the topsoil is stripped, the exposed subgrade should be proofrolled with a loaded tandem dump truck. Any areas that pump or rut should be disked, processed, and aerated to lower the moisture content, then compacted to a minimum of 95% of the maximum standard laboratory dry density per AASHTO T-99.

The additional fill soils required to construct the roadway should be placed in eight inch loose lifts with each lift compacted to a minimum of 95% of the standard laboratory dry density.

After placement and compaction of the subgrade soils, the recommended pavement design for the road is as follows:

Pavement Design Parameters:

Traffic Loadings:	100 Passenger Cars/Day 1 Delivery/Fuel Truck
Design Life:	20 Years
Estimated Illinois Bearing Ratio:	3.0

Preliminary Pavement Design:

Aggregate Basecourse:	8.0"
Bituminous Concrete Binder:	1.5"
Bituminous Concrete Surface:	1.5"

Due to the estimated IBR value being below 6.0 (which is typical of most silty clay soils in the Marion area), IDOT requires the following remediation measures to improve the stability of the subgrade:

1. Increase the crushed stone basecourse thickness to 12"
2. Or lime modify the subgrade at least 8" deep.

Either of these measures may be used, however if lime modification of the subgrade is used, the soils should be tested to assure they will obtain the required IBV value.

Veterans Airport FBO Access Road  
Marion, Illinois  
September 28, 2022  
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Therefore, either of the following pavement designs may be used for this project:

<b>Lime Modified Subgrade:</b>	<b>8.0"</b>
<b>Aggregate Basecourse:</b>	<b>8.0"</b>
<b>Bituminous Concrete Binder:</b>	<b>1.5"</b>
<b>Bituminous Concrete Surface:</b>	<b>1.5"</b>
<b>Or</b>	
<b>Aggregate Basecourse:</b>	<b>12.0"</b>
<b>Bituminous Concrete Binder:</b>	<b>1.5"</b>
<b>Bituminous Concrete Surface:</b>	<b>1.5"</b>

The Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction" adopted on January 1, 2022, indicates the materials to be used in the following sections:

Soil Modification  
Section 302 (Pages 146-150)

Aggregate Basecourse  
Section 351 (Pages 162-165)

Bituminous Concrete Surface and Binder  
Section 406 (Pages 200-214)

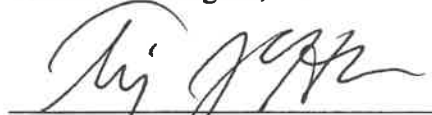
Attached are the Boring Location Diagram, Boring Logs, and Laboratory Test Data. If you should have any questions, or if we can be of further assistance, please feel free to contact us at your convenience.

Sincerely,

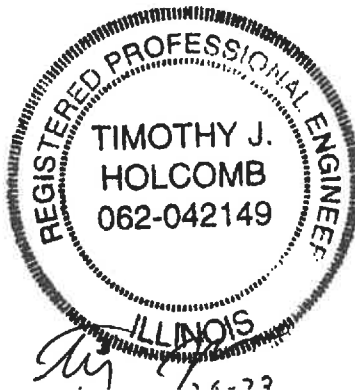
**HOLCOMB FOUNDATION ENGINEERING CO.**



Tristan W. Hudgens, P.E.



Timothy J. Holcomb, P.E.



Unconfined Compressive Strength (Tons/Sq. Ft.)		Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
1	2					
Water Content (%)		Standard N Penetration, Blows/Ft.				
10			20	30	40	50
		0				Surface Elevation
		0				8" Topsoil
		2	1	ss		Gray Mottled Brown Silty CLAY (CL) with trace sand
		4	2	ss		
		6				End of Boring -5'
		8				
		10				
		12				
		14				

Ground Water Data	
No Ground Water Encountered During Drilling and Dry Upon Completion.	
Project: Veterans Airport FBO Access Road Extension Marion, Illinois	Date of Boring September 16, 2022
Client: Clarida & Ziegler Engineering Marion, Illinois	Project No. H-22176

Unconfined Compressive Strength (Tons/Sq. Ft.)		Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
1	2					
Water Content (%)						
Standard N Penetration, Blows/Ft.						
10	20	30	40	50	60	
						Surface Elevation
						4" Topsoil
						Gray Mottled Brown Silty CLAY (CL) with trace sand
		2	1	ss		
		4	2	ss		
		6				End of Boring -5'
		8				
		10				
		12				
		14				

Ground Water Data	
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Unconfined Compressive Strength (Tons/Sq. Ft.) 1    2    3    4    5    6				Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
Water Content (%) -----○-----								
Standard N Penetration, Blows/Ft. 10    20    30    40    50    60								
				2	1	ss		4" Topsoil
				4	2	ss		Gray Mottled Brown Silty CLAY (CL) with trace sand
				6				End of Boring -5'
				8				
				10				
				12				
				14				

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Unconfined Compressive Strength (Tons/Sq. Ft.) 1      2      3      4      5      6				Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
Water Content (%) -----○-----								
Standard N Penetration, Blows/Ft. 10      20      30      40      50      60				Surface Elevation				
								4" Topsoil
				2	1	ss		Gray Mottled Brown Silty CLAY (CL) with trace sand
				4	2	ss		
				6				End of Boring -5'
				8				
				10				
				12				
				14				

Ground Water Data	
No Ground Water Encountered During Drilling and Dry Upon Completion.	
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# Holcomb Foundation Engineering

## Moisture - Density Relationship

Project: Veterans Airport FBO Access Rd.  
Marion, IL

Location: B-1, B-2, B-3, B-4  
Depth: 1-5'

Project No.: H-22176

### Proctor Test Results

Soil Classification: Brown Silty CLAY

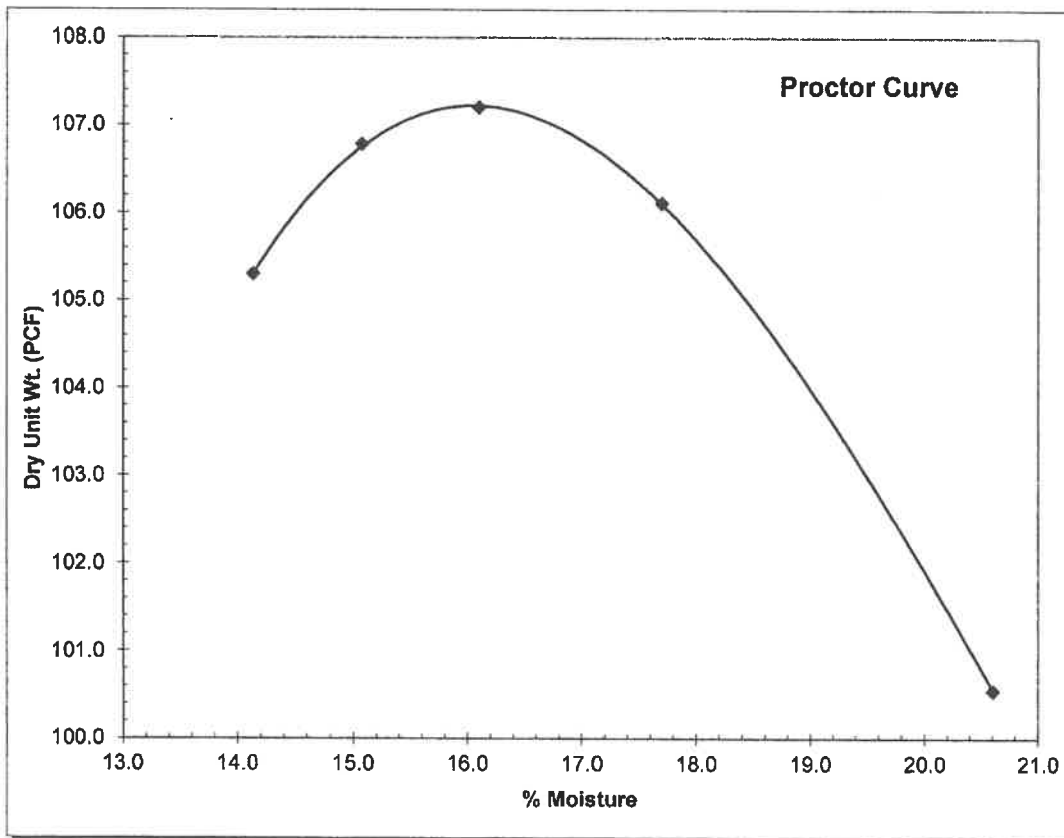
Date: 9/21/22

Maximum Dry Density (PCF) 107.2

Optimum Moisture Content (%) 16.1

Test Data ASTM D-698 (standard)

Moisture Content (%)	Dry Unit Wt. (PCF)
14.1	105.3
15.1	106.8
17.7	106.1
20.6	100.5
16.1	107.2





## GENERAL NOTES

### SAMPLE IDENTIFICATION

The Unified Classification System is used to identify the soil unless otherwise noted.

### RELATIVE DENSITY & CONSISTENCY CLASSIFICATION

<u>TERM (NON-COHESIVE SOILS)</u>	<u>BLOWS PER FOOT</u>
Very Loose	0 - 4
Loose	5 - 10
Firm	11 - 30
Dense	31 - 50
Very Dense	Over 50

<u>TERM (COHESIVE SOILS)</u>	<u>QU (tsf)</u>
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

### DRILLING & SAMPLING SYMBOLS

ss:	Split Spoon - 1 3/8" I.D., 2" O.D.
st:	Shelby Tube - 2.80" I.D., 3" O.D.
au:	Auger Samples
cs:	Continuous Sampling - 2.0" I.D.

### SOIL PROPERTY SYMBOLS

●	Unconfined Compressive Strength, Qu. (tsf)
+	Penetrometer Value. (tsf)
○	Plastic Limit (°)
○	Water Content (°)
○	Liquid Limit (°)
X	Standard "N" Penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2" O.D. Split Spoon

### PARTICLE SIZE

Boulders	8 in.	Medium Sand	0.6 mm to 0.2 mm
Cobbles	8 in. to 3 in.	Fine Sand	0.2 mm to 0.74 mm
Gravel	3 in. to 5 mm	Silt	0.074 mm to 0.0005 mm
Coarse Sand	5 mm to 0.6 mm	Clay	less than 0.005 mm

## UNIFIED SOIL CLASSIFICATIONS

MAJOR DIVISIONS	SYMBOL	TYPICAL DESCRIPTION			
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS	GW	Well graded gravels, gravel-sand mixtures	
		GRAVELS WITH FINES	GP	Poorly graded gravels, gravel-sand mixtures	
			GM	Silty gravels, gravels-sand silt mixtures	
		CLEAN SANDS	GC	Clayey gravels, gravel-sand clay mixtures	
			SW	Well-graded sands, gravelly sands	
			SANDS WITH FINES	SP	Poorly graded sands, gravelly sands
				SM	Silty sands, sand-silt mixtures
		FINE GRAINED SOILS	SILTS AND CLAYS LOW PLASTICITY	SC	Clayey sands, clay-sand mixtures
ML	Inorganic silts of clayey silts with slight plasticity				
CL	Inorganic clays of low to medium plasticity				
SILTS AND CLAYS HIGH PLASTICITY	OL		Organic silts and organic silty clays of low plasticity		
	MH		Inorganic clays of high plasticity		
	CH		Organic clays of high plasticity		
	HIGHLY ORGANIC SOILS		OH	Organic clays of medium to high plasticity	
PT		Peat, humus, swamp soils with high organic contents			