

**CONTRACT AND BONDS  
FOR HIGHWAY CONSTRUCTION**



**OREGON DEPARTMENT OF TRANSPORTATION  
SALEM, OREGON**



**GRADING, DRAINAGE, STRUCTURES, PAVING, SIGNING,  
ILLUMINATION, SIGNALS & ROADSIDE DEVELOPMENT**

**I-5: AURORA DONALD INTERCHANGE (EXIT 278)  
PHASE 2 SECTION**

**PACIFIC HIGHWAY**

**MARION COUNTY**

**CONTRACT NUMBER** 15498

**EXPENDITURE ACCOUNT NUMBER** CON04700

**CLASS OF PROJECT** S001(554)

**CONTRACTOR** HP CIVIL INC

**DATE OF AWARD** \_\_\_\_\_

**SPECIFIED COMPLETION** SEE SUBSECTION 00180.50(h)

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**CONTRACT AND BONDS  
FOR HIGHWAY CONSTRUCTION**

**OREGON DEPARTMENT OF TRANSPORTATION  
SALEM, OREGON**

**OREGON TRANSPORTATION COMMISSION**

JULIE BROWN	Commission Chair
LEE BEYER	Commissioner
ALICIA CHAPMAN	Commissioner
JEFF BAKER	Commissioner
SHARON SMITH	Commissioner
KRIS STRICKLER	Director of Transportation

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### DESCRIPTIONS OF PARTS OF CONTRACT WHICH ARE NOT BOUND HEREIN BUT WHICH ARE PART OF THE CONTRACT

#### **(1) Standard Specifications**

The "2024 Oregon Standard Specifications for Construction," as published by the Oregon Department of Transportation.

Copies of the 2024 Oregon Standard Specifications for Construction may be purchased by visiting the Oregon Department of Transportation, Specifications website at:

[https://www.oregon.gov/ODOT/Business/Pages/Standard\\_Specifications.aspx](https://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx)

#### **(2) Plans**

Applicable Plans, either separate from the Special Provisions or included within the Special Provisions.

Copies of Plans will be furnished by the Project Manager.

**SECTION I. SPECIAL PROVISIONS**

On the attached or inserted sheets which follow is given a description of the work to be performed under this Contract, together with required provisions bound herein, and Special Provisions, and instructions bound herein which supplement and modify the published "2024 Oregon Standard Specifications for Construction" book, making them part of this Contract and applicable to the particular work to be done.

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**DESCRIPTION OF WORK**

Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

**TIME AND PLACES OF RECEIVING BIDS (BID CLOSING)**

Bid Closing for the work described above will be at 9:00:00 a.m. on the 22nd day of February, 2024. Bids will be received by Marie Wright, Construction Contracts Manager.

Submit electronic bids, on-line through Bid Express® ([www.bidx.com](http://www.bidx.com)) before 9:00:00 a.m. on the day of Bid Closing.

Submit paper bids to Marie Wright, Construction Contracts Manager:

Before 9:00:00 a.m. on the day of Bid Closing.

For Bids submitted by mail or parcel delivery service, send to:

Oregon Department of Transportation  
Procurement Construction Contracts, MS #5-1  
355 Capitol Street NE  
Salem, Oregon 97301.

For Bids submitted by hand delivery, date stamp the Bid with the provided date stamping device and place into the ODOT Procurement Bid Box located in the 1<sup>st</sup> floor lobby at the following address:

Oregon Department of Transportation  
355 Capitol Street NE  
Salem, Oregon 97301.

Bids, Bid modifications, and Bid withdrawals will not be accepted at or after 9:00:00 a.m. on the day of Bid Closing.

**PLACE, TIME, AND DATE OF READING BIDS (BID OPENING)**

Bid Opening for the work described above will be at the following address: Oregon Department of Transportation, 355 Capitol Street NE, Salem, Oregon, beginning at 9:00:00 a.m. on the day of Bid Closing.

**COMPLETION TIME LIMIT**

See Subsection 00180.50(h).

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**CLASS OF PROJECT**

This is a Federal-Aid Project.

**CLASS OF WORK**

The Class of Work for this Project is either: A) Earthwork and Drainage, or B) Bridges and Structures.

**PROJECT INFORMATION**

Information pertaining to this Project may be obtained from the following:

Nick Donnelly, Project Manager, David Evans and Associates, 5121 Skyline Village Loops S Suite 200, Salem 97306; or Email Nick.Donnelly@deainc.com. All requests for information must be in writing with reference to the Project name.

Bjorn Miller, ODOT Resident Engineer - Consultant Project, 455 Airport Rd SE Bldg. B, Salem 97301; or Email Bjorn.Miller@odot.oregon.gov. All requests for information must be in writing with reference to the Project name.

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## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

### II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, 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."

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

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or 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:

a. 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 or other knowledgeable company official.

b. 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.

c. 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 minorities and women.

d. 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.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. 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, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will 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 will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will 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 will inform every complainant of all of their avenues of appeal.

#### **6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

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). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, 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 the contracting agency 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 referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

#### **8. Reasonable Accommodation for Applicants /**

**Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

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

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

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

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**11. 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 the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women 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 women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph



2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

### 3. Records and certified payrolls (29 CFR 5.5)

*a. Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

*(2) Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

*(3) Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

*(4) Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

*b. Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

*(2) Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

*(3) Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

*(4) Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### **4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.** a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or



mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

## **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

# **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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## 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

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## 3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

\* \* \* \* \*

#### **4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

\* \* \* \* \*

#### **XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

#### **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

## **ON-SITE WORKFORCE AFFIRMATIVE ACTION REQUIREMENTS FOR WOMEN AND MINORITIES ON FEDERAL-AID CONTRACTS**

Pursuant to 41 CFR 60-4.6 (see also 41 CFR 60-4.2(a)) the following notice concerning Affirmative Action Requirements for Women and Minorities shall be included in, and shall be a part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in geographical areas designated by the United States Department of Labor (USDOL) Director. The USDOL, Office of Federal Contract Compliance Programs (OFCCP) has made the following statement concerning Goals, Timetables and Good Faith Efforts:

"Numerical goals are established based on the availability of qualified applicants in the job market or qualified candidates in the employer's work force. Executive Order [E.O. 11246] numerical goals do not create set-asides for specific groups, nor are they designed to achieve proportional representation or equal results. Rather, the goal-setting process in affirmative action planning is used to target and measure the effectiveness of affirmative action efforts to eradicate and prevent discrimination. The Executive Order and its supporting regulations do not authorize OFCCP to penalize contractors for not meeting goals. The regulations at 41 CFR 60-2.12(e), 60-2.30 and 60-2.15, specifically prohibit quota and preferential hiring and promotions under the guise of affirmative action numerical goals. In other words, discrimination in the selection decision is prohibited."

For purposes of these "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts", "Good Faith Effort" means affirmative action measures designed to implement the established objectives of an Affirmative Action Plan 23 CFR 230.407(o).

### **A. AFFIRMATIVE ACTION REQUIREMENTS**

#### **Notice of Requirement for Affirmative Action To Ensure Equal Employment Opportunity (Executive Order 11246)**

1. 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:

#### **Goal and Timetable for Female Utilization Statewide**

<b>Timetable</b>	<b>Goal (Percent)</b>
From Apr. 1, 1980 until further notice.....	6.9



## Goals for Minority Utilization by County

### Goal (Percent)

Clackamas, Multnomah, and Washington Counties.... 4.5

Marion and Polk Counties ..... 2.9

Benton, Clatsop, Columbia, Crook, Deschutes,  
Hood River, Jefferson, Lincoln, Linn, Sherman,  
Tillamook, Wasco, and Yamhill Counties ..... 3.8

Lane, Coos, Curry, Douglas, Jackson, Josephine,  
Klamath, and Lake Counties ..... 2.4

Baker, Gilliam, Grant, Morrow, Umatilla, Union,  
Wallowa, and Wheeler Counties ..... 3.6

Harney and Malheur Counties..... 4.4

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 non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

**2.** The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 business days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

**3.** As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the county or counties shown in the Solicitation Documents. In cases where the work is two or more counties covered by different percentage goals, the highest percentage will govern.



**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 American 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 solicitation from which this contract resulted.

**3.** A contractor participating, either individually or through an association, in an approved Hometown Plan (including heavy highway affirmative action plans) shall comply with its affirmative action obligations under Executive Order 11246 by complying with its obligations under the plan; provided, that each contractor or subcontractor participating in an approved plan is individually required to comply with the equal opportunity clause set forth in 41 CFR 60-1.4; to make a good faith effort to achieve the goals for each trade participating in the plan in which it has employees; and that the overall good 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's goals and timetables.

**4.** The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minorities 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 performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any 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 non-working 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 minorities and female individuals working at such sites or in such facilities.

**b.** Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's 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 a 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 therefore, along with whatever additional actions the Contractor may have taken.

**d.** Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the

Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

**e.** Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

**f.** Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc., by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the Contractor's 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 on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

**h.** Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

**i.** Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

**j.** Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

**k.** Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

**l.** Conduct, at least annually, an inventory and evaluation at least of all minority and female employees 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 Contractor's activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

**o.** Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

**p.** Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

**8.** Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor-community; or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

**9.** A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

**10.** The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

**11.** The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

**12.** The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

**13.** The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

**14.** The contractor will designate 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. Additionally, the contractor EEO Officer shall ensure that the company EEO policy is being carried out, to submit reports relating to the specifications hereof as may be required by the Agency and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

**15.** Nothing herein provided shall be construed as a limitation upon the application of other laws, which establish different standards of compliance, or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**16.** The Office of Federal Contract Compliance Programs (OFCCP) may conduct compliance evaluations to determine if the contractor maintains nondiscriminatory hiring and employment practices and is taking affirmative action to ensure that applicants are employed and that employees are placed, trained, upgraded, promoted, and otherwise treated during employment without regard to race, color, religion, sex, or national origin. In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

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## **EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS**

As used in these provisions, "Engineer" means the Chief Engineer of the Oregon Department of Transportation acting either directly or through authorized representatives. "Good Faith Efforts" means "affirmative action measures designed to implement the established objectives of an Affirmative Action Plan" 23 CFR 230.407(o).

Section 140 of Title 23, United States Code, EQUAL EMPLOYMENT OPPORTUNITY, as in effect on May 1, 1982, is incorporated by this reference and made a part of these provisions.

### **Written Notification**

The Contractor shall provide to the Engineer within two weeks of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the Contract resulting from this solicitation written notification with the following information: 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 subcontract is to be performed.

The Contractor shall provide immediate written notification to the Engineer when (1) the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor minorities or women that the Contractor sent to the union, or (2) the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its equal opportunity obligations. This is in addition to the notification required in item 7d in the "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts".

### **Monthly Report**

The Contractor and each Subcontractor (on contracts that require certified payrolls) shall submit each month to the Engineer a "Monthly Employment Utilization Report" (Form 731-0668). The electronic form is available at:

<https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx>

### **Annual Report**

Each July for the duration of the Project, each Contractor and Subcontractor shall submit Form FHWA-1391. This report shall be sent directly to the ODOT Office of Equity and Civil Rights.

PURSUANT TO 23 CFR PART 230, SUBPART D, THE STATE HIGHWAY AGENCY HAS A RESPONSIBILITY TO ASSURE COMPLIANCE BY CONTRACTORS WITH THE REQUIREMENTS OF FEDERAL-AID CONSTRUCTION CONTRACTS, 23 CFR 230.405(b). THEREFORE, THE STATE HIGHWAY AGENCY HAS THE FOLLOWING OBLIGATIONS CONCERNING MONITORING AND COMPLIANCE, INCLUDING SHOW CAUSE NOTICE REQUIREMENTS.

### **Monitoring and Compliance**

The Agency will maintain a vigorous monitoring process to ensure nondiscrimination and affirmative action on all federally funded Projects. Monitoring shall include at a minimum, monthly meetings to review the "Monthly Employment Utilization Report" (Form 731-0668) with the Contractor's Equal Employment Opportunity (EEO) Officer and quarterly reviews of the Contractor's Good Faith Efforts as outlined in FHWA 1273.

The Agency shall determine the Contractor's compliance with equal opportunity requirements including:

- Non-discrimination in selection and retention of subcontractors, material suppliers and vendors;
- Maintenance of non-segregated facilities;
- Adequate representation and utilization of minorities and women (by craft and trade) in the Contractor's workforce;
- Good Faith Efforts in meeting on-the-job training and training special provisions contained in FHWA 1273;
- Fair treatment in all terms and conditions of employment; and,
- Adherence (where applicable) to Indian preference provisions.

If the Agency or the FHWA becomes aware of any possible violations of Executive Order 11246 or 41 CFR 60, each has the authority and the responsibility to notify the Office of Federal Contract Compliance Programs. The Contractor has the responsibility either to meet all the craft goals set forth in the applicable "Covered Area" of "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts" or demonstrate Good Faith Efforts to meet these goals (as specified in paragraphs 7a through 7p of the "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal-Aid Contracts").

### **Show Cause Notice**

If an investigation or review reveals that a Contractor or Subcontractor has not complied with these EEO Provisions, the Agency shall issue a Show Cause Notice to initiate efforts to bring the Contractor or Subcontractor into compliance. This written notice shall state the deficiencies found during the review, and shall advise the Contractor or Subcontractor to show cause within 30 Calendar Days why the Agency shall not impose administrative



sanctions. The Contractor or Subcontractor must then show good cause or must provide an acceptable agreement for corrective action within 30 Calendar Days.

If the Contractor or Subcontractor does not provide this information by the end of the 30 Calendar Days, the Engineer shall withhold all project progress payments in process as of the date the Show Cause Notice was issued and will continue to withhold project progress payments until the Contractor or Subcontractor responds in an acceptable manner. If the Contractor or Subcontractor fails to meet the conditions of the corrective action agreement, no further Show Cause Notice is required; the Agency shall immediately initiate enforcement proceedings.

If a Contractor's prequalification certification is revoked or disqualified because the Contractor has been found on at least two occasions to be in breach of these EEO Provisions of Federal-Aid highway construction contracts, the Contractor must be determined to be in compliance with these EEO Provisions prior to the Contractor's prequalification certificate being reinstated.

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### **EQUAL EMPLOYMENT OPPORTUNITY-ASPIRATIONAL TARGET PROVISIONS**

See the EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS incorporated in this Contract for notifying the Engineer, monthly and annual reporting, monitoring, and compliance.

1. *Contract Amounts \$3 million or less, use the following Aspirational Diversity Targets*

#### **Aspirational Diversity Targets**

**ODOT Aspirational Diversity Targets** - While Aspirational Diversity Targets are not requirements for this Contract and are not binding on the Contractor, ODOT desires to encourage the highest possible participation of minorities and women in the work force. Therefore, ODOT has established aspirational targets on all federally funded Projects:

#### **Covered Areas**

<b>Area</b>	<b>Aspirational</b>
ODOT Region 1	Women 14% - Minority 20%
ODOT Region 2, 3, 4, & 5	Women 14% - Minority 14%

Neither the Contractor nor its subcontractors are under any obligation to meet any aspirational targets.

2. *Contract Amounts exceeding \$3 million, use the following Aspirational Diversity Targets*

#### **Aspirational Diversity Targets**

**ODOT Aspirational Diversity Targets** - While Aspirational Diversity Targets are not requirements for this Contract and are not binding on the Contractor, ODOT desires to encourage the highest possible participation of minorities, veterans and women in the work force. Pursuant to Oregon Laws 2023, chapter 504, ODOT has established the following aspirational targets:

#### **Covered Areas**

<b>Area</b>	<b>Aspirational</b>
ODOT Region 1	Women 15% - Veterans 15% - Minority 20%
ODOT Region 2, 3, 4, & 5	Women 15% - Veterans 15% - Minority 15%

Neither the Contractor nor its subcontractors are under any obligation to meet any aspirational targets.

**Outreach Plan** - Pursuant to Oregon Laws 2023, chapter 504, Contractor must establish and implement a plan for outreach to and recruitment and retention of women, minority individuals and veterans to perform work under the Contract ("Outreach Plan"). Contractor's Outreach Plan must require the Contractor to, at a minimum:

- Advertise employment opportunities available under the public improvement contract in general circulation publications, trade association publications and publications that serve an audience or readership that consists primarily of minority individuals, women or veterans;
- Follow up on the contractor's initial solicitations of interest by contacting minority individuals, women or veterans who expressed interest in or responded to the initial solicitation to determine with certainty whether the minority individual, woman or veteran is interested in the opportunities;
- Provide all persons who express continued interest with adequate information about hiring qualifications, pay rates, benefits, the expected duration of employment, work hours and other conditions of employment under the public improvement contract;
- Make efforts to encourage minority individuals, women and veterans to seek employment under the public improvement contract that the contractor may reasonably expect will produce a level of participation that meets the aspirational target described in this paragraph; and
- Use the services of minority community organizations, local, state, federal and tribal governments or other organizations that have recruiting, training and otherwise assisting minority individuals, women and veterans as the organization's primary purpose or mission to assist the contractor with outreach, recruitment and retention.

Contractor shall submit Outreach Plan ten (10) days prior to preconstruction conference. Contractor shall demonstrate adequate good faith efforts to comply with its Outreach Plan.

**Outreach Plan Requirement for Subcontractors** - Pursuant to Oregon Laws 2023, chapter 504, Contractor shall require any subcontractor whose subcontract has an estimated value of \$750,000 or more at the time of Agency's consent to subcontract to develop an Outreach Plan as set forth in Oregon Laws 2023, chapter 504, which requires that the subcontractor at a minimum:

- Advertise employment opportunities available under the public improvement contract in general circulation publications, trade association publications and publications that serve an audience or readership that consists primarily of minority individuals, women or veterans;
- Follow up on the contractor's initial solicitations of interest by contacting minority individuals, women or veterans who expressed interest in or responded to the initial solicitation to determine with certainty whether the minority individual, woman or veteran is interested in the opportunities;
- Provide all persons who express continued interest with adequate information about hiring qualifications, pay rates, benefits, the expected duration of employment, work hours and other conditions of employment under the public improvement contract;
- Make efforts to encourage minority individuals, women and veterans to seek employment under the public improvement contract that the contractor may reasonably expect will produce a level of participation that meets the aspirational target described in this paragraph; and
- Use the services of minority community organizations, local, state, federal and tribal governments or other organizations that have recruiting, training and otherwise assisting minority individuals, women and veterans as the organization's primary purpose or mission to assist the contractor with outreach, recruitment and retention.

Contractor shall submit Subcontractor's Outreach Plan with Contractor's request for consent to subcontract

**Oregon Department of Transportation**  
**Policy Statement**  
**Disadvantaged Business Enterprise (DBE) Program**

The Oregon Department of Transportation (ODOT) is committed to a Civil Rights Program that includes participation of Disadvantaged Business Enterprises (DBEs) in ODOT contracting opportunities. ODOT has established a DBE program in accordance with U.S. Department of Transportation (USDOT) regulations 49 CFR Part 26, as amended in 2014 and effective as of November 3, 2014.

It is ODOT's policy never to exclude any person from participation in, deny any person the benefits of, or otherwise discriminate on the basis of race, color, sex, national origin, or disability in the award and administration of USDOT-assisted contracts. It is ODOT's policy to ensure DBEs, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also our policy to:

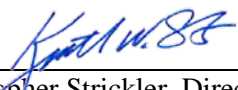
1. Ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. Create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. Ensure the DBE program is narrowly tailored in accordance with applicable law;
4. Ensure only firms that fully meet 49 CFR Part 26 eligibility standards are permitted to participate as DBEs;
5. Help remove barriers to the participation of DBEs in USDOT-assisted contracts;
6. Promote the use of DBEs in all types of federally-assisted contracts and procurement activities conducted by recipients
7. Assist the development of firms that can compete successfully in the marketplace outside the DBE program; and
8. Provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs.

The Director of ODOT establishes the DBE policy for the department. The Manager of the Office of Civil Rights (OCR) is delegated as the DBE Liaison Officer. In that capacity, the Manager of OCR, in coordination with all ODOT personnel, is responsible for implementing all aspects of the DBE program. Implementation of the DBE program is accorded the same priority as compliance with all other legal obligations incurred by ODOT in its financial assistance agreements with the USDOT. It is the expectation of the Director that all ODOT personnel shall adhere to the intent as well as the provisions and procedures of the DBE Program.

ODOT circulates this policy to the following in accordance with the DBE program: (1) The Oregon Transportation Commission, (2) ODOT personnel involved with USDOT-assisted work, (3) Members of the DBE and non-DBE business communities that perform or are interested in performing work on ODOT contracts. The complete DBE Program and the overall goal calculation reports are available for review at:

ODOT Office of Civil Rights  
 800 Airport Road SE  
 Salem, OR 97301  
<https://www.oregon.gov/odot/Business/OCR/Pages/Disadvantaged-Business-Enterprise.aspx>

For questions or further information, please contact:  
 Angela M. Crain, Manager  
 Office of Civil Rights  
 (T) 503-931-2575  
 (F) 503-986-6382  
[Angela.M.Crain@odot.oregon.gov](mailto:Angela.M.Crain@odot.oregon.gov)

  
 Kristopher Strickler, Director  
 Oregon Department of Transportation

June 10, 2022  
 Date

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**DISADVANTAGED BUSINESS ENTERPRISE (DBE)  
SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

**01.00 DBE Policy and Authorities:**

**(a) DBE Policy, Required Assurance, and Applicability** - As required by 49 CFR Part 26, the Oregon Department of Transportation (ODOT) and the Contractor agree to abide by and take all necessary and reasonable steps to comply with the policy set out below:

**(1) DBE Policy** - It is the policy of the United States Department of Transportation (USDOT) to practice nondiscrimination on the basis of race, color, sex and/or national origin in the award and administration of USDOT assisted contracts. Consequently, the Disadvantaged Business Enterprise (DBE) requirements of 49 CFR part 26 apply to this agreement.

**(2) DBE Required Assurance** - The Contractor 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 USDOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as ODOT deems appropriate. Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

**(3) DBE Applicability** - This applies to all public improvement projects financed in whole or in part with federal funds received from FHWA, FTA and FAA through ODOT. ODOT and its Contractors shall conform to all applicable civil rights laws, orders, and regulations. ODOT and its Contractors shall not discriminate on the basis of race, age, sex, color, religion, national origin, mental or physical disability, political affiliation, or marital status in the award and performance of ODOT contracts.

**(b) Authorities** - These DBE Supplemental Required Contract Provisions are authorized by the following laws, rules, regulations and guidelines, which, in conjunction with any pertinent policy memoranda or procedures issued by the FHWA, all of which are incorporated by reference into the provisions, govern ODOT's administration of the DBE Program.

**(1)** The USDOT Regulations (49 CFR Part 26) published in the Federal Register, effective March 4, 1999, established a requirement that all recipients of USDOT funds establish a DBE Program. The regulations are applicable both to ODOT's Federal-aid construction and to its non-construction activities.

**(2)** The USDOT's legal authority for its DBE regulations includes Executive Order 11625 (October 13, 1971), which required that federal executive agencies develop comprehensive plans and programs to encourage minority business participation. USDOT requires ODOT to establish a DBE Program as a condition for receiving USDOT federal funds.

(3) Title VI, Civil Rights Act of 1964. This Act concerns non-discrimination in federally assisted programs or activities on the grounds of race, color, sex or national origin.

(4) The Program is also subject to the following laws: Section 30 of the Airport and Airway Development Act of 1970 and Section 520 of the Airport and Airway Improvement Act of 1982, as amended by the Airport and Airway Safety Capacity Expansion Act of 1987; Section 905 of the Railroad Act of 1978 (45 USC 903); and Section 19 of the Urban Mass Transportation Act of 1964, as amended (Public Law 95-599).

(5) Oregon Revised Statutes, Chapters 200 and Chapters 279A, 279B and 279C.

(6) Oregon Administrative Rules, Chapter 123, Division 200, Certification Procedures.

The Contractor agrees that these Disadvantaged Business Enterprise (DBE) Supplemental Required Contract Provisions (including all references) shall be incorporated into all subcontracts, regardless of tier, and into any agreements with Committed DBEs, regardless of form of agreement.

**02.00 Abbreviations and Definitions** - Abbreviations and definitions of words and phrases used in connection with the DBE Program are as follows:

**(a) Abbreviations:**

**COBID** - State of Oregon Certification Office of Business Inclusion and Diversity, which is authorized to certify DBE firms according to federal regulations

**DBE** - Disadvantaged Business Enterprise

**FAA** - Federal Aviation Administration

**FHWA** - Federal Highway Administration

**FTA** - Federal Transit Administration

**ODOT** - Oregon Department of Transportation (also referred to as 'Agency')

**USDOT** - United States Department of Transportation

**(b) Definitions:**

**Assigned DBE Contract Goal** - An assigned numerical percentage value of the total dollar amount of a Contract Award that is allocated solely for DBE participation. For a DBE to count towards participation it must be certified by COBID under the commodity codes of the work it is contracted to perform.

**Broker** - A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the contract.



**Certification Directory of DBEs** - A publication (available in paper or Internet) listing all DBEs which are currently certified by the COBID. The Directory is provided to the Contractor for use in identifying DBE firms whose participation on a contract may be counted toward achievement of the assigned DBE contract goal.

**Certified Disadvantaged Business Enterprise (DBE)** - A business firm certified by the COBID, indicating that it:

- Meets the criteria outlined in 49 CFR part 26 regarding certification as a DBE; and
- Possesses the required resources and expertise to perform designated types of work.

**Commercially Useful Function (CUF)** - The definition is consistent with 49 CFR 26.55(c) and describes how ODOT counts DBE participation towards DBE goals:

A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

**Committed DBE** - A Committed DBE firm is one that was identified by the Contractor to meet an assigned DBE contract goal as a condition of Contract Award, and includes any substitute DBE that has been approved by ODOT in accordance with 49 CFR 26.53(f) and section 10.00 of the Disadvantaged Business Enterprise (DBE) Supplemental Required contract Provisions in exhibit C-5 that has subsequently been committed work to meet the assigned DBE contract goal. A non-Committed DBE is one that was hired on a race- and gender-neutral basis and has not been identified as a substitute Committed DBE.

**Commodity Codes** - Codes assigned by the COBID to indicate the standard types of services, labor, materials, or work the DBE provides. Services and commodity codes reflect information provided by the certified DBE firms and are not used as prequalification factors by ODOT.

**Contractor's DBE Liaison Officer** - The individual designated by the Contractor to assist the Contractor in meeting the Contractor's responsibility of compliance with the legal requirements of the DBE program and with the contractual obligations imposed by these supplementary provisions including but not limited to assuring that the DBE subcontractors on this project perform a commercially useful function.

**DBE Eligibility** - A firm is eligible to participate as a DBE if it meets the criteria as established by the federal DBE regulations in 49 CFR part 26 and enforced by the certifying agency, which in Oregon is COBID, applies these regulations to make

certification decisions. A firm will no longer be able to participate as a DBE on current or future contracts when it receives notification of decertification, denial of recertification, or notice of graduation by the certifying agency.

**Equipment** - All machinery, tools, and apparatus needed to complete the contract.

**Federal-Aid Contract** - For the purposes of these Disadvantaged Business Enterprise (DBE) Supplemental Required Contract Provisions, any contract including consultant agreements or modifications of a contract between ODOT and a Contractor which is paid for in whole or in part with USDOT financial assistance from FHWA, FTA or FAA.

**Good Faith Efforts** - Efforts required to obtain and support DBE participation that could reasonably be expected to produce and maintain a level of DBE participation sufficient to meet the assigned DBE contract goal. Good faith efforts are required before Bid Opening, upon Contract Award, and continue throughout the performance of the contract to maximize DBE participation. See 49 CFR 26.53 and 49 CFR Part 26, Appendix A.

**Joint Venture DBE** - An ODOT certified enterprise consisting of one or more firms of which at least one is a certified DBE, formed to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks and profits of the joint venture are commensurate with its ownership interest of the business. (see Section 8.00).

**Managerial Control** - Consistent with normal industry practice, management shall include scheduling work operations, ordering equipment and materials (if materials are part of the contract), preparing and submitting payrolls and all other required reports and forms, and hiring and firing employees, including supervisory employees.

**Manufacturer** - A firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.

**Operational Control** - Consistent with normal industry practice, the DBE shall supervise the daily operations of the work contracted. There are only two acceptable ways for the DBE to supervise the daily operations. The DBE owner shall act as superintendent and directly supervise the work or the DBE owner shall supervise the work of and employ a skilled and knowledgeable superintendent. If the latter is used, the DBE owner shall be actively involved in making the operational and managerial decisions of the firm; wherein the DBE owner can continue operations should the skilled and knowledgeable superintendent's employment be discontinued.

**Regular Dealer** - A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a regular dealer, the DBE firm shall engage in, as its principal business and in its own name, the purchase and sale of the products in question. A regular dealer in such items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock if it owns and operates distribution equipment. Any supplementing of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis, and such equipment shall be operated by

the DBE's own employees. Brokers and packagers shall not be regarded as regular dealers within the meaning of this definition.

**Subcontract** - A subcontracting arrangement is generally considered to exist when a person or firm assumes an obligation to perform a part of the contract work and the following conditions are present:

- Compensation for performance of work is on a unit price or lump sum basis.
- The subcontractor exercises full control and authority over the subcontracted work, including the furnishing of labor and equipment and choice of work methods, with only general supervision being exercised by the Contractor.
- Personnel involved in the operation are under the direct supervision of the subcontractor and are included on the subcontractor's payroll.
- ODOT has provided written consent to the subcontract arrangement, regardless of tier.

All conditions involved should be considered and no one condition alone will normally determine whether a subcontract actually exists. (See 00180.21.)

**Type of Work** - Specific descriptions of work which the DBE is certified in the Certification Directory of DBEs as having the expertise and resources necessary to perform.

**03.00 Assigned DBE Contract Goal** - For any project with an assigned DBE contract goal for DBE participation, the Contractor is required to select a portion of work available on the project for DBE participation. The Contractor may use DBE subcontractors, suppliers, manufacturers or professional service providers to fulfill the assigned DBE contract goal as long as the DBE is certified in the types of work selected. The assigned DBE contract goal on a project remains in effect throughout the life of the contract. Dollar values of participation shall be credited toward meeting the assigned DBE contract goal based on DBE gross earnings.

According to 49 CFR 26.87(j)(2), if a Contractor has executed a subcontract with a firm before COBID notifies the firm of its ineligibility, the Contractor may continue to use the firm on the contract and may continue to receive credit toward its assigned DBE contract goal for the firm's work. If ODOT awards the contract to a DBE prime Contractor that is later ruled ineligible, the portion of the ineligible firm's performance of the contract remaining after COBID issued the notice of ineligibility shall not count toward the ODOT overall goal, but may count toward the assigned DBE contract goal. There is an exception under 49 CFR 26.87(j)(3) if the DBE's ineligibility is caused solely by its having exceeded the size standard during the performance of the contract, ODOT may continue to count its participation on the contract toward overall and assigned DBE contract goals.

In determining whether a DBE Contractor has met an assigned DBE contract goal, only the work the DBE has committed with its own forces as well as the work that it has committed to be performed by DBE subcontractors and DBE suppliers will be counted.

According to 49 CFR 26.71(n), DBE firms are certified only for specific types of work. If a DBE firm has not been certified prior to Bid Opening, for the type of work it is intending to

perform on a given contract, then the firm's participation on that contract cannot count toward assigned DBE contract or overall goals.

The assigned DBE contract goal for the project is listed on the "Assigned DBE Contract Goal" sheet at the end of these provisions.

#### **04.00 Subcontracting Limitations:**

**(a) DBE Subcontractors** - All DBE subcontractors committed to perform a function or service as a condition of contract award, or for replacing the performance of a Committed DBE, shall perform a commercially useful function according to Section 09.00. If it is determined by ODOT that the DBE subcontractor is unable to perform a commercially useful function, ODOT will notify the Contractor prior to subcontract approval. The Contractor shall either provide evidence that the DBE subcontractor is able to perform a commercially useful function, or replace the DBE subcontractor with another DBE who has been certified to perform the bid item subcontracted according to Section 10.00(c). If the Contractor cannot provide sufficient evidence that the DBE subcontractor has the ability to perform a CUF, and/or refuses to replace the DBE, the Contractor may be declared in default and the contract could be terminated according to the Oregon Standard Specifications for Construction subsection 00180.90(a).

**(b) Second Tier DBE Subcontracts** - Second tier DBE subcontracts may be counted toward the Contractor's assigned DBE contract goal provided the subcontract was listed in the original DBE commitment prior to bid award. The proportion of participation or work performed by a second-tier DBE subcontract may not be double counted and may only be counted towards the DBE goal in accordance with 49 CFR Part 26.

#### **05.00 DBE Subcontract, Sub-Subcontract(s), and Other Agreement Documents:**

**(a) Committed DBEs** - All work committed to a DBE toward meeting an assigned DBE contract goal, including work to be performed by a substitute Committed DBE, shall be performed under a written agreement according to 00160.01 and 00180.21. The agreement shall fully describe any partial pay item work committed to be performed by DBE firms.

**(b) Non-Committed DBEs** - Work to be performed by a non-Committed DBE shall be in accordance with 00160.01, 00180.20, and 00180.21.

**06.00 Good Faith Efforts Requirements** - The Contractor is required to exercise good faith efforts during the entire life of the contract to meet the assigned DBE contract goal. Good faith efforts shall be made to secure DBE participation sufficient to meet the assigned DBE contract goal. The Contractor shall also make every reasonable effort during the course of the project to enable DBE firms to perform those portions of the contract work for which they have been committed.

If the Contractor determines that the committed DBE is unable or unwilling to perform under the subcontract, unable to perform a commercially useful function, or has changed its ownership and/or control, the Contractor shall make good faith efforts to replace with another

DBE. Section 10.00 discusses the procedures that shall be followed to terminate a Committed DBE and replace the firm with a substitute.

The Engineer may request the Contractor to submit evidence of Good Faith Efforts at any time during the course of the contract and the Contractor shall promptly submit such evidence.

**07.00 DBE Work Plan Proposal Form** - The Contractor shall require each DBE participating on the project as a subcontractor and each Committed DBE, regardless of work type or form of agreement, to complete the "Disadvantaged Business Enterprise Work Plan Proposal - Form 3A" (Form 734-2165A). The form shall be filled-in electronically, then printed, and signed by an authorized representative of the DBE and of the Contractor. The Contractor shall submit the completed form to the Engineer. Form 734-2165A is available on the ODOT Office of Equity and Civil Rights website at:

<https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx>

For Committed DBEs, the Contractor shall submit the completed DBE Work Plan Proposals to the Engineer at or before the pre-construction conference. For non-Committed DBE subcontractors, the Contractor shall submit the completed forms to the Engineer in time for review of the Contractor's request for consent to use the DBE subcontractor on the project.

The purpose of the DBE Work Plan Proposal is to preview whether the proposed activities and type of work identified will comply with DBE program regulations, particularly with respect to commercially useful function and crediting rules. The Contractor shall ensure the form is completed with sufficient information about the DBE's intended work, personnel, equipment, materials, and performance to allow the Agency to determine whether the DBE's proposed performance will meet commercially useful function requirements. Additional information and documentation may be requested by the Agency as needed to alleviate program compliance concerns and must be provided promptly according to 49 CFR 26.109.

The DBE Work Plan Proposal specifically solicits information regarding the following:

- (a) Type of Work** - List the types of work the DBE will perform.
- (b) Personnel Required** - List the names and/or craft classifications for personnel who will perform. Indicate whether the individual is regularly employed by the DBE, or the source from which the individual was or is to be recruited.
- (c) Equipment Required** - List the items of equipment that will be used on the project. Indicate whether the equipment is owned, rented or leased. If rented or leased, consent to the rental or lease shall be obtained from the Agency prior to beginning of the work.
- (d) Supplies and Materials Required** - List the supplies and materials that will be used on the project. Indicate the source, by name, address, and phone number, from which supplies and materials will be obtained. For a DBE supplier committed to meet an assigned DBE contract goal, attach documentation showing how the DBE meets manufacturer, regular dealer, or broker requirements, as applicable to the credit being claimed and provide any additional explanation needed regarding ordering, scheduling, and delivery according to subsection (f) below.

**(e) Prime Contractor Resources** - Discuss any plans for the DBE to share any resources of the Contractor, e.g. personnel, equipment, tools, or facilities.

**(f) Additional Information** - Provide comments or explanation of any of the information provided above. Include information related to joint check arrangements or any plans the DBE has to subcontract work to a lower tier or perform work through a specialty contractor.

The Engineer and Office of Equity and Civil Rights (OECR) Field Coordinator will review the proposals and may provide written comments as to whether the activities and type of work identified in the proposals complies with program regulations. In those instances where proposed activity and type of work violates applicable regulations, written comments will be offered as to corrective action required in order to comply with the regulations.

**08.00 Contractor Pre-construction Conference Reporting** - The Contractor shall deliver the following information to the Engineer at or before the Pre-construction Conference:

- The name of the DBE liaison officer who will administer the Contractor's DBE program. Said officer or the officer's designee shall attend the conference.
- Contractor's project schedule showing the work commencement date and estimated completion date for each DBE that will perform work on the project.
- "Disadvantaged Business Enterprise Work Plan Proposal - Form 3A" for all Committed DBEs that are performing work on the project regardless of contracting tier.

**09.00 Commercially Useful Function** - The Contractor is responsible for ensuring that DBE firms working on the project perform a commercially useful function (CUF). The Contractor shall receive credit toward meeting the assigned DBE contract goal and payment for DBE commercially useful function performed work only.

ODOT may perform an on-site review to ascertain whether the DBE is actively performing, managing, and supervising the work. All DBEs shall employ a labor force which is separate and apart from that employed by the Contractor, and which is independently recruited by the DBE according to standard industry practice. The DBE shall supervise and manage the work or independently hire a supervisor, who may not be a supervisor employed by the Contractor or any other subcontractor on the project.

With regard to the Federal-aid share, if an investigation reveals that there has been a violation of the CUF provisions, that portion of the work found to be in violation would not be counted toward goal achievement for either the Contractor or the Agency.

When a DBE is presumed not to be performing a CUF as described in this section, the DBE may present evidence through the Contractor to the Agency to rebut that presumption.

**(a) The DBE (Not Some Other Business Entity) Shall Actually Perform the Subcontract** - The DBE's utilization of labor, supervisory personnel, equipment and material in the performance of the subcontract shall be consistent with industry standards and shall demonstrate that the DBE and not some other business entity is actually performing the subcontract. For example, when a DBE associates itself too closely with

another business entity or entities, in acquiring a labor force, supervisors, equipment or materials to an extent inconsistent with industry standards, the DBE can no longer be said to be actually performing the subcontract because a partnership or joint venture, of which the DBE is a member, is the actual performer of the subcontract.

**(b) DBE's Work Force** - The DBE shall solicit, hire, place on its payroll, direct, and control all workers performing work under its contract. The DBE owner or its superintendent shall, on a full-time basis, supervise and control the work of the contract. The DBE may with the prior written consent of the Engineer augment its work force with personnel of another firm. The Engineer shall approve the request only when:

- Specialized skills are required, and
- The use of such personnel is for a limited time period.

**(c) DBE Equipment** - The DBE is expected to perform the work with equipment that is owned, being purchased, or leased by the DBE under a written lease agreement that has been consented to by the Engineer prior to the DBE starting work. No credit will be given, nor payment made for the cost of equipment leased or rented and used in the DBE firm's work when payment for those costs is made by a deduction from the Contractor's payment(s) to the DBE firm.

The DBE may lease specialized equipment, provided a written rental agreement, separate from the subcontract specifying the terms of the lease arrangement, is consented to by the Engineer prior to the DBE starting work. The Engineer will consent to the lease agreement only when:

- The equipment is of a specialized nature,
- The equipment is readily available at the job site,
- The operation of the equipment is under the full control of the DBE,
- The lease arrangement is for a short term,
- The lease arrangement for the specialized equipment in question is a normal industry practice, and
- The DBE shall hire, direct, supervise, control and carry the operator of the equipment on the DBE payroll.

**(d) DBE Trucking Firms** - Whenever a DBE trucking firm has been committed to meet an assigned DBE contract goal, the Contractor shall ensure that the Committed DBE individually identifies each truck intended for use on the Project on its "Disadvantaged Business Enterprise Work Plan Proposal - Form 3A" or an attached list.

The Contractor shall furnish a daily log of all trucking work performed under the Committed DBE's subcontract. The "Daily DBE Trucking Log" (Form 734-2916), (or an approved equal that contains all the information on the ODOT form, including the certification) shall be completed for each day work is performed under the DBE's subcontract. The Daily DBE Trucking Log shall identify all trucks under the management and supervision of the DBE subcontractor used on the Project.

The Contractor shall submit the Daily DBE Trucking Log to the Engineer on a weekly basis and no later than 14 Calendar Days after the first recorded date in the logs. For owner-operator trucks, the Contractor shall comply with 00170.65(b-4).

The following factors will be used to determine if a DBE Trucking firm is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- The DBE shall itself own and operate at least one fully licensed, insured and operational truck used on the contract.
- The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- 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.
- According to 49 CFR 26.55(d)(5) the DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by the non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangements.
- For the purposes of this paragraph, a lease shall indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks shall display the name and identification number of the DBE.

**(e) DBE Flagging Firms** - DBE flagging firms shall be responsible for ensuring all their dispatched employees meet the required certification and licensing requirements and for furnishing their employees with equipment (in this case, paddles and radios) to perform the committed work. This does not preclude the DBE's employees from supplementing with their own equipment.

**10.00 Termination and Substitution of DBEs** - The Contractor must comply with the requirements and procedures under 49 CFR 26.53(f). The Contractor shall use the specific DBEs listed in response to a contract goal to perform the work and supply the materials for which each is listed unless the contractor obtains ODOT's prior written consent, coordinated with the ODOT Office of Equity and Civil Rights. Without ODOT consent, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE. Contractor must provide the DBE with written notice and supporting documentation of its good cause reasons they wish to terminate and/or substitute the DBE with a copy to the Engineer and the ODOT Office of Equity and Civil Rights. The DBE must be given 5 days to respond to the termination request, copying the ODOT Office of Equity and Civil Rights.



ODOT may provide such written consent only if it agrees, for reasons stated in its concurrence document, that the prime contractor has good cause to terminate the DBE firm because the DBE is unable, unwilling or ineligible to perform. To initiate the termination, substitution, removal or replacement process with a Committed DBE contractor/supplier (regardless of the tier), the Contractor or lower tier contractor/subcontractor must do the following:

**(a) Contractor Notice of Termination of a Non-Committed DBE** - The Contractor shall notify the Agency in writing of plans to terminate a non-Committed DBE. Include the name of the non-Committed DBE to be terminated, a brief explanation of the reason for termination, and the adjusted DBE subcontract or agreement amount.

**(b) Contractor Written Request to Terminate a Committed DBE** - All Contractor requests to terminate, substitute or replace a Committed DBE, including a partial termination or substitution of work committed to a DBE, shall be in writing and shall include the following information:

- Date the Contractor determined the DBE to be unwilling, unable or ineligible to perform.
- Projected date Contractor will require substitution or replacement DBE to commence work if consent is granted to the request.
- Brief statement of facts describing and citing specific actions or inaction by the DBE giving rise to the Contractor's assertion that the DBE is unwilling, unable or ineligible to perform.
- Brief statement of the affected DBE's capacity and ability to perform the work as determined by Contractor.
- Brief statement of facts regarding actions taken by Contractor that are believed to constitute good faith efforts toward enabling the DBE to perform.
- To date percentage of work completed on each bid item by the DBE.
- The total dollar amount paid, per bid item, to date for work performed by the DBE.
- The total dollar amount, per bid item, remaining to be paid to the Committed DBE for work completed, but for which the DBE has not received payment and with which the Contractor has no dispute.
- The total dollar amount, per bid item, remaining to be paid to the DBE for work completed, but for which the DBE has not received payment and over which the Contractor and/or the DBE have dispute.
- A written, signed statement from the DBE, provided the DBE concurs with request to terminate, indicating its unwillingness or inability to perform.

**(c) Contractor Written Notice to Committed DBE of Pending Request to Terminate and Substitute with Another DBE** - The Contractor shall send a copy of the request to terminate and substitute letter to the affected Committed DBE in conjunction to submitting the request to the Engineer. The affected DBE firm may submit a response letter to the Engineer within five Calendar Days of receiving the notice from the Contractor. The affected DBE firm may explain its position concerning performance on the committed work. The Engineer will consider both the Contractor's request and DBE's response and explanation before approving the Contractor's termination and substitution request. If the Contractor is unsuccessful in notifying the affected DBE firm, after trying its best to deliver

a copy of its request letter, the Agency may determine that the affected Committed DBE is unable or unwilling to continue the contract and a substitution will be immediately approved by the Engineer. Contractor must provide the DBE with written notice and supporting documentation of its good cause reasons they wish to terminate and/or substitute the DBE with a copy to the Engineer and the ODOT Office of Equity and Civil Rights. The DBE must be given 5 days to respond to the termination request, copying the ODOT Office of Equity and Civil Rights.

**(d) Proposed Substitution of Another Certified DBE** - When a Committed DBE substitution shall occur, the Contractor may submit another eligible DBE firm to replace the original committed firm in writing. The Contractor shall submit the name of the DBE firm, the proposed work to be performed, and the dollar amount of the work. The Contractor shall give pertinent information including bid item, item description, bid quantity and unit, unit price, and total price. In addition, the Contractor shall submit a written DBE Work Plan for the requested substitute DBE according to Section 07.00. The dollar value of work to be performed by the substitute DBE shall be in an amount equal to the dollar value of the amount committed to the terminated DBE, minus the value of work performed to date by the DBE, prior to the request for substitution. Should the Contractor be unable to commit the required dollar value to the substitute DBE, the Contractor shall provide written evidence of good faith efforts made to obtain the substitute value requirement. The Agency will review the quality and intensity of those efforts. Efforts that are merely superficial are not good faith efforts to meet the assigned DBE contract goal. The Contractor shall document the steps taken to obtain participation which demonstrate the good faith efforts outlined below:

- Evidence that the Contractor attended any pre-solicitation or prebid meetings that were scheduled by ODOT to inform DBE firms of contracting and subcontracting or material supply opportunities available on the project;
- Evidence that the Contractor identified and selected specific economically feasible units of the project to be performed by DBE firms in order to increase the likelihood of participation by DBE firms;
- Evidence that the Contractor advertised in general circulation, trade association, minority and trade oriented, women-focus publications, concerning the subcontracting or supply opportunities;
- Evidence that the Contractor provided written notice to a reasonable number of specific DBE firms, identified from the DBE Directory of Certified Firms for the selected subcontracting or material supply work, in sufficient time to allow the enterprises to participate effectively;
- Evidence that the Contractor followed up initial solicitations of interest by contacting the enterprises to determine with certainty whether the enterprises were interested. The Contractor should provide the following information as evidence:
  - The names, addresses, and telephone numbers of DBE firms who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacting the DBE firms to determine with certainty whether the DBE firms were interested;
  - A description of the information provided to the DBE firms regarding the plans and specifications and estimated quantities for portions of the work to be performed;

- Documentation of each DBE contacted, but rejected and the reasons for the rejection.
- Evidence that the Contractor provided interested DBE firms with adequate information about the plans, specifications and requirements for the selected subcontracting or material supply work;
- Evidence that the Contractor negotiated in good faith with the enterprises, and did not without justifiable reason reject as unsatisfactory bids prepared by any DBE;
- Evidence that the Contractor advised and made efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance required by ODOT or Contractor;
- Evidence that the Contractor's efforts to obtain DBE participation were reasonably expected to produce a level of participation sufficient to meet the assigned DBE contract goal or requirements of ODOT; and
- Evidence that the Contractor used the services of minority community organizations or minority organizations that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises.

**11.00 Changes in Work Committed to DBEs** - The Agency will consider the impact on DBE participation in instances where the Agency changes, reduces, or deletes work committed to a DBE at the time of contract award. In such instances, the Contractor shall not be required to replace the work but is encouraged to do so. If the prime Contractor proposes any changes that involve a Committed DBE, the Contractor shall notify the affected DBE of the proposed change, reduction, or deletion of any work committed at the time of contract award prior to executing the change order. The Contractor shall enable the affected DBE to participate in the change order request and will make every effort to maintain the Committed DBE percentage that was the condition of contract award. Documentation of this effort and a letter from the DBE agreeing to the change shall be included with the request.

## **12.00 Contractor Payments to Subcontractors and Suppliers:**

**(a) DBE-Related Records** - The Contractor shall maintain records of all subcontracts or other agreements entered into with DBE firms and records of materials purchased from DBE suppliers. Such records shall show the name and business address of each DBE subcontractor or vendor and the total dollar amount actually paid to each DBE subcontractor or vendor.

**(b) Prompt Payment and Release of Retainage** - The Contractor shall pay each subcontractor for satisfactory performance of its contract no later than 10 Calendar Days from receipt of each payment the Contractor receives from ODOT. If retainage is withheld the Contractor shall also return retainage payments to each subcontractor within 10 Calendar Days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Engineer. This policy applies to both DBE and non-DBE contractors.

**(c) Paid Summary Reports** - The Contractor shall submit a "Paid Summary Report" (Form 734-2882) to the Engineer certifying payments made to all of the following:

- All subcontractors
- Committed DBE suppliers
- Non-Committed DBE suppliers and service providers with estimated total payments for the Project over \$10,000.

The Contractor shall submit the completed and signed Paid Summary Report to the Engineer within 20 days of receipt of payment from the Agency for each month in which payments were made to each subcontractor, each Committed DBE supplier, and each non-Committed DBE supplier or service provider with estimated total payments for the Project over \$10,000. At the completion of the project, submit Form 734-2882 recapping the total amounts paid to each subcontractor, and each Committed DBE supplier, and each non-Committed DBE supplier or service provider with estimated total payments for the Project over \$10,000.

The Contractor shall require each subcontractor at every tier to comply with the requirement to submit Form 734-2882 within 20 days of receipt of payment from its controlling contractor and provide a recap of the total amounts paid at the completion of the project or completion of their Work.

Forms shall be submitted to an email address provided to the Contractor at the Preconstruction Conference.

***The participation of a DBE subcontractor will not be credited towards the Contractor's assigned DBE contract goal, or the overall goal, until the amount being counted toward the goal, and any retainage held by the Contractor has been paid to the DBE.***

**13.00 Remedies** - Failure of any Contractor to meet the requirements cited in Section 01.00(b) constitutes a breach of contract for which the imposition of the following sanctions could occur:

- Temporarily withholding progress payments until the Contractor complies with these provisions through future performance.
- Permanently withholding payment for work already performed in a manner that constitutes a breach of contract.
- Suspension of work according to the Oregon Standard Specifications for Construction, subsections 00150.00 and 00180.70.

Any Bidder or Contractor or subcontractor on a public contract that violates the provisions of ORS 200.075 shall have its right to bid on or participate in any public contract suspended for up to 90 days for a first violation, up to one year for a second violation and up to five years for a third violation.

Each violation shall remain on record for five years. After five years, the violation shall no longer be considered in reviewing future violations.

Failure of a Bidder, Contractor, or subcontractor to comply with the requirements cited in Section 01.00(b) when there appears to be evidence of criminal conduct, shall be referred to the Oregon Department of Justice and/or the FHWA Inspector General for criminal investigation, and if warranted, prosecution.

**14.00 Records and Reports** - The Contractor shall keep such project records as are necessary to determine compliance with these DBE Supplemental Required Contract Provisions, including but not limited to records on equipment usage, fuel consumption, invoicing, and payments. Such records shall include written reports from the DBE Liaison Officer to the Contractor as to the performance of the committed DBE and its performance of a commercially useful function. Contractor shall provide the Engineer with records on equipment and fuel logs and other records needed to verify compliance with commercially useful function and DBE crediting requirements.

**15.00 Further Information** - The Disadvantaged Business Enterprise Supplemental Required Contract Provisions shall be incorporated into and attached to all agreements and contracts on projects financed in whole or in part with federal funds.

For further information concerning Disadvantaged Business Enterprise participation, including confirmation of certification for type of work, contact, in writing, the DBE Program Manager not later than one week prior to the project Bid Opening at [ocrinforequest@odot.oregon.gov](mailto:ocrinforequest@odot.oregon.gov).

Other requests may be directed to:

Oregon Department of Transportation  
Office of Equity and Civil Rights  
800 Airport Road SE  
Salem, OR 97301  
Phone: 503-986-4350  
Fax: 503-986-6382  
[ocrinforequest@odot.oregon.gov](mailto:ocrinforequest@odot.oregon.gov)

Training

**ASSIGNED DBE CONTRACT GOAL**

The minimum Assigned **DBE** Contract Goal for this Project is **11%**.

(Overall DBE program goal for ODOT is set at 23.43% for FHWA funded Contracts for federal fiscal years 2023, 2024 and 2025.)

A Certification Directory of DBEs is available from the Certification Office of Business Inclusion and Diversity (COBID) website at:  
<https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp>  
or by telephone at 503-986-0075.

Training



## REIMBURSABLE FEDERAL ON-THE-JOB and APPRENTICESHIP TRAINING

This Section for Reimbursable Federal On-the-Job Training and Apprenticeship Training supersedes subparagraph B(7-e) of the "On-Site Workforce Affirmative Action Requirements for Women and Minorities on Federal Aid Contracts," and is in implementation of 23 U.S.C. 140(a). All other provisions apply.

### SECTION 1: ABBREVIATIONS AND DEFINITIONS

#### (a) Abbreviations

**BOLI** - Bureau of Labor and Industries for the State of Oregon

**EEO** - Equal Employment Opportunity

**OECR** - Office of Equity and Civil Rights

**OJT** - On-the-Job Training

#### (b) Definitions

**Affirmative Action** - Contractor's efforts exerted towards achieving equal opportunity through positive, aggressive, and continuous result-oriented measures to correct past and present discriminatory practices and their effects on the conditions and privileges of employment. These measures include, but are not limited to, recruiting, hiring, promotion, upgrading, demotion, transfer, termination, compensation, and training.

**Apprenticeship Training Program** - A specific Apprenticeship Training Program, approved by BOLI, which provides a combination of field and classroom trade specific experience under the supervision of journey level workers. For this Contract, this is a Race and Gender Neutral program.

**OJT Program** - A specific on-the-job training program, approved by the Agency and FHWA, which provides a combination of field, and limited classroom, trade specific experience under the supervision of journey level workers. This is an Affirmative Action program that targets women and minorities.

**Qualified Hours** - Specific On-Site training hours (may include some classroom hours) completed by a properly registered and enrolled trainee consistent with the Contractor's OJT Program or an apprentice consistent with the Apprenticeship Training Program. The Contractor reports these Qualified Hours to the Agency for the OJT and Apprenticeship Training Goal.

**Race and Gender Neutral** - Employment and contracting practices where the ethnicity and the sex of a person are not considered in the evaluation of candidates for employment or bids for the Contract.

**Training Goal** - A fixed quantity of Qualified Hours set by the Agency and included in the bid schedule.

## **SECTION 2: POLICY STATEMENT**

In order to increase the number of trained and skilled workers in highway construction the Agency will set a Training Goal for the Project.

It is the policy of the Agency that the Contractor shall take all necessary and reasonable steps to ensure that trainees and apprentices have the opportunity to participate on highway construction projects and to develop as journey-level workers in the given trade or job classification employed, and to meet this Training Goal.

The Contractor shall adopt the following policy:

It shall be the policy of the Contractor to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or 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 on-the-job training.

The Training Goal is not intended, and shall not be used to discriminate against any applicant, whether members of a minority group or not.

## **SECTION 3: APPRENTICESHIP TRAINING PROGRAM**

### **(a) General**

Apprentices shall be paid the appropriate rates approved in connection with their stage in the Apprenticeship Training Program.

A valid certification by an appropriate apprenticeship committee that the Contractor is an approved training agent shall be prima facie proof of compliance.

### **(b) EEO Requirements**

The Contractor shall ensure that, without discrimination, minorities and women have an equal employment opportunity to compete for and participate as apprentices while supporting a diverse workforce that is representative of the population.

Apprenticeship training is Race and Gender Neutral, however, the Contractor is still obligated to comply with all applicable EEO requirements.

### **(c) Reports**

The Contractor and each Subcontractor with an Apprenticeship Training Program shall complete and submit the following reports to the Engineer, according to the instructions provided in the respective forms:

- The "Training Program Approval Request (TPAR)" (Form 734-2880) shall be submitted prior to or at the preconstruction conference.
- Before an apprentice begins work, an "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878) shall be submitted.
- Each month the Contractor shall submit the "Monthly Employment Utilization Report" (Form 731-0668). This report is required of the Contractor and Subcontractors who have contracts that require certified payrolls, regardless of their participation in the apprenticeship.
- Each month the Contractor shall submit an "Apprentice/Trainee Monthly Progress Report (MPR)" (Form 734-2879) for each apprentice. This Form is used to report Qualified Hours for apprentices and will be the source document for estimated monthly progress payments to the Contractor.

Forms are published on the ODOT OECR website at:

<https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx>

## **SECTION 4: OJT PROGRAM**

### **(a) EEO Requirements**

The Contractor shall make every effort to enroll minority and women trainees by conducting systematic and direct, meaningful recruitment through public and private sources likely to yield minority and women trainees within a reasonable area of recruitment.

Whenever minorities or women are not placed in OJT positions, the Contractor shall provide documented evidence of Affirmative Action recruitment efforts. The Agency will review the documents of the Contractor's systematic and direct, meaningful recruitment efforts to determine whether the Contractor has complied with the criteria in "Required Contract Provisions Federal-Aid Construction Contracts" (FHWA Form 1273), Section II Nondiscrimination.

When filling OJT positions Contractors are encouraged to hire previously approved trainees who have not yet completed their training.

### **(b) Training Requirements**

The intent of these provisions is to provide real and meaningful training in the construction crafts. Off-Site training is permissible only when it is an integral part of an approved training program and does not comprise a significant part of the overall training. In addition:

- A Contractor, not registered as a training agent, may choose to adopt a standardized OJT Program. Standardized OJT Programs are published at the OECR website at: <https://www.oregon.gov/ODOT/Business/OCR/Pages/Workforce-Development.aspx>
- Some job classifications such as flagger, bookkeeper, clerk/typist or secretary are prohibited from OJT Programs.
- OJT Programs shall always maintain the approved ratio of trainees to journey level workers On-Site.

- OJT Programs shall always maintain the approved types and numbers of equipment On-Site.
- No employee shall be registered as a trainee in any job classification the employee has completed leading to journey level status, or for any job classification in which the employee has been employed as a journey level worker. The Contractor shall keep records, and provide to the Agency, if requested, documents on each trainee.
- Trainees shall be pre-approved by the Agency.

OJT Program trainees shall be paid the journey level rate specified in the contract for the type of work performed.

### **(c) Reports**

The Contractor and each Subcontractor with an OJT Program shall complete and submit the following reports to the Engineer according to the instructions on their respective forms:

- The training program forecast using the "Training Program Approval Request (TPAR)" (Form 734-2880) shall be submitted prior to or at the preconstruction conference.
- Before the trainee begins work, an "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878) shall be submitted. Attach a copy of the "Training Program Approval Request (TPAR)" (Form 734-2880) to the "Apprentice/Trainee Approval Request (ATAR)" (Form 734-2878). The Contractor and trainee must sign and return a copy of the training program that will be utilized. The Contractor shall provide certification to the trainee upon completion of the OJT Program and also submit a copy to OECR. Upon completion of the Contract, a certification shall be given to each trainee and to the Agency to document the number of hours and training completed by the individual.
- Each month the Contractor shall submit the "Monthly Employment Utilization Report" (Form 731-0668). This report is required of the Contractor and Subcontractors (for contracts that require certified payrolls), regardless of their participation in the Apprenticeship or On-the-Job Training programs.
- Each month the Contractor shall submit an "Apprentice/Trainee Monthly Progress Report (MPR)" (Form 734-2879) for each trainee. This form is used to report Qualified Hours for trainees and will be the source document for estimated monthly progress payments to the Contractor.

Forms are published on the ODOT OECR website at:

<https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx>

## **SECTION 5: MONITORING AND COMPLIANCE**

The Contractor has the primary responsibility to monitor compliance levels throughout the Contract and to ensure the Training Goal is met. If the Contractor decides any of the training hours are to be provided by a Subcontractor, the Contractor shall ensure that the Subcontract contains the appropriate training clauses that obligate the Subcontractor. This shall not relieve the Contractor of the Contractor's primary responsibility.

At the request of the Agency, the Contractor will meet with the Agency to review records related to training. The Agency, through meetings and progress records provided by the Contractor, will provide the Contractor with informational compliance and reimbursement data including:

- The Contractor's training forecasts compared with the actual Qualified Hours achieved.
- Total Qualified Hours and payment reimbursement summary.
- For information purposes only, consolidated summary reports by OJT craft and apprenticeship crafts.

The Agency will track training activities provided by Contractor for the OJT trainees and apprentices.

## **SECTION 6: MEASUREMENT AND PAYMENT**

### **(a) General**

The quantity of Qualified Hours will be paid for at the Contract unit price of \$20 per hour for the item "Training."

No separate or additional payment will be made for failure to achieve the Training Goal. See (b) below for Disincentive.

No separate or additional payment will be made for Qualified Hours achieved in excess of 150% of the Training Goal. No Disincentive applies.

If the Contractor achieves from 100% to 150% of the Training Goal, the Agency will reimburse the Contractor for Qualified Hours.

After the Second Notification, the Agency will review the final reports required and make adjustments. Any additional reimbursements will be paid on the next Contract payment voucher.

### **Examples of achieving the Training Goal:**

Example A: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves 100% of the Qualified Hours (fulfilled the goal): therefore 1,000 hours x \$20.00/hr = \$20,000 reimbursed (during progress of the Contract).

Example B: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves 150% of the Qualified Hours or 1,500 hours (exceeded the goal): therefore 1,500 hours x \$20.00/hr = \$30,000 reimbursed (during progress of the Contract).

Example C: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves an actual 1,525 Qualified Hours (exceeded even 150% of the goal): therefore 1,500 hours x \$20.00/hr = pay of \$30,000 reimbursed (during progress of the Contract).

**(b) Disincentive**

If, at the Second Notification, the Contractor has not achieved the Training Goal there will be no payment (disincentive) to the Contractor and no Qualified Hours as follows:

Regardless of all prior partial payments for the Pay Item "Training," a correction equal to 100% of the Pay Item goal times the Pay Item price will be subtracted from the final payment due the Contractor on the next Contract payment voucher.

**Examples of *not* achieving the Training Goal:**

Example A: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves an actual 500 Qualified Hours (failed to meet the goal): A disincentive applies; therefore  $1,000 \text{ hours} \times \$20.00/\text{hr} = \text{line item deduction}$  of \$20,000 will show on the next Contract payment voucher. The previously paid qualified hours ( $500 \times \$20 = \$10,000$ ) under the pay item on vouchers will remain and the net impact in this example will be the \$20,000 deduction offset by the \$10,000 qualified and paid hours for a net reduction of \$10,000.

Example B: Training Goal = 1,000 hours; Pay Item = \$20/hr; Contractor achieves zero Qualified Hours (failed to meet the goal): A disincentive applies; therefore  $1,000 \text{ hours} \times \$20.00/\text{hr} = \text{line item deduction}$  of \$20,000 will show on the next Contract payment voucher.

If, as a result of a line item deduction, a net amount is due the Agency, the Contractor shall pay the Agency within 45 Calendar Days of notice of such deficiency.

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

Seal w/signature (Steve Boice)



EXPIRES: 12/31/2023

I certify the Special Provision Sections listed below are applicable to the design for the subject project for Temporary and Permanent Traffic Control, Traffic Signals, Signing, Striping. Modified Special Provisions were prepared by me or under my supervision.

Sections 00220, 00221, 00222, 00223, 00224, 00225, 00226, 00227, 00228, 00840, 00850, 00855, 00856, 00857, 00865, 00867, 00902, 00905, 00910, 00920, 00930, 00940, 00942, 00950, 00960, 00962, 00963, 00965, 00970, 00985, 00987, 00990, 02910

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

Training




## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
 Illumination, Signals & Roadside Development  
 I-5: Aurora Donald Interchange (Exit 278)  
 Phase 2 Section  
 Pacific Highway  
 Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

<p>Seal w/signature (Shane Brown)</p>  <p>EXPIRES: 12/31/2023</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for Structural Items. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00256, 00501, 00510, 00520, 00530, 00535, 00540, 00545, 00550, 00564, 00582, 00585, 00587, 00596A, 00599, 02001</p>
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Training


## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

## PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Ed Chamberland )</p>  <p>DIGITALLY SIGNED 2023.11.11 17:10:55-08'00'</p> <p>RENEWS: 12-31-2023</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for Well Abandonment. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00298</p>
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Training

## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
 Illumination, Signals & Roadside Development  
 I-5: Aurora Donald Interchange (Exit 278)  
 Phase 2 Section  
 Pacific Highway  
 Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

Seal w/signature (Shawn Ellis)



RENEWS: 12-31-2023

I certify the Special Provision Sections listed below are applicable to the design for the subject project for Temporary and Permanent Water Management. Modified Special Provisions were prepared by me or under my supervision.

Sections 00245, 01011, 01012, 01013, 01091

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Training

## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

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Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

## PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Pat Gaylord)</p> <div><p><b>REGISTERED PROFESSIONAL LAND SURVEYOR</b></p></div> <p>DIGITALLY SIGNED      2023.11.15    13:04:23-08'00'</p> <div><p><b>OREGON JULY 10, 1996 PATRICK M. GAYLORD 2767</b></p></div> <p>RENEWS: 06/30/2025</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for Construction Survey. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section 00305</p>
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OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Cameron Grile)</p> 	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for Illumination. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00227, 00583, 00950, 00960, 00962, 00970</p>
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Training


## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

<p>Seal w/signature (Dustin Haas)</p>  <p>RENEWS: 06-30-2025</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for Pavement Substructures and Pavements. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00332, 00344, 00730, 00745, 00755</p>
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Training

## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
 Illumination, Signals & Roadside Development  
 I-5: Aurora Donald Interchange (Exit 278)  
 Phase 2 Section  
 Pacific Highway  
 Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

Seal w/signature (Jim Phillips)



RENEWS: 12-31-2024

I certify the Special Provision Sections listed below are applicable to the design for the subject project for Temporary Work Access, Erosion Control, Environmental items. Modified Special Provisions were prepared by me or under my supervision.

Sections 00237, 00245, 00280, 00294, 00842, 01030, 01040

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Training

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

Seal w/signature (Craig Shike)



RENEWS: 06-30-2024

I certify the Special Provision Sections listed below are applicable to the design for the subject project for Solid Pile Retaining Wall and Sign Structures. Modified Special Provisions were prepared by me or under my supervision.

Sections 00442, 00510, 00530, 00540, 00543, 00596D, 00921, 00930

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Training




## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
 Illumination, Signals & Roadside Development  
 I-5: Aurora Donald Interchange (Exit 278)  
 Phase 2 Section  
 Pacific Highway  
 Marion County

## PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature (Ted Stewart)</p>  <p>RENEWS 6/30/2024</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for Roadway Items. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00230, 00310, 00320, 00330, 00350, 00620, 00641, 00730, 00745, 00749, 00755, 00759, 00810, 00811, 00820, 00830, 01050</p>
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Training

## OREGON DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISIONS

## FOR

Grading, Drainage, Structures, Paving, Signing,  
 Illumination, Signals & Roadside Development  
 I-5: Aurora Donald Interchange (Exit 278)  
 Phase 2 Section  
 Pacific Highway  
 Marion County

**PROFESSIONAL OF RECORD CERTIFICATION:**

Seal w/signature (Hao Vo)



RENEWS: 6-30-2024

I certify the Special Provision Sections listed below are applicable to the design for the subject project for Drainage. Modified Special Provisions were prepared by me or under my supervision.

Sections 00240, 00390, 00405, 00415, 00430, 00445, 00460, 00470, 00480, 00490

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

Training

## SPECIAL PROVISIONS

### WORK TO BE DONE

The Work to be done under this Contract consists of the following:

1. Construct temporary traffic control.
2. Construct new northbound and southbound I-5 bridges over Ehlen Road.
3. Construct earthwork, drainage, and retaining walls.
4. Install permanent traffic control.
5. Perform realignment of Ehlen Road, including paving, and signals.
6. Perform additional and Incidental Work as called for by the Specifications and Plans.

### AUTHORITY OF CONSULTANT

The consultant will be directly in charge of the Project. However, the consultant's authority on this Project is as designated in the official "Consultant Agreement" for this Project, and as designated by the Engineer. This does not include authority to approve Contract changes or semifinal and Final Inspection of the Project.

### APPLICABLE SPECIFICATIONS

The Specifications that are applicable to the Work on this Project is the 2024 edition of the "Oregon Standard Specifications for Construction", as modified by these Special Provisions. All Sections in Part 00100 apply, whether or not modified or referenced in the Special Provisions.

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

### CLASS OF PROJECT

This is a Federal-Aid Project.

## SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

Comply with Section 00110 of the Standard Specifications modified as follows:

**00110.05(e) Reference to Websites** - Add the following bullet list to the end of this subsection:

- American Traffic Safety Services Association (ATSSA)  
[www.atssa.com](http://www.atssa.com)
- BidExpress  
[www.bidx.com](http://www.bidx.com)
- EquipmentWatch  
[www.equipmentwatch.com](http://www.equipmentwatch.com)
- ODOT Construction Section  
[www.oregon.gov/odot/construction/pages/index.aspx](http://www.oregon.gov/odot/construction/pages/index.aspx)
- ODOT Construction Section - Qualified Products List (QPL)  
[www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx](http://www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx)
- ODOT Construction Surveying Manual for Contractors  
[www.oregon.gov/ODOT/ETA/Documents\\_Geometronics/Construction-Survey-Manual-Contractors.pdf](http://www.oregon.gov/ODOT/ETA/Documents_Geometronics/Construction-Survey-Manual-Contractors.pdf)
- ODOT Electronic Bidding Information Distribution System (eBids)  
(Also referred to as ODOT eBids website)  
<https://ecmnet.odot.state.or.us/ebidse>
- ODOT Estimating  
[www.oregon.gov/ODOT/Business/Pages/Steel.aspx](http://www.oregon.gov/ODOT/Business/Pages/Steel.aspx)
- ODOT Oregon Trucking Online - "Highway Restriction Notice - Size and/or Weight"  
(Form No. 734-2357)  
[www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restriction/](http://www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restriction/)
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms  
[www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx](http://www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx)
- ODOT Procurement Office - Construction Contracts Unit Notice of Intent  
[www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx](http://www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx)
- ODOT Procurement Office - Construction Contracts Unit prequalification forms

[www.oregon.gov/odot/business/procurement/pages/bid\\_award.aspx](http://www.oregon.gov/odot/business/procurement/pages/bid_award.aspx)

- ODOT Traffic Control Plans Unit  
[www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx](http://www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx)
- ODOT Traffic Standards  
[www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx](http://www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx)
- Oregon Legislative Counsel  
[www.oregonlegislature.gov/lc](http://www.oregonlegislature.gov/lc)
- Oregon Secretary of State: State Archives  
[sos.oregon.gov/archives/Pages/default.aspx](http://sos.oregon.gov/archives/Pages/default.aspx)

## **SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES**

Comply with Section 00120 of the Standard Specifications modified as follows:

**00120.05 Request for Plans, Special Provisions, and Bid Booklets** - Add the following to the end of this subsection:

The Plans, which are applicable to the Work to be performed under the Contract, bear title and date as follows:

"Grading, Drainage, Structures, Paving, Signing,  
Illumination, Signals & Roadside Development  
I-5: Aurora Donald Interchange (Exit 278)  
Phase 2 Section  
Pacific Highway  
Marion County  
February 2024"

**00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered** - Add the following to the end of this subsection:

Certain Specifications included in the Project require additional experience or personnel qualifications. Refer to the subsection requirements that may affect bidding considerations, including but not limited to the following:

### **Subsection    Title**

00256.30	Personnel Qualifications
00294.30	Personnel Qualifications
00298.30	Personnel Qualifications
00520.42(h)(2)(c)	Dynamic Pile Testing Personnel
00535.30	Personnel Qualifications
00540.30	Personnel Qualifications
00585.30	Personnel Qualifications

00759.30	Personnel Qualifications
00921.30	Personnel Qualifications
00963.30	Personnel Qualifications
01030.30	Personnel Qualifications

**00120.40(b) Bidding Considerations** – Add the following to the end of the list:

00160.20(d) Build America Buy America Act Requirements

**00120.70 Rejection of Nonresponsive Bids** - Add the following bullet to the end of the bullet list:

- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

### **SECTION 00130 - AWARD AND EXECUTION OF CONTRACT**

Comply with Section 00130 of the Standard Specifications.

### **SECTION 00140 - SCOPE OF WORK**

Comply with Section 00140 of the Standard Specifications.

### **SECTION 00150 - CONTROL OF WORK**

Comply with Section 00150 of the Standard Specifications modified as follows:

**00150.15(b) Agency's Responsibilities** - Replace this subsection, except for the subsection number and title, with the following:

The Engineer will perform the Agency responsibilities described in the *Construction Surveying Manual for Contractors*, Chapter 1.5 (see Section 00305).

**00150.15(c) Contractor's Responsibilities** - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall perform the Contractor responsibilities described in the *Construction Surveying Manual for Contractors*, Chapter 1.6 (see Section 00305).

The Contractor shall perform slope staking including intersections and set stakes defining limits for clearing which approximate Right-of-Way and easements.

**00150.50(c) Contractor's Responsibilities** – Add the following bullet to the end of the bulleted list:

- Hold a Utility scheduling meeting and monthly Utility coordination meetings (see also 00180.42)



Add the following subsection:

**00150.50(f) Utility Information (No Anticipated Relocations)** - Within the Project limits, there are no anticipated relocations with the Utilities listed in Table 00150-1. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

**Table 00150-1**

<b>Utility</b>	<b>Contact Person's Name, Address, Email, and Phone Number</b>
NW Natural	Blake Johnson 970 14th Ave SE, Albany, OR 97322 blake.johnson@nwnatural.com 971.979.6859
American Tower	Michael Greiner michael.greiner@americantower.com 503-341-8518
Bonneville Power Administration	Darin Smith 2715 Tepper Lane NE, Keizer OR 97303 dxsmith@bpa.gov 503-753-3883

The Contractor shall notify, in writing, the Utilities listed above, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project.

**(NW Natural) - Gas Utilities –**

In the event of an emergency, and in addition to the calls required by the Utilities notification system, the Contractor shall call:

- Northwest Natural Gas 1-800-882-3377

**Bonneville Power Administration (BPA) -**

Energized transmission power lines may overhang portions of the Work with a minimum vertical clearance of 85 feet. The Contractor shall maintain a safety clearance of at least 20 feet vertically between construction Equipment or vehicles and the transmission power lines.

The Contractor shall maintain a safety clearance of at least 14 feet horizontally between construction Equipment or vehicles and the point where steel lattice tower legs, wood poles, steel poles, concrete poles, concrete foundation and guy wires enter the earth.

BPA operates within the Project limits and requires an on-site safety watcher (see Section 00223). An on-site safety watcher is required when any of the following apply:

- The Contractor is performing Work within the limits of a BPA easement or BPA Right-of-Way; or
- The Contractor is performing Work within 100 feet of a BPA facility.

The Contractor shall keep access to all BPA structures open and unobstructed at all times.

The Contractor shall not store flammable materials or refuel construction Equipment or vehicles on BPA Right-of-Way.

In the event of an emergency, the Contractor shall call BPA Monroe Control Center (MCC) dispatch office at 1-509-465-1837, in addition to calls required by the Utilities notification system.

Add the following subsection:

**00150.50(g) Utility Information (Anticipated Relocations):**

The organizations list in Table 00150-2 may be adjusting Utilities within the limits of the Project during the period of the Contract with relocation Work estimated to be completed by the following dates and times:

**Table 00150-2**

<b>Subsection</b>	<b>Utility</b>	<b>Contact Person's Name, Address, Email, and Phone Number</b>	<b>Estimated Completion Date</b>
00150.50(g)(1)	Portland General Electric	Jessica North 2079 Progress Way, Woodburn, OR 97071 <a href="mailto:jessica.north@pgn.com">jessica.north@pgn.com</a> 949-433-1982	September 27, 2024
00150.50(g)(2)	Fargo Interchange Service District	Matt Knudsen 5155 Silverton Road NE, Salem, OR 97305 <a href="mailto:mknudsen@co.marion.or.us">mknudsen@co.marion.or.us</a> 503-588-5084	Lowering Station "D2" 826+00 to 827+00 June 30, 2024  Protection Station "D2" 826+00 to 827+00 and "SB" 1826+00 to 1827+00 During Construction
00150.50(g)(3)	Lumen	Joshua Coplantz 740 State St, Rm 407, Salem, OR 97301 <a href="mailto:joshua.coplantz@lumen.com">joshua.coplantz@lumen.com</a>	Station "WB" 85+00 to "WB" 92+00 by September 27, 2024  Station "ER" 67+00 to "ER" 84+00 and "ER" 93+00 to "ER" 103+00 December 15, 2024

00150.50(g)(4)	Astound	Jaison Krueger 669 Glatt Circle Woodburn, OR 97071 jaison.krueger@astound.com 503-383-5350	Station "WB" 85+00 to "WB" 92+00 by September 27, 2024  Station "ER" 67+00 to "ER" 84+00 and "ER" 93+00 to "ER" 103+00 November 1, 2024
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The Contractor shall contact the Engineer to view the approved utility relocation Plans.

The Contractor shall notify, in writing, the Utilities listed above, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project.

**(1) (Portland General Electric) - "Power Supplier":**

The Contractor shall notify the Power Supplier(s) in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the power line(s).

Energized power lines overhang portions of the Work with a minimum vertical clearance of 18 feet. The Contractor shall maintain at least 10 feet of safety clearance. Exceptions require written approval from the Power Supplier(s) and may require an on-site safety watcher, at no cost to the Contractor. The Contractor shall provide the Engineer a copy of the written approval of exception before beginning work.

**(2) (Fargo Interchange Service District) - "Sewer Facility":**

The Contractor shall notify the Sewer Facility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Sewer facilities.

The Contractor shall notify the Sewer Facility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin performing grading between Station "D2" 826+00 to 827+00 and "SB" 1826+00 to 1827+00. After the Sewer Facility receives the notification, the Contractor shall then allow the Sewer Facility 14 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing grading between Station "D2" 826+00 to 827+00 and "SB" 1826+00 to 1827+00.

**(3) (Lumen) - "Telecommunication Utility":**

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin performing concrete paving of concrete island between Station "ER" 83+00 to 84+00. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 14 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing concrete paving of concrete island between Station "ER" 83+00 to 84+00.

**(4) (Astound) - "Telecommunication Utility":**

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin performing concrete paving of concrete island between Station "ER" 83+00 to 84+00. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 14 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing concrete paving of concrete island between Station "ER" 83+00 to 84+00.

**00150.60(a) Load and Speed Restrictions for Construction Vehicles and Equipment -**

Add the following bullet to the end of the bullet list:

- The Contractor shall restrict the combined weights of construction vehicles, Equipment, and Materials on Bridges according to 00220.45.

**SECTION 00160 - SOURCE OF MATERIALS**

Comply with Section 00160 of the Standard Specifications modified as follows:

**00160.20(a) Buy America** - Replace this subsection, except for the subsection number and title, with the following:

If \$500,000 or more of federal highway funds are involved on the Project, the Contractor shall limit the quantity of foreign Materials incorporated into the Work as follows. Section 635.410 of Title 23, Code of Federal Regulations, and the Intermodal Surface Transportation Efficiency Act require that all iron or steel manufacturing processes, including, without limitation, the casting of ingots, for iron or steel Materials permanently incorporated into the Project shall occur in the United States, unless the cost of foreign-origin iron or steel Materials does not exceed one-tenth of one percent (0.1%) of the Contract Amount or \$2,500, whichever is greater. Buy America requirements apply to any steel or iron component of a manufactured product regardless of the overall composition of the manufactured product (e.g., Buy America applies to the steel wire mesh or steel reinforcing components of a precast reinforced concrete pipe). The Contractor shall not incorporate foreign-origin iron or steel Materials in excess of this amount into the Project. All foreign-origin iron or steel Materials incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic iron or steel Materials at the Contractor's expense. For purposes of this Specification, the cost of foreign-origin iron or steel Materials shall be the value of the iron or steel products as of the date they are delivered to the Project Site.

Manufacturing processes include without limitation the casting of ingots and the application of coatings to finished iron or steel products or components. Coatings include epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the steel or iron product or component. The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any iron or steel

products into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all domestic iron or steel Materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

The Contractor shall include this provision in all subcontracts.

**00160.20(d) Build America Buy America Act Requirements** – Replace this subsection, except for the subsection number and title, with the following:

If federal highway funds are involved on the Project, the Contractor shall comply with the Build America Buy America Act and implementing regulations (Infrastructure Investment and Jobs Act (“IIJA”), Pub. L. No. 117-58, which includes the Build America, Buy America Act (“the Act”). Pub. L. No. 117-58, Sections 70901-70941).

The Build America Buy America Act requirements apply to construction materials permanently incorporated in the Project. All construction materials permanently incorporated in the Project must be produced in the United States.

Construction materials include an article, Material, or supply that is or consists primarily of only one of the following, with the standard for the material to be considered “produced in the United States”:

- **Non-ferrous metals** - All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
- **Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)** - All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
- **Glass (including optic glass)** - All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
- **Fiber optic cable (including drop cable)** - All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
- **Optical fiber** - All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
- **Lumber** - All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
- **Drywall** - All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.

- **Engineered wood** - All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

The classification of an article, material, or supply as construction material is based on its status at the time it is brought to the work site for incorporation in the Project. In general, the work site is the location of the Project at which the construction materials will be incorporated.

Manufactured products assembled outside the Project Site are not subject to the Build America Buy America requirements. Manufactured products means articles, materials, or supplies that have been:

- Processed into a specific form and shape; or
- Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

The USDOT issued a Public Interest Waiver for De Minimis Costs and Small Grants. The final waiver can be viewed here:

<https://www.federalregister.gov/documents/2023/08/16/2023-17602/waiver-of-buy-america-requirements-for-de-minimis-costs-and-small-grants> and this waiver applies to Materials covered by the Build America Buy America Act.

The public interest waiver is for manufactured products and construction materials for which:

- The total value of the non-compliant products (foreign or unknown origin) is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project\*; or
- The total amount of Federal financial assistance applied to the project, through awards or subawards, is below \$500,000.

\*The “total value of the non-compliant products” includes construction materials only. The “total applicable costs” includes construction materials, iron and steel, and manufactured products. The value of materials are the actual cost of the materials, not the anticipated cost of materials. Furthermore, this bullet does not apply to iron and steel subject to the requirements of 23 U.S.C. 313. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for steel and iron. (See 00160.20(a).)

Strict compliance with the Build America, Buy America domestic preferences is required, except to the extent the above public interest waiver applies. The Contractor shall not incorporate construction materials in excess of this amount into the Project. All foreign origin construction Materials incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic construction Materials at the Contractor's expense.

The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any applicable construction materials into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the products and Materials shall be considered of foreign origin.

The Contractor shall retain manufacturers' certificates verifying the origin of all applicable construction materials for 3 years after the date of final payment for the Project, and shall furnish copies to the Engineer upon request.

Iron and steel Materials and manufactured products that are predominately iron or steel are subject to 00160.20(a).

The Contractor shall include this provision in all subcontracts.

**00160.21 Cargo Preference Act Requirements** - Add the following to the end of this subsection:

Additional information may be available at the following websites:

<https://www.fhwa.dot.gov/construction/cqit/cargo.cfm>

<https://www.fhwa.dot.gov/construction/cqit/cargo/qa.cfm>.

**00160.30 Agency-Furnished Material** - Add the following to the end of this subsection:

The Agency will furnish the listed items at the following locations:

- ATC Controller – 3
  - CCTV Camera – 3
- ODOT Traffic Signal Services Unit  
 2445 Liberty St NE  
 Salem, OR 97301

## SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications.

## SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications modified as follows:

Add the following subsection:

**00170.06 Federal-Aid Participation** - This Project is to be conducted according to the regulations applying to Federal-Aid Highway Projects.

### **00170.70(a) Insurance Coverages -**

Add the following to the end of this subsection:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	\$5,000,000.00	\$10,000,000.00
Commercial Automobile Liability	\$2,000,000.00	(aggregate limit not required)

Pollution Liability	\$1,000,000.00	\$1,000,000.00
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- With Lead Liability Endorsement or separate coverage

Commercial Automobile Liability with Pollution Coverage	\$2,000,000.00	(aggregate limit not required)
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**00170.70(d) Additional Insured -**

Add the following paragraph and bullets to the end of this subsection:

Add the following as Additional Insureds under the Contract:

- David Evans and Associates, Inc.
- GRI
- Historical Research Associates
- DKS Associates Inc.

**00170.72 Indemnity/Hold Harmless** - Add the following paragraph and bullets to the end of this subsection:

Extend indemnity, defense and hold harmless to the Agency and the following:

- David Evans and Associates, Inc.
- GRI
- Historical Research Associates
- DKS Associates Inc.

**SECTION 00180 - PROSECUTION AND PROGRESS**

Comply with Section 00180 of the Standard Specifications modified as follows:

Add the following subsection:

**00180.40(c) Specific Limitations** - Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

Limitations	Subsection
Cooperation with Utilities .....	00150.50
Contract Time .....	00180.50(h)
Right-of-Way and Access Delays .....	00180.65
Closed Lanes .....	00220.40(e)(1)
Special Events .....	00220.40(e)(2)(b)
Other Closure Restrictions .....	00220.40(f)
Regulated Work Areas .....	00290.34(a)
Maintenance Under Traffic .....	00620.43



## Opening Sections to Traffic ..... 00745.51

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

**00180.41 Project Work Schedules -**

After the paragraph that begins "The Contractor shall submit a Project Work schedule meeting the requirements..." add the following paragraphs:

Submit an overall sequencing and phasing plan showing the timeline for construction of all curb ramps. Submit a list of individual curb ramps or groups of curb ramps not to exceed 32 curb ramps to include in the schedule for approval by the Engineer.

The Contractor shall include the following curb ramp tasks in the Project Work schedule:

- Contractor initial site visit(s) for ramp existing conditions;
- Submittal of Working Drawings for each ramp, submitted to the Agency according to 00759.03(c);
- Submittal of Curb Ramp Plan(s); and
- Preplacement Conference(s).

In the paragraph that begins "The Contractor shall submit a supplemental "look ahead" Project Work schedule each week to the Engineer." add the following bullets to the end of the bullet list:

- Identify date of curb ramp site visit to include Contractor and Agency, to review Working Drawings;
- Identify curb ramp resubmittal of Working Drawings, as required according to 00759.03;
- Identify the anticipated date of curb ramp closure;
- Identify the field markings for excavation limits for curb ramps;
- Identify when the curb ramp formwork begins;
- Identify when the curb ramp Concrete placement begins; and
- Identify the anticipated opening curb ramp date.

After the paragraph that begins "One of the following Type..." add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type "C" schedule as detailed in the Standard Specifications is required on this Contract.

**00180.42 Preconstruction Conference -** Add the following to the end of this subsection:

The Contractor shall conduct a group Utilities scheduling meeting with representatives from the Utility companies involved with this Project and the Engineer before the preconstruction conference. The Contractor shall incorporate the Utilities time needs into the Contractor's schedule submitted at the preconstruction conference.

At the preconstruction conference, or at a mutually agreed upon time at least 10 Calendar Days prior to beginning ground disturbing activities, the Contractor shall meet with the Engineer to discuss sensitive cultural sites on the Project. In attendance at this conference shall be:

- The Contractor's supervisory personnel.
- Any Subcontractors (including contract archaeological monitors) and supervisory personnel who will be involved in ground disturbing activities.
- Agency archaeology representative or region environmental coordinator.
- When applicable, tribal representative(s) or monitor(s).

Add the following subsection:

**00180.50(h) Contract Time** - There is one Contract Time on this Project as follows:

The Contractor shall complete all Work to be done under the Contract, except for seeding establishment and plant establishment, not later than October 29, 2027.

**00180.65 Right-of-Way and Access Delays** - Add the following paragraph and bullet to the end of this subsection:

It is anticipated that the ending date of an anticipated delay for the following properties will be as shown:

- File 9803012 Station "DW" 1+30 to "DW" 4+70 (Lt and Rt) not later than July 1, 2024.
- File 9803013 Station "ER" 96+20 to "ER 96+50" Lt, not later than January 1, 2026.

Add the following subsection:

**00180.85(c) Lane Closures** - Lane closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event Traffic Lanes are closed beyond the limits listed in 00220.40(e) or 00220.40(f). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$1,000 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e) or 00220.40(f).

The Engineer will determine when it is safe to reopen lanes to traffic. Assessment of liquidated damages will stop when all lanes have been safely reopened. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b).

Add the following subsection:

**00180.85(e) Traffic Delays Beyond 20 Minutes** - Stopping or holding vehicles beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event traffic is stopped or held longer than the 20-minute limit listed in 00220.02. Therefore, the Contractor

shall pay to the Agency, not as a penalty, but as liquidated damages, \$1,000 per 20 minutes, or for a portion of 20 minutes, for stopping or holding traffic longer than 20 minutes.

Assessment of liquidated damages will stop when the Engineer determines that traffic is no longer stopped or held beyond the 20-minute limit. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b).

## **SECTION 00190 - MEASUREMENT OF PAY QUANTITIES**

Comply with Section 00190 of the Standard Specifications modified as follows:

**00190.20(f)(2) Scale Without Automatic Printer** - Replace the paragraph that begins "The Contractor shall inform..." with the following paragraph:

If the scales require manual entry of gross weight information, the Agency may periodically have a representative weigh witness at the scales to observe the weighing procedures. The Contractor shall inform the Engineer of their intent to use a scale without an automatic printer at least 3 working days before weighing begins or before the Contractor changes to a scale that does not have an automatic printer. The Contractor shall pay costs for the weigh witness. The hourly cost of the weigh witness will be as stated in the Special Provisions. In addition, the Engineer may periodically check the weight for a load of Materials by directing the haul vehicle to reweigh on a different scale that has been inspected and certified according to 00190.20(b) and 00190.20(d).

Add the following paragraph after the paragraph that begins " If the scales require manual entry...":

Pay costs for the weigh witness at \$35.00 per hour.

**00190.20(g) Agency-Provided Weigh Technician** - Add the following paragraph to the end of this subsection:

Pay costs for the weigh technician at \$35.00 per hour.

## **SECTION 00195 - PAYMENT**

Comply with Section 00195 of the Standard Specifications modified as follows:

**00195.10 Payment For Changes in Materials Costs** - Replace this subsection with the following subsection:

**00195.10 Asphalt Cement Material Price Escalation/De-escalation** - An asphalt cement escalation/de-escalation clause will be in effect during the life of the Contract.

The Agency reserves all of its rights under the Contract, including, but not limited to, its rights for suspension of the Work under 00180.70 and its rights for termination of the Contract under 00180.90, and this escalation/de-escalation provision shall not limit those rights.

**(a) Monthly Asphalt Cement Material Price (MACMP)** - The Monthly Asphalt Cement Material Price (MACMP) is established by the Agency each month. For the actual MACMP, go to the Agency website at:

<https://www.oregon.gov/ODOT/Business/Pages/Asphalt-Fuel-Price.aspx>

The MACMP is based on selling prices of asphalt cement published by Poten & Partners, Inc. for primarily PG 64-22 paving grades in the Portland, Oregon area and typical non-modified paving grades in the Boise, Idaho area. The MACMP for a given month is the average of the weekly published prices for each area reported each Friday in that month. If any portion of the Project Site is located within the boundaries of ODOT Maintenance District 13 or 14, the MACMP will be based on the prices for the Boise, Idaho area. If no portion of the Project Site is within the boundaries of ODOT Maintenance District 13 or 14, the Contractor may elect to have the MACMP based on the prices of either the Portland, Oregon area or the Boise, Idaho area. If electing to use Boise, Idaho area prices for determination of the MACMP, the Contractor shall notify the Engineer in writing of the Contractor's election before or within 7 Calendar Days after the date of the preconstruction conference. This election, once acknowledged by the Engineer, will be binding for the entire duration of the Contract. If no such written notification is made, the Portland, Oregon area prices will be used as the basis of the MACMP. The area selected as the basis of the MACMP, once chosen, will become the sole area to be used as the basis for all asphalt cement used on the Project.

If the weekly prices cease to be available from Poten & Partners, Inc. for any reason, the Agency, in its discretion will select and begin using a substitute price source or index to establish the MACMP each month. The Agency does not guarantee that asphalt cement will be available at the MACMP.

**(b) Base Asphalt Cement Material Price (Base)** - The base asphalt cement material price for this Project is the MACMP published on the Agency website for the month immediately preceding the Bid Opening date.

**(c) Monthly Asphalt Cement Adjustment Factor** - The monthly asphalt cement adjustment factor will be determined each month as follows:

- If the MACMP is within  $\pm 5\%$  of the Base, there will be no adjustment.
- If the MACMP is more than 105% of the Base, then:

$$\text{Adjustment Factor} = (\text{MACMP}) - (1.05 \times \text{Base})$$

- If the MACMP is less than 95% of the Base, then:

$$\text{Adjustment Factor} = (\text{MACMP}) - (0.95 \times \text{Base})$$

**(d) Asphalt Cement Price Adjustment** - A price adjustment will be made for the items containing asphalt cement listed below. The price adjustment as calculated in (c) above will use the MACMP for the month the asphalt is incorporated into the Project. The price adjustment will be determined by multiplying the asphalt incorporated during the month for subject Pay Items by the Adjustment Factor.

The Pay Items for which price adjustments will be made are:

**Pay Item(s)**

PG 64-22 Asphalt in Level 3, 1/2" ACP  
 PG 70-22ER Asphalt in Level 4, 1/2" ACP  
 Emulsified Asphalt for Tack Coat

Add the following subsection:

**00195.11 Fuel Cost Price Escalation/De-escalation** - A fuel escalation/de-escalation clause will be in effect during the life of the Contract.

The Agency reserves all of its rights under the Contract, including, but not limited to, its rights for suspension of the Work under 00180.70 and its rights for termination of the Contract under 00180.90, and this escalation/de-escalation provision will not limit those rights.

**(a) Monthly Fuel Price (MFP)** - A Monthly Fuel Price (MFP) is established by the Agency each month. For the actual MFP, go to the Agency website at:

<https://www.oregon.gov/ODOT/Business/Pages/Asphalt-Fuel-Price.aspx>

The MFP for a given month is the average rack price obtained from the Oil Price Information Service (OPIS) listing dated the first Monday of that month for ultra low sulfur distillate No. 2 diesel fuel for Portland, Oregon. If the average rack price is not posted by OPIS or is otherwise not available to the Agency for the first Monday of any month for any reason, the Agency may use the average rack price posted by OPIS immediately before or after the first Monday of that month. If the average rack prices cease to be available from OPIS for any reason, the Agency in its discretion will select and begin using a substitute price source or index to establish the MFP each month. The Agency does not guarantee that fuel will be available at the MFP.

**(b) Base Fuel Price (Base)** - The base fuel price for this Project is the MFP published on the Agency website for the month immediately preceding the Bid Opening date.

**(c) Monthly Fuel Adjustment Factor** - A monthly fuel adjustment factor is determined each month as follows:

- If the MFP is within  $\pm 25\%$  of the Base, there will be no adjustment.
- If the MFP is more than 125% of the Base, then:

$$\text{Adjustment Factor} = (\text{MFP}) - (1.25 \times \text{Base})$$

- If the MFP is less than 75% of the Base, then:

$$\text{Adjustment Factor} = (\text{MFP}) - (0.75 \times \text{Base})$$

**(d) Fuel Price Adjustment** - A fuel price adjustment for fluctuations in the cost of fuel will apply only to the major fuel usage Pay Items shown in the following list and at the respective fuel factors listed:

Item	Fuel Factor
General Excavation	0.29 Gal/CU YD
Aggregate Base	0.69 Gal/Ton
Leve 3, 1/2 Inch ACP	2.93 Gal/Ton
Level 3, 1/2 Inch ACP in Leveling	2.93 Gal/Ton
Level 4, 1/2 Inch ACP	2.93 Gal/Ton
Continuously Reinforced Concrete Pavement 12 Inches Thick	1.0 Gal/Sq Yd

The following Pay Items associated with the following Bridges and Structures:

Bridge No. 24041 19 Gal/\$1000

Item
Bridge Removal Work
Shoring, Cribbing, Cofferdams
Structure Excavation
Granular Structure Backfill
Furnish Pile Driving Equipment
Furnish PP 16 X 0.5 Steel Piles
Furnish PP 16 X 0.5 Test Piles
Drive PP 16 X 0.5 Steel Piles
Drive Test Piles
Pile Load Test (Dynamic)
PP 16 X 0.5 Steel Pile Splices
Reinforcement, Grade 100
Reinforcement, Grade 60
Reinforcement, Grade 80
Coated Reinforcement, Grade 80
Foundation Concrete, Class 4000
Deck Concrete, Class HPC4500
General Structural Concrete, Class 4000
Saw Cut Texturing
Architectural Treatment
Reinforced Concrete Bridge End Panels
33 Inch Precast Prestressed Box Beams
Fall Arrest System
Bearing Devices, 8 Inch Wide, 42 Inch Long, 2.25 Inch Thick
GRC Conduit System, 1 Inch Diameter
GRC Conduit System, 3/4 Inch Diameter
Asphaltic Plug Joint Seals
Type "F" Concrete Rail, 42 Inch
Concrete Slope Paving
Slope Paving Curbs

Structure No. 24239

19 Gal/\$1000

## Item

Structure Excavation  
 Reinforcement, Grade 60  
 General Structural Concrete, Class 3300  
 Architectural Treatment  
 Test Panels  
 Predrilling and Encasing Solider Piles  
 W18 X 40 Steel Solider Piles  
 W18 X 55 Steel Solider Piles  
 Lagging  
 Wall Drainage and Filter System

Structure No. 24308

19 Gal/\$1000

## Item

Retaining Wall, MSE

Structure No. 24309

19 Gal/\$1000

## Item

Retaining Wall, MSE

Structure No. 24316

19 Gal/\$1000

## Item

Structure Excavation  
 Granular Wall Backfill  
 Granular Structure Backfill  
 Reinforcement, Grade 60  
 General Structural Concrete, Class 4000

The Contractor is cautioned to consider that its operations may require more or less fuel.

A price adjustment ( $\pm$ ) to the Contractor for fuel cost changes will be made monthly if the MFP differs 25% or more from the Base. This adjustment will be the product of the monthly fuel adjustment factor and the estimated monthly fuel used. The monthly fuel used will be determined by multiplying the quantities of Work accomplished during the month for subject Pay Items, by the appropriate fuel factors.

Fuel cost adjustments will continue to be made as specified and will not be revised for any reason, including the Contractor's election to use an alternative fuel (natural gas, wood pellets, propane, or other).

**00195.12(d) Steel Materials Pay Item Selection** - Add the following paragraphs to the end of this subsection:

If the Contractor elects not to participate in the steel escalation/de-escalation program for this Project, no response from the Contractor is required.

The Contractor may elect to participate in the steel escalation/de-escalation program for this Project under 00195.12 through 00195.12(d) by marking each check box for each Pay Item in the list below the Contractor is selecting for participation in the program. The completed list must be submitted in writing, signed and dated by the Contractor, to the Project Manager before or within 7 Calendar Days after the date of the preconstruction conference.

<b>PARTICIPATE</b>	<b>PAY ITEM DESCRIPTION</b>	<b>COST BASIS (CB)</b>
<input type="checkbox"/>	Furnish PP 16 X 10.5 Steel Piles	CB 90%
<input type="checkbox"/>	Furnish PP 16 X 0.5 Test Piles	CB 90%
<input type="checkbox"/>	Reinforcement, Grade 100	CB 40%
<input type="checkbox"/>	Reinforcement, Grade 60	CB 40%
<input type="checkbox"/>	Reinforcement, Grade 80	CB 40%
<input type="checkbox"/>	Coated Reinforcement, Grade 80	CB 40%
<input type="checkbox"/>	W18 X 40 Steel Solider Piles	CB 90%
<input type="checkbox"/>	W18 X 55 Steel Solider Piles	CB 90%
<input type="checkbox"/>	Continuously Reinforced Concrete Pavement 12 Inches Thick	CB 10%
<input type="checkbox"/>	Guardrail, Type 2A	CB 11%
<input type="checkbox"/>	Guardrail, Type 3	CB 11%
<input type="checkbox"/>	Guardrail Transition	CB 11%
<input type="checkbox"/>	Guardrail Connections	CB 11%

Regardless of the number of Pay Items listed by the Agency or selected by the Contractor, or if no Pay Items qualify for the steel escalation/de-escalation program for this Project or the Contractor elects not to participate in the steel escalation/de-escalation program for this Project, the steel price escalation/de-escalation clause (and program) contained in 00195.12 through 00195.12(d) are included in this Contract and are the only steel price escalation/de-escalation clause (and program) that apply to this Contract.

\_\_\_\_\_  
Contractor's Signature

\_\_\_\_\_  
Date

**00195.50(a) Progress Payments** - Replace the paragraph that begins "The estimates upon which progress payments are ..." with the following paragraph:

The estimates upon which progress payments are based are not represented to be accurate estimates. All estimated quantities are subject to correction in the final estimate. If the



Contractor uses these estimates as a basis for making payments to Subcontractors and Suppliers, the Contractor assumes all risk and bears any losses that result.

### **SECTION 00196 - PAYMENT FOR EXTRA WORK**

Comply with Section 00196 of the Standard Specifications.

### **SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK**

Comply with Section 00197 of the Standard Specifications modified as follows:

**00197.20(e) Standby Time** - Replace this subsection, except for the subsection number and title, with the following:

If ordered by the Engineer, standby time will be paid at 50% of the hourly rental rate calculated according to this Subsection, excluding the hourly operating rate. Rates for standby time that are calculated at less than \$1 per hour will not be paid. Payment will be limited to not more than 8 hours in a 24-hour period or 40 hours in a 1 week period.

**00197.80 Percentage Allowances** - Replace the table that shows Subsection and Percent with the following:

<b>Subsection</b>	<b>Percent</b>
00197.10 Materials	19
00197.20 Equipment	19
00197.30 Labor	29
00197.40 Special Services	19

Replace the paragraph that begins "When a Subcontractor performs ordered..." with the following paragraph:

When a Subcontractor performs ordered Force Account Work, the Contractor will be allowed a supplemental markup of 10% on each Force Account Work order.

### **SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS**

Comply with Section 00199 of the Standard Specifications.

## SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

## SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications modified as follows:

**00220.02(a) General Requirements** - Add the following bullets to the end of the bullet list:

- When performing trench excavation or other excavation across or adjacent to a Traffic Lane on a Roadway having a pre-construction posted speed greater than 35 mph, backfill the excavation, install Surfacing, and open the Roadway to traffic by the end of each work shift. Install a "BUMP" (W8-1-48) sign approximately 100 feet before the backfilled area and a "ROUGH ROAD" (W8-8-48) sign approximately 500 feet ahead of the "BUMP" sign. If this requirement is not met, maintain all necessary lane or shoulder closures and provide additional TCM, including flagging, at no additional cost to the Agency. Do not use temporary steel plating to reopen the Roadway.
- During stage V construction of the east and west Ehlen Road tie ins, provide continuous 24-hour flagger operation, with a minimum of 2 flaggers. Occupy the advance flagger stations, as directed.
- Before activating a modified traffic signal, revising lane usage, implementing new roadway geometry, or removing a "STOP" sign, protect traffic by installing "NEW TRAFFIC PATTERN AHEAD" (W23-2) signing according to 00222.40. Keep the signs in place for 30 Calendar Days after completing the modifications.
- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings. Modify the "Typical Abrupt Edge Delineation" configuration by replacing the tubular markers with temporary plastic drums on 40 foot maximum spacing along the abrupt edge.
- When paving operations create an abrupt edge, protect traffic by installing signing according to the "Divided Highway or Freeway Two Lane Closure" detail shown on the Standard Drawings.
- Protect traffic by grinding and inlaying existing longitudinal rumble strips before staging traffic across them. Grind and inlay existing rumble strips according to the "Existing Rumble Strip Removal" detail shown on the Standard Drawings. Use Level 2, 1/2 inch ACP, or as directed.
- Protect pedestrians in pole base excavation areas by placing approved covers over all pole base excavations. Place a minimum of two B(II)LR barricades adjacent to and on either side of the excavated area, facing pedestrian traffic, or place covers and barricades as directed.

**00220.40(e)(1) Closed Lanes** - Replace this subsection, except for the subsection number and title, with the following:

Traffic Lanes may be closed on the Pacific Highway I-5 when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

**Single Lane Closures** – One Traffic Lane in each direction on the Pacific Highway I-5 may be closed during the following times:

- Nightly, Sunday night through Friday morning, between 8:00 p.m. and 5:00a.m.
- Nightly, Friday night through Sunday morning, between 8:00 p.m. and 8:00 a.m.

**Two-lane Closures** – Two Traffic Lanes in each direction on the Pacific Highway I-5 may be closed during the following times:

- Nightly, Sunday night through Friday morning, between 10:00 p.m. p.m. and 4:00 a.m.
- Nightly, Friday night through Sunday morning, between 10:00 p.m. and 8:00 a.m.

One Traffic Lane may be closed on all other adjacent Roadways within the Project Site not listed above, when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

- Nightly between 9:00 p.m. and 6:00 a.m.

**00220.40(e)(2)(b) Special Events** - Add the following to the end of this subsection:

The following special events will occur during this Project:

- St. Paul Rodeo: Dates of June/early July See [www.stpaulrodeo.com](http://www.stpaulrodeo.com)
- Oregon State University home football games, between noon on the Day preceding and noon the following Day.
- University of Oregon home football games, between noon on the Day preceding and noon the following Day.
- Wooden Shoe Tulip Festival See [www.woodenshoe.com](http://www.woodenshoe.com)

Add the following subsection:

**00220.40(f) Other Closure Restrictions** – Ramps and Roadways may be closed when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2).

**(1) I-5 Northbound Entrance Ramp** - The Contractor will be permitted to close the road to traffic at the Northbound Ehlen Road Entrance Ramp to I-5 Northbound on two separate occasions – once for up to 7 consecutive Calendar Days and once for up to 14 consecutive Calendar Days from 8:00 p.m. Sunday through 5:00 a.m. Monday.

Do not close more than one ramp at the same time. The ramp closures will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222. Do not close the ramp until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of ramp closure.

**(2) I-5 Southbound Entrance Ramp** - The Contractor will be permitted to close the road to traffic at the Southbound Ehlen Road Entrance Ramp to I-5 Southbound on two separate occasions – both for up to 7 consecutive Calendar Days from 8:00 p.m. Sunday through 5:00 a.m. Monday.

Do not close more than one ramp at the same time. The ramp closures will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222. Do not close the ramp until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of ramp closure.

**(3) I-5 Northbound Exit Ramp** - The Contractor will be permitted to close the road to traffic at the I-5 Northbound Exit Ramp to Ehlen Road for up to 7 consecutive Calendar Days from 8:00 p.m. Sunday through 5:00 a.m. Monday.

Do not close more than one ramp at the same time. The ramp closures will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222. Do not close the ramp until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of ramp closure.

**(4) I-5 Southbound Exit Ramp** - The Contractor will be permitted to close the road to traffic at the I-5 Southbound Exit Ramp to Ehlen Road on two separate occasions – once for up to 7 consecutive Calendar Days and once for up to 14 consecutive Calendar Days from 8:00 p.m. Sunday through 5:00 a.m. Monday.

Do not close more than one ramp at the same time. The ramp closures will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222. Do not close the ramp until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of ramp closure.

#### **(5) Limited Duration I-5 Directional Mainline Road Closure**

The Contractor will be permitted to close I-5 mainline in a single direction during the on-site diversion tie-ins. The closure is allowed nightly between 12:00 a.m. and 4:00 a.m. for a maximum of 6 times (3 in each direction).

Do not close more than one direction at the same time. The road closure will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222. Do not close mainline I-5 until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of mainline closure.

#### **(6) Limited Duration Ehlen Road Closure**

The Contractor will be permitted to close Ehlen Road during the Bridge removal and construction. The closure is allowed between 9:00 p.m. Friday and 5:00 a.m. Monday for a maximum duration of 8 weekends.

The road closure will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00221 and Section 00222. Do not close Ehlen Road until all Materials and Equipment are on hand or guaranteed to be delivered so that the Work can be done in an efficient manner with a minimum period of closure.

#### **(7) Limited Duration Ehlen Road Pedestrian Access Closure**

The Contractor will be permitted to close the pedestrian access along the east and west sides of Ehlen Road during removal and construction of the Bridge. The closure is allowed between 9:00 p.m. Friday and 5:00 a.m. Monday for a maximum duration of 8 weekends.

#### **00220.45 Load Restrictions on Bridges -**

For Structure(s) No.(s) 07796A and 07796B, limit the combined weight of construction vehicles, Equipment, and daily Material usage to 65,000 pounds for every 1,000 square feet of surface area plus the weight of long term storage of Materials to 25,000 pounds for every 100 square feet of surface area of the Bridge or a total of 200,000 pounds for each span of the Bridge, whichever is less.

The Contractor may request alternate loadings by submitting, 30 Calendar Days before proposed loadings, stamped loading calculations and data according to 00150.35.

### **SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL**

Comply with Section 00221 of the Standard Specifications modified as follows:

**00221.06 Traffic Control Plan** - Replace this subsection with the following subsection:

**00221.06 Traffic Control Plan and Tourist-Oriented Directional and Business Logo Signs –**

**(a) Traffic Control Plan** - Submit one of the following, 5 Calendar Days before the preconstruction conference:

**(1) Agency Traffic Control Plan** - If the Contractor intends to use the Agency TCP without modification, a written notification indicating that the Agency TCP will be used without modification.

**(2) Contractor-Modified Traffic Control Plan** - The Contractor may request to use a Contractor-modified Agency TCP, or a TCP developed by the Contractor. Do not use a modified TCP, or a TCP developed by the Contractor, unless approved by the Engineer. Use the Agency TCP unless a modified TCP, or a TCP developed by the Contractor is accepted.

The Engineer is not obligated to consider any modified Agency TCP or a TCP developed by the Contractor. The Agency will not be liable to the Contractor for failure to accept or act upon any request for a modified Agency TCP or a TCP developed by the Contractor.

To conserve time and funds, the Contractor may first submit a written request for a preliminary review by the Engineer. The request should contain a description of the proposal together with a rough estimate of anticipated dollar and time impacts. The Engineer will, within a reasonable time, respond to the Contractor in writing whether or not the request would be considered by the Agency.

If requesting a Contractor-modified Agency TCP, or a TCP developed by the Contractor, at a minimum the request shall meet all requirements of the Contract documents and comply with the Project transportation management plan (TMP). Provide the following information:

- Stamped Working Drawings according to 00150.35 that include the proposed TCP showing all TCM and quantities of TCD.
- A TPAR plan that includes:
  - Details and features used to provide pedestrian accessibility.
  - Pedestrian staging Plans at a scale no smaller than 1 inch = 50 feet.
  - Temporary alternate facilities or detour routes for pedestrian traffic.
- Staging sequences and details for Work affecting vehicular, pedestrian, and bicycle traffic.
- Proposed order and duration of the TCM.
- A detailed temporary striping plan.

If the Contractor's request to use a Contractor-modified Agency TCP, or a TCP developed by the Contractor is approved in whole or in part, acceptance will be made by a Change Order.

The Engineer will establish prices that represent a fair measure of the value of Work to be added, changed, or deleted as a result of any accepted modifications to the Agency TCP or an accepted TCP developed by the Contractor.

Once a TCP has been accepted by the Engineer, any additional modifications must be submitted by the Contractor for Agency review following the procedure described above. The Engineer is not obligated to consider additional modifications to a previously approved TCP.

**(b) Tourist-Oriented Directional and Business Logo Signs** - Submit one of the following for approval, at least 5 Calendar Days before the preconstruction conference:

**(1) No Signs** - If there are no tourist-oriented directional (TOD) or business logo signs on the Project, a written notification that no TOD or business logo signs exist within the Project limits or

**(2) Signs** - Submit one copy of a sketch map of the Project showing all existing TOD and business logo signs and a written narrative describing how these signs will be kept in service and protected throughout all the construction stages. If modifications are necessary, submit updated information to the Engineer for approval at least 21 Calendar Days before the change is needed.

## SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

Comply with Section 00222 of the Standard Specifications modified as follows:

### 00222.40(e) Temporary Sign Placement - Add the following to the end of the bullet list:

- At least ten Calendar Days before closing a pedestrian pathway at Ehlen Rd and at Delores Way, place a "SIDEWALK CLOSED, Full Time" (CW11-4) sign in advance of each future closure point. Locate the sign so it is legible from the nearest alternate pedestrian pathway facing incoming pedestrian traffic. The sign may be mounted between the panels of a Type II barricade or on a single-post TSS. Do not place the sign or sign support such that it narrows the pedestrian pathway to a width of less than 4 feet.
- Before opening the TPAR, place TPAR signing and other TCM as shown, or as directed. Maintain the "SIDEWALK CLOSED, Full Time" (CW11-4) signs while the TPAR is open to pedestrian traffic.
- At least ten Calendar Days prior to the start of work, place a "SIDEWALK OPEN" (CW11-3) sign in advance of each end of the Work Area. Locate the sign so it is legible from the nearest alternate pedestrian pathway facing incoming pedestrian traffic. The sign may be mounted between the panels of a Type II barricade, or on a single-post TSS. Do not place the sign or support such that it narrows the pedestrian pathway to a width less than 4 feet.
- Before starting work, place pedestrian-specific TCM as shown in the TCP, or as directed. Maintain "SIDEWALK OPEN" (CW11-3) signs while work is affecting the pedestrian pathway.
- Place a "PEDESTRIANS ON ROADWAY" (CW11-2) sign at the beginning of each end of the Work Area, facing incoming traffic as shown, or as directed.
- Install a 54-inch "TRUCKS LEAVING HIGHWAY XXXX FT" sign in advance of each entrance point to the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings. Install a 54-inch "TRUCKS ENTERING HIGHWAY XXXX FT" sign in advance of each exit point from the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings.
- Install a "PROJECT IDENTIFICATION" (CG20-8) sign with an "ODOT" logo rider on the Pacific Highway. Place the sign according to sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Supplemental Drawings, in advance of the "ROAD WORK AHEAD" sign at each end of the Project, facing incoming traffic. The Engineer will determine the sign legend.
- Install "ROAD WORK AHEAD" (W20-1-48) signs with a 36 by 24-inch "FINES DOUBLE" (R2-6aP) rider on the Pacific Highway, according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans except do not install the "FINES DOUBLE" rider on concrete barrier mounted signs.
- Install beyond each end of the Project, facing outgoing traffic, an "END ROAD WORK" (CG20-2A-24) sign a distance of  $(A \div 2)$  according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans.
- Install two sign flag boards, as shown on the Standard Drawings, above the following detour and road closed advance warning signs, where applicable:
  - "DETOUR AHEAD", "DETOUR XXXX FT", "DETOUR X/X MILE" (W20-2) signs.

- "ROAD CLOSED AHEAD", "ROAD CLOSED XXXX FT", "ROAD CLOSED X/X MILE" (W20-3) signs.
- Install a "24 HR FLAGGING AHEAD" (CW20-9) sign in each direction approximately 250 feet prior to the "BE PREPARED TO STOP" sign. Remove the temporary signs when 24-hour flagging is no longer required, or as directed.
- Install the following warning signs for each new "STOP" sign installed in the intersection. Install a "Stop Ahead" (W3-1) symbol sign approximately 350 feet in advance of the "STOP" sign. Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign approximately 350 feet in advance of the "Stop Ahead" sign. Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after installing the "STOP" sign.
- For each leg of the intersection affected by the new traffic signal, install the following warning signs:
  - A "Signal Ahead" (W3-3) symbol sign approximately 350 feet in advance of the intersection, shown on the Standard Drawings or as modified by the Plans.
  - A "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign approximately 350 feet in advance of the "Signal Ahead" sign. Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after installing the "Signal Ahead" sign.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign approximately 350 feet in advance of Ehlen Rd/Bents Rd, Ehlen Rd/SB Ramp, Ehlen Rd/NB Ramps, facing northbound southbound eastbound westbound incoming traffic.
- Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after installing the new traffic signals at Ehlen Rd/Bents Rd, Ehlen Rd/SB Ramp, Ehlen Rd/NB Ramps.
- For paving operations on freeways, place "ABRUPT EDGE" (CW21-9) and "ROAD WORK XX MPH" (CW20-1a) signs as shown. Use an "XX" value equal to 15 mph below the current posted regulatory speed. If a speed is posted for a temporary regulatory speed reduction, that speed is the current posted regulatory speed.
- For paving operations on non-freeways, place "ABRUPT EDGE" (CW21-9) and "ROAD WORK XX MPH" (CW20-1a) signs as shown. Use an "XX" value equal to 10 mph below the current posted regulatory speed. If a speed is posted for a temporary regulatory speed reduction, that speed is the current posted regulatory speed.
- For all other moving operations that do not create an abrupt edge adjacent to traffic, omit the "ABRUPT EDGE" signs.
- Install a 72 by 24-inch "CONSTRUCTION VEHICLE DO NOT FOLLOW" (CW23-14) sign on rigid substrate on the back of all Material or Equipment delivery vehicles.
- During the on-site diversion and preparation Work (Stages I, II, III, IV) on the Pacific Highway, install temporary signing and other required TCD as shown. Install temporary speed zone signing according to and as shown in the Temporary Speed Zone Order.

Add the following subsection:

**00222.40(f) Temporary Speed Zone Reduction** - Install a temporary regulatory speed zone, as directed. Use regulatory signs for all required temporary speed zone signage.



**00222.45(b) Portable Changeable Message Signs** - Add the following bullet to the end of this subsection:

- At least seven Calendar Days before the Pacific Highway Ramp closures, place one or more PCMS displaying the following message as shown, or as directed:

<b>Panel 1</b>	<b>Panel 2</b>
(Name/# of highway)	CLOSURE
(Location)	(Time Frame)
CLOSURE	(Time Frame)

**00222.45(c) Radar Speed Trailers** - Add the following bullet(s) to the end of the bulleted list:

- Install a 30 by 36-inch "SPEED LIMIT XX" (R2-1) sign below the trailer display panel. The "XX" value is the legal speed limit as determined by a Speed Zone Order signed by the State Traffic Engineer.

**00222.80(a) Area Basis -**

Add the following sentence to the end of the paragraph that begins "Temporary signs will...":

No measurement of quantities will be made for "CONSTRUCTION VEHICLE DO NOT FOLLOW" (CW23-14) signs.

Add the following sentence to the end of this subsection:

Temporary signing quantities include temporary regulatory speed zone signage.

**00222.90 Payment -**

Add the following to the end of this subsection:

No separate or additional payment will be made for furnishing, installing, and maintaining 72 by 24-inch "CONSTRUCTION VEHICLE DO NOT FOLLOW" (CW23-14) signs. Payment will be included in 00221.90(b).

**SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES**

Comply with Section 00223 of the Standard Specifications modified as follows:

Add the following subsection:

**00223.34 Bonneville Power Administration (BPA) Safety Watcher** - When Work requires the presence of a BPA-certified safety watcher (see 00150.50(f)), furnish personnel possessing a current, valid certification from BPA. For coordination of BPA Safety Watchers, contact Darin Smith at BPA, 503-304-5906. The duties of the BPA safety watcher are to watch work that could impact the BPA facilities. Equip each safety watcher according to 00223.21, except that "STOP/SLOW" paddles are not required.

BPA-certified safety watchers can be obtained through the following providers:

Furnish BPA safety watchers when and where required according to 00150.50(f). BPA safety watchers are responsible for limiting the movement of personnel or Equipment to prevent electrical contact accidents.

BPA safety watchers have the authority to halt the operation whenever any unsafe act or condition is imminent.

- Christenson Electric, Aleah Lewis 503-419-3493
- EC Company, Matt Ramsay 503-278-6048
- Resource Management Assoc. (RMA), Lane Kadel 503-803-2029
- Power Technology Inc. (PTI), Fred Diaz 435-729-0956

Add the following subsection:

**00223.80(b)(5) BPA Safety Watchers** - BPA Safety Watchers will be measured on the time basis, of the actual number of hours BPA Safety Watchers are staffed as required according to 00150.50(f).

**00223.90 Payment** - Add the following Pay Item(s) to the Pay Items list:

(h) BPA Safety Watcher ..... Hour

Payment for item (h) performed beyond the quantity shown in the Contract Schedule of items will be made at the Contract unit price if the Engineer determines that the Contract unit price does not exceed the value of the work as determined according to Section 00197. If the Engineer determines that the Contract unit price exceeds the value of the Work, payment for the Additional Work will be made according to 00195.20.

Item (h) includes all necessary Equipment, special apparel, and two-way radios.

## **SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES**

Comply with Section 00224 of the Standard Specifications.

## **SECTION 00225 - TEMPORARY PAVEMENT MARKINGS**

Comply with Section 00225 of the Standard Specifications.

## **SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS**

Comply with Section 00226 of the Standard Specifications modified as follows:

Add the following subsection:

**00226.15 Temporary Glare Screens** - Use temporary glare screens from the QPL or Conditional Use List.

Add the following subsection:

**00226.45 Temporary Glare Screens** - Install temporary glare screens as shown or directed, and according to the following:

- Install according to manufacturer's instructions.
- Install vertical and true to line.
- Install using a QPL approved pipe from the same manufacturer as the temporary glare screen.
- Install on concrete barrier by drilling holes as shown and placing the manufacturer's QPL approved pipe in the holes. Submit for approval, in writing, any other proposed method of installation.
- Immediately repair any temporary barrier segment that is damaged during temporary glare screen installation at no additional cost to the Agency.
- Do not install on permanent Bridge rail or permanent Bridge barrier.
- Temporary glare screens that are installed in a continuous run shall be from the same manufacturer and of like appearance throughout the entire installation.

For any segment of concrete barrier that will be used for permanent installations, fill holes and repair according to Section 00820 after removing the temporary glare screen.

Add the following subsection:

**00226.65 Temporary Glare Screens** - Immediately replace or repair any temporary glare screen segment that is damaged. Repair to the Engineer's satisfaction or replace with an undamaged segment. If the temporary glare screen segment is damaged by the Contractor, repair or replace at no additional cost to the Agency.

**00226.80(b)(2) Temporary Barrier** - Add the following to the end this subsection:

The quantities will be limited to those shown in Table 00226-1. The estimated quantity of Temporary Barrier is:

**TABLE 00226-1**

Stage/Phase	Location (STA to STA)	Temporary Barrier (foot)	Temporary Barrier, Minimum Deflection (foot)
Stage I Phase 1	"RW" 780+30 to "RW" 800+00	N/A	1,970
Stage I Phase 1	"RW" 805+20 to "RW" 814+15	N/A	895
Stage I Phase 1	"SB" 1771+00 to "SB" 1801+00	N/A	3,000
Stage I Phase 1	"SB" 1807+00 to "SB" 1820+00	N/A	1,300
Stage I Phase 1	"SB" 1828+00 to "SB" 1841+60	N/A	1,360

Stage I Phase 1	"A2" 800+00 to "A2" 811+00	N/A	1,100
Stage I Phase 1	"C2" 801+00 to "C2" 812+00	N/A	1,100
Stage I Phase 1	"D2" 813+00 to "D2" 828+00	N/A	1,500
Stage I Phase 2	"RW" 788+70 to "RW" 835+00	N/A	4,630
Stage I Phase 2	"RW" 808+30 to "RW" 814+15	N/A	585
Stage I Phase 2	"SB" 1778+30 to "SB" 1840+70	N/A	6,240
Stage I Phase 2	"SB" 1780+50 to "SB" 1800+00	N/A	1,950
Stage I Phase 2	"SB" 1803+00 to "SB" 1817+30	N/A	1,430
Stage II	"RW" 788+70 to "RW" 822+00	N/A	3,330
Stage II	"RW" 800+00 to "RW" 828+50	N/A	2,850
Stage III	"TSB" 2781+00 to "TSB" 2839+20	N/A	5,820
Stage III	"TSB" 2787+00 to "TSB" 2831+50	N/A	4,450
Stage III	"D2" 819+00 to "D2" 831+50	N/A	1,250
Stage V Phase 1	"ER" 84+00 to "ER" 94+50	N/A	1,050
Stage V Phase 1	"C2" 810+00 to "C2" 812+00	N/A	200
Stage V Phase 1	"C2" 810+00 to "C2" 812+00	N/A	200
Stage V Phase 1	"A2" 810+00 to "A2" 812+00	N/A	200
Stage V Phase 1	"A2" 810+00 to "A2" 812+00	N/A	200
Stage V Phase 3	"ER" 84+50 to "ER" 98+00	N/A	1,350
Stage V Phase 3	"D2" 812+50 to "D2" 815+00	N/A	250
Stage V Phase 3	"D2" 812+50 to "D2" 815+00	N/A	250
Stage V Phase 3	"B2" 812+50 to "B2" 815+00	N/A	250
Stage V Phase 3	"B2" 812+50 to "B2" 815+00	N/A	250
Stage V Phase 3	"C2" 804+60 to "C2" 812+00	N/A	740

Add the following subsection:

**00226.80(b)(5) Temporary Glare Screens** - Temporary glare screens and moving temporary glare screens will be measured on the length basis, determined by measuring from end to end of the devices, as installed on temporary barrier along the line and grade of each separate run.

**00226.90 Payment** - Add the following Pay Items to the end of the Pay Item list:

- (p) Temporary Glare Screens..... Foot
- (q) Moving Temporary Glare Screens ..... Foot

Add the following paragraphs after the paragraph that begins "Item (m) includes...":

Item (p) includes furnishing, installing, and removing temporary glare screens.

Item (q) includes moving the temporary glare screens from one location of actual use to another location of actual use on the temporary barrier.

## **SECTION 00227 - TEMPORARY TRAFFIC SIGNALS AND ILLUMINATION**

Comply with Section 00227 of the Standard Specifications.

## **SECTION 00228 - TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING**

Comply with Section 00228 of the Standard Specifications.

## **SECTION 00230 – TEMPORARY ROADBED AND SURFACING**

Section 00230, which is not a Standard Specification, is included in this Project by Special Provision.

### **Description**

**00230.00 Scope** - This Work consists of constructing, maintaining, and removing temporary Roadbeds and Surfacing, as shown or directed.

### **Materials**

**00230.10 Materials** - Furnish Materials meeting the following requirements:

Aggregate Base .....	00640.10
Asphalt Concrete Pavement (ACP) .....	00745.50
Emulsified Asphalt Tack Coat .....	00730.11
Geotextile.....	02320

If the I-5 Temporary Diversion is scheduled to last more than 24 months, the following Pavement design will be required:

- 3.0" Level 4 ½" ACP Wearing Course (PG 70-22ER)
- 3.0" Level 4 ½" ACP Base Course (PG 70-22ER)
- 3.0" Level 3, ½" ACP Base Course (PG 64-22)
- 16.0" Aggregate Base
- Subgrade Geotextile

If the I-5 Temporary Diversion is scheduled to last less than 24 months, use the section shown.

**00230.11 Earthwork** - Furnish Materials required to construct the Roadbed according to Section 00330 and as shown.

### Construction

**00230.40 Earthwork** - Construct temporary embankments and excavation outside the permanent Roadbed according to the applicable parts of Section 00330, except density testing to verify compaction will not be required. Compact the embankment material according to 00330.43(c). Ensure that Earthwork that remains in place as permanent Roadbed meets all requirements of Section 00330.

**00230.41 Geotextile** - Place embankment geotextile according to Section 00350.

**00230.43 Aggregate Base** - Place and compact Aggregate Base according to the applicable parts of Section 00640.

**00230.44 Asphalt Concrete Pavement** - Place ACP to the lines and grade shown or directed. Compact ACP according to 00745.49(d).

**00230.45 Emulsified Asphalt Tack Coat** - Apply Emulsified Asphalt according to the applicable parts of Section 00730.

### Maintenance

**00230.60 Surface Maintenance** - Maintain temporary surfaces according to 00220.60.

### Finishing and Cleaning Up

**00230.70 General** - When temporary surfaces are no longer needed, do the following:

- Remove all related materials.
- Restore the area on which the temporary Surfacing and associated Roadbed occupied to the original ground contours, or as directed.
- Apply permanent seeding to the area occupied by the temporary Surfacing and associated Roadbed, if required, according to Section 01030.
- Dispose of excess materials according to 00330.41(a)(4).

### Measurement

**00230.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. It is estimated that the following approximate quantities of Materials will be required:

Material	Amount
Construct Temporary Roadbed and Surfacing:	
Embankment.....	1,520 cu. yd.
Excavation .....	6,650 cu. yd.
Stone Embankment .....	640 cu. yd.
Subgrade Geotextile .....	21,900 sq. yd.
Aggregate Base .....	21,140 ton
Asphalt Concrete Mixture.....	12,000 ton
Emulsified Asphalt Tack Coat .....	21 ton
Remove Temporary Roadbed and Surfacing:	
Embankment.....	6,650 cu. yd.
Excavation .....	11,000 cu. yd.

Quantities include only those quantities placed or removed outside the permanent Roadbed Neat Line.

Permanent seeding will be measured according to 01030.80.

### Payment

**00230.90 Payment** - The accepted quantities of Work performed under this Section, except for permanent seeding Work, will be paid for at the Contract lump sum amount for the item "Construct and Remove Temporary Roadbed and Surfacing".

Payment will be payment in full for constructing, maintaining, and removing Roadbeds and Surfacing, and for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Permanent seeding will be paid for according to 01030.90.

## SECTION 00237 - AGENCY-PROVIDED STAGING AREAS

Section 00237, which is not a Standard Specification, is included in this Project by Special Provision.

### Description

**00237.00 Scope** - This Work consists of utilizing Agency provided prospective or mandatory staging areas as the Contractor elects or as required for the construction of the Contract.

Locate staging area(s) in previously improved area(s) that have been paved or compacted and graveled, unless otherwise shown or approved.

**00237.01 Prospective Staging Areas** - The following prospective staging area(s) have been cleared for use. If the Contractor elects not to utilize the listed prospective staging area(s) or elects to use other or additional staging areas, 00290.10 applies. Do not stage Equipment, store Materials, or operate beyond the staging area boundary shown or delineated unless otherwise directed in writing.

**(a) Prospective Staging Area, Bents Road/Ehlen Road:**

- **Location** – Area between Bents Road and Ehlen Road
- **Access** – Off of Bents Road
- **Available Area** - 1.47 Acres

**Measurement**

**00237.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

**Payment**

**00237.90 Payment** - No separate or additional payment will be made for Work performed under this Section.

**SECTION 00240 - TEMPORARY DRAINAGE FACILITIES**

Comply with Section 00240 of the Standard Specifications.

**SECTION 00245 - TEMPORARY WATER MANAGEMENT**

Section 00245, which is not a Standard Specification, is included in this Project by Special Provision.

**Description**

**00245.00 Scope** - This Work consists of furnishing, installing, operating, maintaining, and removing temporary water management facilities in regulated Work areas.

**00245.01 Abbreviations:**

**TWM** - Temporary Water Management  
**TWMF** - Temporary Water Management Facility  
**TWMP** - Temporary Water Management Plan



**00245.02 Definitions:**

**Temporary Water Management Facility** - A TWMP that conveys water around or through Work areas, removes water from Work areas, and treats and discharges water at locations outside Work areas.

**00245.03 Temporary Water Management Plan** - The Agency TWMP is a concept plan. 28 Calendar Days before beginning Work in regulated Work areas, submit stamped Working Drawings of a Contractor-developed TWMP, according to 00150.35, based on either the Agency's concept plan or an independent plan that meets water quality and environmental guideline requirements and does not negatively affect neighboring properties or water rights.

Include the following minimum information in the TWMP:

- The sequence and schedule for dewatering and re-watering. This sequence and schedule must include when to contact the Engineer prior to dewatering and re-watering.
- How the Work area is isolated from the active stream flow upstream, through, and downstream.
- How the stream flow is routed and conveyed around or through the isolated Work area.
- How fish passage is provided around the Work area, if required.
- How the isolated Work area is de-watered.
- How the pumped water is treated, if necessary, before it is discharged downstream.
- Description of all construction stages, including appropriate contact points for each stage.
- A list of on-site backup Materials and Equipment.
- Provide the name of the TWM Subcontractor (if applicable) and Contractor's superintendent, and their 24-hour contact phone number 10 Days before the pre-Work meeting. If changes in the appointment of the TWM Subcontractor or Contractor's superintendent occur during the term of the Contract, provide written notice to the Engineer within 5 Calendar Days of the change.
- Calculations of water withdraw pump's capacity.
- Details of the proposed water intake screen used to isolate in-water Work area and how it meets the requirements of 00290.34(c)(3).

Any change to the TWMP during construction requires approval prior to implementation.

Obtain the Engineer's written approval before beginning Work in in-water Work areas.

**00245.04 Pre-Work Meeting** - Before beginning any TWM Work, attend a pre-work meeting at the Project Site with the Engineer no more than 8 Calendar Days prior to implementation of TWM. Required meeting attendees include:

- Engineer
- Contractor
- TWM Subcontractor (if applicable)

- Agency Environmental Coordinator or their appointed representative

The pre-Work meeting agenda typically includes the method of TWM, the TWMP, fish salvage plan and strategy, describe environmental risks, turbidity monitoring, energy dissipation, dewatering and re-watering plan and strategy, site clean-up expectations, and the circumstances under which contacting the Engineer is required.

### **Materials**

**00245.10 Materials** - Furnish Materials meeting the following requirements:

Pipe .....	00445.11
Plastic Sheetting .....	00280.14(a)
Sandbags .....	00280.15(a)
Water Intake Screening.....	00290.34(c)

Furnish pumps that are:

- Self-priming.
- Equipped with a variable speed governor.
- Equipped with a power source.
- Able to pump water that contains soft and hard solid.

### **Construction**

**00245.40 Fish Removal** - Qualified Agency, ODFW, or ODOT consultant biologists will remove fish and other aquatic organisms from the isolation Work areas. Coordinate fish removal with the Engineer at least 28 Calendar Days before beginning Work in regulated Work areas. Allow access into the isolation Work areas before, during and after installation of the TWMF to perform the specified tasks as follows:

- **Before Installation of TWMF** - Before any in-water Work, including installing TWMF, qualified personnel will remove fish and other native aquatic organisms from within the proposed isolated Work area.
- **After Installation of TWMF** - After installing TWMF and the reduction of the water level through the isolated Work area has begun, qualified personnel will remove all fish and aquatic organisms as the water level is reduced. Do not completely de-water the isolation area until all fish and aquatic organisms have been removed.

**00245.41 Installation** - During installation of the temporary water management facility, maintain a downstream water flow rate of at least 50 percent of the upstream water flow rate.

**00245.42 Operation** - Operate temporary water management as follows:

- Protect fish and fish habitat according to 00290.34.
- Maintain and control water flow downstream of the isolated Work area for the duration of the diversion to prevent downstream de-watering.

- Clean, maintain and repair water intake screening to ensure adequate flows and protection of aquatic organisms.
- In the event of containment failure immediately notify the Engineer so arrangements can be made to remove fish and aquatic organisms from the isolation Work areas prior to the continuation of Work within the ordinary high water limits.

### **Maintenance**

**00245.60 Maintenance** - Monitor water turbidity according to 00290.30(a)(8).

### **Finishing and Cleaning Up**

**00245.70 Removal** - Prior to removal of the TWMF, obtain approval from the Engineer after completion of all Work within ordinary high water limits. Remove the TWMF and re-water and restore the stream flow. Maintain downstream water flow during removal of the facility. Staged or metered re-watering may be required and will be determined by the Engineer.

### **Measurement**

**00245.80 Measurement** - No measurement of quantities will be made for temporary water management facilities.

The estimated quantities of Materials required for the temporary water management facility are:

Temporary Water Management Facility at Station "DW" 6+25 :

Pipe .....	301 Feet
Plastic Sheeting .....	1,165 Square Yard
Sandbags.....	1,550 Each

Turbidity monitoring will be measured according to 00290.80.

### **Payment**

**00245.90 Payment** - The accepted quantities of temporary water management facilities will be paid for at the Contract lump sum amount for the item "Temporary Water Management Facility at Station \_\_\_\_\_".

The location of the facility will be inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Turbidity monitoring will be paid for according to 00290.90.

No separate or additional payment will be made for TWMP, maintaining, operating, monitoring, moving, or removing the facility.

## **SECTION 00280 - EROSION AND SEDIMENT CONTROL**

Comply with Section 00280 of the Standard Specifications modified as follows:

**00280.00 Scope** - Replace the paragraph that begins "This Work also consists of providing temporary ..." with the following paragraph:

This Work also consists of providing temporary erosion and sediment control (ESC) measures and furnishing, installing, moving, operating, maintaining, inspecting, and removing ESC throughout the Project area according to the Standard Drawings, the erosion and sediment control plan (ESCP), the Specifications, or as directed, until the site is permanently stabilized. Included also is the monitoring of weather, of stormwater and receiving waters, the reporting of monitoring observations, the reporting of corrective actions (when necessary) and the updates and revisions of the ESCP, including ESCP cover sheet, necessary to keep it representative of current site conditions and compliant with the 1200-CA permit if applicable.

Delete the paragraph that begins "When contaminants, pollutants or hazardous materials...".

Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA permit is applicable to the Project.

**00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands** - Replace the bullet that begins "Information required under 1200-CA..." with the following bullet:

- Information required under 1200-CA permit, if applicable.

Add the following paragraphs to the end of this subsection:

Fill in required information listed on the ESCP cover sheet prior to beginning of construction and submit revised cover sheet to Engineer 10 Days before the preconstruction meeting. Monitor weather, stormwater runoff, and receiving waters, and document monitoring observations. Immediately upon discovery, notify Engineer if a 1200-CA permit non-compliance occurs. Provide updates and revisions of the ESCP, including ESCP cover sheet, necessary to keep it representative of current site conditions and compliant with the 1200-CA permit.

When contaminants, pollutants or hazardous materials are discovered in the Project location in Soils or groundwater comply with 00290.20(f) and, provide an environmental management plan (EMP) as required by the 1200-CA permit if applicable.

**00280.14(a) Plastic Sheetting** – Add the following sentence to the end of this subsection:

Furnish plastic sheetting and all components to cover stockpiled Soils.

**00280.14(e) Slope and Channel Liner Matting** - Add the following paragraph to the end of this subsection:

All matting must be made from plant fiber. Matting made from plastic or monofilaments will be rejected.

**00280.16(a) Construction Entrances** - Add the following paragraphs to the beginning of this subsection:

Provide construction entrances, Type 1.

With prior approval from the Engineer, the Contractor may use prefabricated construction entrances.

**00280.16(k) Active Treatment System** – Add the following sentence to the end of this subsection:

Obtain approval of the active treatment system from DEQ prior to use.

**00280.30 Erosion and Sediment Control Manager** –

Add the following bullet to the beginning of the bullet list under “The ESCM duties include:”

- Be present at the Project Site during all ground disturbing activities.

Replace the bullet that begins “Monitor rainfall, snow melt and runoff ...” with the following bullet:

- Visually monitor rainfall, snow melt and runoff at the Project Site.

Replace the bullet that begins “Monitor water quality in receiving streams in ...” with the following bullet:

- Visually monitor water quality in receiving streams in the vicinity of the Project Site.

Replace the bullet that begins “Monitor water in sediment traps receiving ...” with the following bullet:

- Monitor the pH of the water in sediment traps receiving runoff from Soils amended with cementitious material for acidity or alkalinity.

Add the following bullet to the end of the bullet list:

- Monitor locations identified in Section 00294 for compliance.

**00280.41(f) Hauling Material** – Replace this subsection, except for the subsection number and title, with the following:

Cover loads carrying Soil or sediment which may generate dust. Haul saturated loads in water tight beds or drain saturated loads prior to leaving the Project Site.

**00280.41(g) Underground Injection Controls (UIC)** – Replace this subsection, except for the subsection number and title, with the following:

Do not allow storm water from work area to enter Underground Injection Control (UIC) inlets, UIC catch basins or UIC wells.

**00280.44 (a) Plastic Sheeting** – Replace this subsection, except of the number and title, with the following:

Install Plastic Sheeting according to 00280.14(a) and Detail no. 6001. Cover stockpiles at the end of every Day beginning on the first Day of stockpiling Soils. Keep sheeting in place during rain events. Control runoff from plastic sheeting so water discharges without moving sediment.

Check anchoring system and overlap before leaving Project Site longer than 24 hours. Completely remove and replace plastic when it starts to deteriorate. Do not allow plastic to break into pieces. Repair or add anchors as needed. Remove and dispose of all plastic sheeting components at the time that stockpiles are removed.

**00280.48 Emergency Materials** - Add the following paragraphs after the paragraph that begins "Provide, stockpile, and protect...":

Provide and stockpile the following emergency Materials on the Project site:

Item	Quantity
Matting, Type B.....	75 Sq Yd
Check Dam, Type 6.....	5 Each
Sediment Fence.....	250 Foot
Inlet Protection, Type 3.....	5 Each
Sediment Barrier, Type 3.....	250 Foot
Plastic Sheeting.....	100 Sq Yd

When emergency materials are used, restock emergency materials within 48 hours of use.

**00280.62 Inspecting and Monitoring** – Delete the paragraph that begins "Inspect the Project Site...".

**00280.62(a) Inspection** - Replace the paragraph that begins "Perform site inspection, complete..." with the following paragraph:

Inspect the Project Site and all ESC devices for Effective Function and potential erosion or sediment movement and complete all applicable parts of the ODOT Erosion Control Monitoring Form, and submit the form to the Agency as follows:

**00280.62(b) Rainfall** – Add the following to the end of this subsection:

The closest on-line rain gauge is located at:  
[forecast.weather.gov/MapClick.php?lat=45.24658&lon=-122.77095](http://forecast.weather.gov/MapClick.php?lat=45.24658&lon=-122.77095&unit=0&lg=english&FcstType=graphical)  
 &unit=0&lg=english&FcstType=graphical

**00280.64(a) Corrective Action Timelines** – Delete the bullet that begins “If completion of corrective action is not feasible...”

Delete the bullet that begins “Provide a schedule for clean-up and corrective actions...”

Delete the bullet that begins “Provide all corrective action documentation and photographs...”

**00280.64(b) Corrective Action Documentation** – Add the following bullets to the beginning of the bulleted list:

- If completion of corrective action is not feasible within 24 hours, document the reasons why the time line cannot be met.
- Provide a schedule for clean-up and corrective actions that restores Effective Functioning as soon as feasible. If schedule cannot be met document the reasons for the delay.
- Provide all corrective action documentation and photographs to Agency within 24 hours of completion of corrective actions.

## **SECTION 00290 - ENVIRONMENTAL PROTECTION**

Comply with Section 00290 of the Standard Specifications modified as follows:

**00290.10 Staging and Disposal Sites** – Replace the paragraph that begins “Locate staging areas...” with the following paragraph:

Locate staging areas in previously improved or disturbed sites, including existing Roadways, pullouts, turnouts, parking lots, and storage yards that have been compacted, and graveled or paved, unless otherwise specified in Section 00237 or approved, in writing, by the Engineer.

Add the following subsection:

**00290.12 Construction Mats** – Provide mats of sufficient size to be capable of supporting the anticipated loads on the types of Soil that will be encountered. Provide mats that meet the following minimum requirements:

- Be free of leachable preservatives or other constituents harmful to aquatic environments.
- Consist of firm, durable Materials capable of supporting construction Equipment without shearing or tearing.
- Made from Materials that resist long-duration exposure to inclement weather and UV light.
- Surface with a durable, slip-resistant finish.
- Self-ballasting or include an anchoring system capable of keeping the mats stationary under construction traffic and Equipment.
- Removable and reusable, intact.

The Contractor may fabricate mats or use prefabricated mats designed for these purposes.

**00290.20(c)(2) Clean Fill** - Add the following paragraph to the end of this subsection:

Manage all excavated Soil that does not meet the definition of clean fill according to Section 00294.

Add the following subsection:

**00290.30(a)(7) Water Quality:**

- Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, or water contained within a work area isolation, directly into any waters of the State or U.S. until it has been satisfactorily treated (using a best management practice such as a filter, settlement pond, bio-bag, dirt-bag, or pumping to a vegetated upland location).
- Do not use permanent stormwater quality treatment facilities to treat construction runoff unless prescribed by an ESCP approved under Section 00280.
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- Do not use explosives under water.
- Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cure water, silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the State or U.S.
- Implement containment measures adequate to prevent flowing stream water from coming into contact with concrete or grout within the first 24 hours after placement.
- Do not end-dump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.
- Cease Project operations under high flow conditions that may result in inundation of the Project area, except for efforts to avoid or minimize resource damage.
- The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.
- If Work activities violate permit conditions or any requirement of this subsection, stop all in-water work activities and notify the Engineer.

Add the following subsection:

**00290.30(a)(8) Meter Turbidity Monitoring** - In addition to any turbidity monitoring required by 00280.62(c) to comply with NPDES 1200 series requirements, monitor turbidity using a turbidity meter every two hours during in-water work according to the following:

- Use a turbidity meter that has been maintained and calibrated according to the manufacturer's specifications.
- Measure stream turbidity before beginning each Day's in-water work to establish pre-construction turbidity levels.
- Measure upcurrent and downcurrent turbidity at two-hour intervals during in-water work and perform work based on turbidity measurements according to the following:



- Take upcurrent samples at a location representative of background turbidity approximately 100 feet from the in-water work area.
- Take downcurrent samples at a location approximately 100 feet from the in-water work area at approximately mid-depth of the water body and within any visible turbidity plume.
- If the downcurrent reading is less than 5 nephelometric turbidity units (NTU) higher than the upcurrent reading, continue to work and take readings every two hours.
- If the downcurrent reading is greater than or equal to 5 and less than 30 NTU higher than the upcurrent reading, modify work procedures and repair or implement best management practices (BMP), continue work, and continue to take readings every two hours. If after four hours the downcurrent reading is still greater than or equal to 5 NTU higher than the upcurrent reading, stop all in-water work and repair or implement additional BMP. Resume in-water work activities only after the downcurrent reading is less than 5 NTU above the upcurrent reading.
- If the downcurrent reading is greater than or equal to 30 and less than 50 NTU higher than the upcurrent reading, modify work procedures, repair or implement BMP and continue work. If, at the subsequent two-hour reading, the downcurrent reading is still more than 30 NTU higher than the upcurrent reading, stop all in-water work and repair or implement additional BMP. Resume in-water work activities only after the downcurrent reading is less than 5 NTU above the upcurrent NTU reading.
- If the downcurrent reading is 50 NTU or more higher than the upcurrent reading, stop all in-water work, repair or implement additional BMP, and inform the Agency. Resume in-water work activities only after the downcurrent reading is less than 5 NTU above the upcurrent NTU, as determined by continued readings made at least every two hours, or the next Day's initial turbidity reading.
- Document all turbidity monitoring observations on form 734-2755, "Turbidity Monitoring Report", or another form approved by the Agency. Submit reports to the Engineer weekly during in-water work and keep copies of the reports at the Project Site.

**00290.34 Protection of Fish and Fish Habitat** - Add the following paragraph:

Meet with the Agency Biologist, Resource Representative, Engineer, and inspector on site, before moving Equipment on-site or beginning any work, to ensure that all parties understand the locations of sensitive biological sites and the measures that are required to be taken to protect them.

**00290.34(a) Regulated Work Areas** - Add the following to the end of this subsection:

The regulated work area is the area at or below the ordinary high water (OHW) elevation and within Wetland boundaries as shown on the plans.

Perform work within the regulated work area only during the in-water work period. The in-water work period is from July 1 to October 31.

The total volume of material filled or discharged into waters of the State and waters of the U.S. shall not exceed 3,834 cubic yards.

The total volume of material excavated from the waters of the State and waters of the U.S. shall not exceed 1,948 cubic yards.

Submit a schedule to complete all work within the regulated work area within the in-water work period at least 10 Days prior to the preconstruction conference.

**00290.34(b) Prohibited Operations** - Add the following to the end of this subsection:

- Allow entry within the regulated work area as shown.
- Install steel piles greater than 24 inches in diameter or H-pile larger than designation HP 24 within the regulated work area.

Add the following subsection:

**00290.34(c) Aquatic Species Protection Measures Required by Environmental Permits:**

**(1) General Requirements:**

- Do not install fish ladders (for example: pool and weirs, vertical slots, fishways) or fish trapping systems.
- Do not apply surface fertilizer within 50 feet of any stream channel.

Use heavy Equipment as follows:

- Choice of Equipment must have the least adverse effects on the environment (for example: minimally sized, low ground pressure).
- Secure absorbent material around all stationary power Equipment (for example: generators, cranes, drilling Equipment) operated within 150 feet of wetlands, waters of the State, waters of the U. S., drainage ditches, or water quality facilities to prevent leaks, unless suitable containment is provided to prevent spills from entering waters of the State or waters of the U.S.
- Do not cross directly through a stream for construction access, unless shown or approved. If shown or approved, cross perpendicular to the stream and do not block stream flow. When a crossing is no longer needed, completely remove the crossing and restore the Soils and vegetation to the original condition.
- Store fuel and maintain all Equipment in staging areas that are at least 150 feet away from any waters of the State, waters of the U.S., or storm inlet or on an impervious surface that is isolated from any waters of the State, waters of the U.S., or storm inlet.
- If temporary access roads are needed within 150 feet of any body of water, use existing routes unless new routes are shown or approved.
- Before beginning work on temporary access routes that are not shown, submit a proposal to the Engineer for approval.

**(2) Work Area Isolation** - Provide work isolation according to Section 00245. Provide safe passage around or through the isolated work area for adult and juvenile migratory fish unless passage did not previously exist.

**(3) Water Intake Screening** - Install, operate, and maintain fish screens on each water intake used for project construction, including pumps used to isolate an in-water work area. When drawing or pumping water from any stream, protect fish by equipping intakes with screens having a minimum 27 percent open area and meeting the following requirements:

- Perforated plate openings shall be 3/32 inch or smaller.
- Mesh or woven wire screen openings shall be 3/32 inch or smaller in the narrowest direction.
- Profile bar screen or wedge wire openings shall be 1/16 inch or smaller in the narrow direction.

Choose size and position of screens to meet the following criteria in Table 00290-1:

**Table 00290-1**

Type	Approach Velocity <sup>1</sup> (Ft./Sec.)	Sweeping Velocity <sup>2</sup> (Ft./Sec.)	Wetted Area of Screen (Sq. Ft.)	Comments
Ditch Screen	≤ 0.4	Shall exceed approach velocity	Divide max. water flow rate (cfs) by 0.4 fps	If screen is longer than 4 feet, angle 45° or less to stream flow
Screen with proven self-cleaning system	≤ 0.4	—	Divide max. water flow rate (cfs) by 0.4 fps	—
Screen with no cleaning system other than manual	≤ 0.2	—	Divide max. water flow rate (cfs) by 0.2 fps	Pump rate 1 cfs or less
<sup>1</sup> Velocity perpendicular to screen face at a distance of approximately 3 inches <sup>2</sup> Velocity parallel to screen				

Provide ditch screens with a bypass system to transport fish safely and rapidly back to the stream.

**(4) Special Aquatic Habitats** - The following exploration or construction activities are not allowed in special aquatic habitats:

- Use of pesticides and herbicides, unless allowed according to Section 01030.
- Use of short pieces of plastic ribbon to determine flow patterns.
- Temporary roads or drilling pads built on steep slopes, where grade, Soil type, or other features suggest a likelihood of excessive erosion or slope failure.

- Exploratory drilling in estuaries that cannot be conducted from a work barge, or an existing bridge, dock, or wharf.
- Installation of a fish screen on any permanent water diversion or intake that is not already screened.
- Drilling or sampling in an EPA-designated Superfund Site, a state-designated clean-up area, or the likely impact zone of a significant contaminant source, as identified by historical information, U. S. Army Corps of Engineers representative, or the Agency.

**(5) Site Restoration** - Restore damaged streambanks to a natural slope, pattern, and profile suitable for establishment of permanent woody vegetation unless precluded by pre-project conditions (for example: natural rock substrate):

- Replant all damaged streambanks before the first April 15 following construction.
- If use of large wood, native topsoil, or native channel material is required for the site restoration according to the roadside development plans, stockpile all large wood, native vegetation, weed-free topsoil, and native channel material displaced by construction. Cut trees or large wood and trees into pieces of no less than 20 feet in length, or as shown on the roadside development plans or as directed. Stockpiled native wood and vegetation remain the property of the Agency.
- Stabilize all disturbed Soils, including obliteration of temporary access roads, following any break in work unless construction will resume in 4 Calendar Days.

**(6) Drilling, Boring, or Jacking** - If drilling, boring, or jacking is used, the following conditions apply:

- Design, build, and maintain facilities to collect and treat all construction and drilling discharge water using the best available technology applicable to site conditions. Provide treatment to remove debris, nutrients, sediment, petroleum hydrocarbons, metals, and other pollutants likely to be present. An alternate to treatment is collection and proper disposal offsite.
- Isolate drilling operations from wetted stream to prevent drilling fluids from contacting waters of the State or waters of the U.S.
- Use casing to prevent loss of drilling fluid to the subsurface formation. Do not drill without a containment method to keep drilling fluids and slurry isolated.
- If it is necessary to drill through an over-water bridge deck, use containment measures to prevent drilling debris from entering the stream channel.
- If drilling fluid or waste is released to surface water, wetland or other sensitive environment, cease all drilling pending written approval from appropriate regulatory agencies through the Engineer to resume drilling.
- Recover all waste and spoils if precipitation is falling or imminent. Recover, recycle, or dispose of all drilling fluids and waste to prevent entry into flowing water.
- Recycle drilling fluids using a tank instead of drill recovery/recycling pits, whenever feasible.
- When drilling is completed, make attempts to remove the remaining drilling fluid from the sleeve (for example: by pumping) to reduce turbidity when the sleeve is removed.

**(7) Treated Wood** - Treated wood includes any wood treated with any pesticide or wood preservatives. Do not use lumber, pilings, or other wood products that are treated or preserved with pesticidal compounds below the ordinary high water (OHW) or as part of an in-water or over-water structure, except as described below:

- Store treated wood shipped to the Project out of contact with standing water and wet Soil, and protected from precipitation.
- Visually inspect each load and piece of treated wood. Reject for use in or above aquatic environments if visible residues, bleeding of preservative, preservative-saturated sawdust, contaminated Soil, or other matter is present.
- Use pre-fabrication to the extent feasible. When field fabrication is necessary, all cutting and drilling of treated wood, and field preservative treatment of wood exposed by cutting and drilling, shall occur above the OHW. Use tarps, plastic tubs, or similar devices to contain the bulk of any fabrication debris, and wipe off any excess field preservative.
- All treated wood structures, including pilings, shall have design features to avoid or minimize impacts and abrasion by livestock, pedestrians, vehicles, vessels, and floats.
- Treated wood may be used to construct a bridge, over-water structure or an in-water structure, with the exception of the work containment system, provided that all surfaces exposed to leaching by precipitation, overtopping waves, or submersion are coated with a water-proof seal or barrier are maintained. Apply and contain coatings and paint-on field treatment to prevent contamination. Surfaces that are not exposed to precipitation or wave attack, such as parts of a timber bridge completely covered by the bridge deck, are exempt from this requirement.
- During demolition of treated wood, ensure that no treated wood debris falls into the water. If treated wood debris does fall into the water, remove it immediately.
- Store removed treated wood debris in appropriate dry storage areas, at least 150 feet away from the regulated work area.

**(8) Ditch and Culvert Cleaning** - Complete ditch cleaning, culvert and trash rack cleaning by Working from the top of bank, unless work area isolation would result in less habitat disturbance.

- Do not work more than 20 feet upstream or downstream the culvert or trash rack.
- Remove only the minimum amount of wood, sediment, or other natural debris necessary to maintain the facility's function, without disturbing spawning gravel or changing the configuration of the original ditch, unless the new configuration is part of the project design.
- Place all large wood, cobbles, and gravels recovered from during culvert and trash rack cleaning downstream from the structure.
- Complete drift removal in the following priority, as directed:
  - Pull and release whole logs or trees downstream.
  - Pull whole logs and trees and place in the riparian area, as directed.

- Remove whole logs or trees only if roadside development plans have been developed for replacement in-kind.
- Pull, cut only as necessary, and release logs and trees downstream.

**(9) Temporary Power, Communication and Water Lines** - Before installing temporary power, communication, or water lines across streams or bodies of water, submit a proposed plan to the Engineer for approval. Do not begin installation before receiving approval from the Engineer. Proposed plans for installation of temporary power, communication, and water lines and stream crossings shall utilize the following design methods in the listed order of priority:

1. Aerial lines, including lines hung from existing bridges.
2. Directional drilling, boring and jacking that spans the channel migration zone and any associated wetland.
3. Trenching, which is restricted to intermittent streams and may only be used when the stream is naturally dry. For all sections of trenches below the ordinary high water line, backfill with native material and cap with clean gravel suitable for fish use in the project area.

Align each crossing as perpendicular to the watercourse as possible. For drilled, bored, or jacked crossings, ensure that the line is below the total scour prism. Return any large wood displaced by trenching or plowing as nearly as possible to its original position, or otherwise arranged to restore habitat functions.

**(10) Injured Fish Notification** - If a dead or injured fish is found in the project area, immediately notify the Agency. If the injured fish is in a location where further injury or stress may take place, attempt to move the fish to a safer location, if one is available, near the capture site while keeping the fish in the water and reducing its stress as much as possible. Do not disturb the fish after it has been moved. If the fish is dead or dies while being captured or moved, save the fish and any tags. The Agency will notify appropriate regulatory agencies about the injured or dead fish and provide additional direction to the Contractor.

**00290.36(a) Migratory Birds** - Add the following to the end of this subsection:

Do not disturb migratory bird nesting habitat (shrubs, trees, and structures), or clear vegetation from March 1 to September 1 of each year without prior written approval from the Engineer. Notify the Engineer, in writing, a minimum of 10 Calendar Days prior to starting activities that could harm nesting birds.

**(1) Bird Management** - Bird management activities to comply with the Migratory Bird Treaty Act (16 U.S.C. 703 712) will be performed by the Agency. Ensure that the Agency and its permitted agents have access to the project area, as needed to prevent migratory bird nesting. Nesting prevention may include daily bird harassment and the installation and maintenance of devices that exclude birds.

Do not disturb migratory bird nesting habitats (shrubs, trees, and structures), or clear vegetation from March 1 to September 1 of each calendar year without prior written

approval from the Engineer. Notify the Engineer, in writing, a minimum of 10 Calendar Days prior to starting activities that could harm nesting birds.

**00290.41 Protection of Waters of the U.S. or State** - Add the following to the end of this subsection:

Permits have been obtained for this project from the US Army Corps of Engineers (Corps) and the Department of State Lands (DSL). Keep a copy of Corps and DSL permits at the project site during construction. Changes to the project that may increase the amount of fill placed or Material removed in waters of the U.S. or State, or the acreage of waters impacted are not authorized. The following waters of the U.S. or State are present and have been determined to be unavoidable as indicated in Table 00290-2:

**Table 00290-2**

Impact Waters of the US or State	Removal Volume (cu yds.)	Fill Volume (Cu yds)	Station	Duration of Impact (Temporary or Permanent)	Area of impact , sq. yds. (Acres)
Unnamed tributary to Senecal creek	20	20	Sta. "DW" 6+00 Lt/Rt	Temporary	99 (0.02 Ac)
Unnamed tributary to Senecal creek	803	841	Sta. "DW" 6+00 Lt/Rt	Permanent	321 (0.07 Ac)
Wetland 1	None	None	NA	None	None
Wetland 2	182	182	Sta. "ER" 95+50 to Sta. "ER"96+15 Rt	Temporary	182 (0.04 Ac)
Wetland 2	None	None	Sta. "DW" 6+00 Lt/Rt	Permanent	None
Wetland 3	50	50	Sta. "DW" 6+00 Lt/Rt	Temporary	255 (0.05 Ac)
Wetland 3	893	2,741	Sta. "DW" 6+00 Lt/Rt	Permanent	357 (0.07 ac)

Install construction mats as shown and on Wetland and soft Soils found in sensitive areas to prevent truck/tire ruts, the compacting of Wetland Soils or damaging Wetland plants. Prior to placement of mats, trim or bend over woody vegetation (willows, shrubs, trees, etc.) at or slightly above ground level. Do not uproot or disturb the roots of any vegetation. Install mats in good condition, that are clean of Soil and any invasive plant species, seed stock or plant material. Carry and place mats onto and from their locations. Do not drag mats into or out of position during installation or removal.

Add the following subsection:

**00290.42 Work Containment Plan** - A Work Containment Plan (WCP) is required on this Project for 96" culvert pipe and 30" storm sewer pipe installation activities.

Develop and submit a WCP for approval at least 28 Calendar Days prior to mobilization for 96" culvert pipe and 30" storm sewer installation activities. Maintain a copy of the WCP on the Project Site at all times during construction, readily available to employees and inspectors. Ensure that all employees comply with the provisions of the WCP. Design the WCP to avoid or minimize disturbance to protected features (sensitive cultural or natural resources, regulated work areas, aquatic life or habitat in regulated work areas) related to Contractor operations.

Before developing the WCP, meet with Agency to review the Contractor's activities that require the WCP to ensure that all parties understand the locations of protected features to be avoided and the measures needed to avoid and protect them.

Notify the Engineer at least 10 Calendar Days before beginning work access or containment construction activities.

The Agency reserves the right to stop Work and require the Contractor to change the WCP methods and Equipment before any additional Contract Work, at no additional cost to the Agency, if and when, in the opinion of the Agency, such methods jeopardize sensitive cultural or natural resources, regulated work areas, or aquatic life or habitat in regulated work areas.

The WCP shall identify how the Contractor's construction operations will protect regulated features during mobilization, construction, maintenance, and demolition. Include a narrative describing compliance with Section 00290 and DSL and Corp permits.

**00290.51 Protection of Sensitive Cultural Sites** - Add the following to the end of this subsection:

There are sensitive cultural sites or areas of high probability for cultural resources on this Project. At the time of preparation of the Plans, 1 site was identified.

The Region Environmental Coordinator for this Project is Sarah Eastman-Flores.

The Agency Archaeology Representative for this Project is Jessica Curteman.

All contact with the Agency Archaeology Representative and the Region Environmental Coordinator shall be through the Engineer.

An Inadvertent Discovery Plan (IDP) has been developed for this project. The IDP is available from the Engineer.

Meet with the Engineer at least 10 Calendar Days prior to beginning ground disturbing activities to discuss sensitive cultural sites on the Project. Required attendees include:

- The Contractor's supervisory personnel.
- Subcontractors, including contract archaeological monitors, and supervisory personnel who will be involved in ground disturbing activities.
- Agency archaeology representative or region environmental coordinator.
- When applicable, tribal representative(s) or monitor(s).



Prior to beginning On-Site Work, install work zone fencing from section 00221.13 of the QPL, or lath and flagging, around no work zones, as shown or as directed.

Archaeological Monitors are required to be on-site during all ground-disturbing activities in the "archaeological monitoring area" indicated on the Plans, unless otherwise notified. Notify the Engineer 10 Calendar Days before beginning ground-disturbing activities in this location.

**00290.80 Measurement** – Replace this subsection, except for the subsection number and title, with the following:

The quantities of Work performed under this Section will be measured according to the following:

**Lump Sum Basis** – Under this method, no measurement of quantities will be made.

**Area Basis** – Construction mats will be measured by the square foot. The area measured will be the maximum total area of construction mats in place at any one time.

**00290.90 Payment** - Add the following paragraphs to the end of this subsection:

The work containment plan will be paid for at the Contract lump sum amount for the item "Work Containment Plan".

Payment will be payment in full for furnishing all Materials, Equipment, labor, and Incidentals necessary to complete the Work as specified. Payment includes providing and updating the Work Containment Plan.

The accepted quantities of turbidity monitoring will be paid for at the Contract lump sum amount for the item "Turbidity Monitoring".

Payment for turbidity monitoring will be payment in full for furnishing and placing all Materials and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for work zone fencing.

The accepted quantities of construction mats will be paid for at the Contract unit price, per square foot, for the item "Construction Mats".

Payment for construction mats will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to construct, install, maintain, and remove the construction mats.

## **SECTION 00294 - CONTAMINATED MEDIA**

Section 00294, which is not a Standard Specification, is included in this Project by Special Provision.

### **Description**

**00294.00 Scope** - In addition to the requirements of Section 00290 and the Specifications, this Work consists of the following:

- Excavate, segregate, stockpile, transport, and dispose of Contaminated Soils and contaminated grubbing materials, as defined by 00294.01, from the following locations:

**Contaminated Soil Location Table 00294-1**

<b>From Location/Station to Location/Station</b>	<b>Depth below grade (feet)</b>	<b>Approximate Quantity (cy)</b>	<b>Known Contaminants</b>
"DW" 7+50 to "DW" 10+85 Lt/Rt (Taxlot 1700)	0-2'	2,516	Suspected Pesticides, Herbicides, Heavy Metals
"ER" 72+40 to "ER" 81+55 Lt/Rt (Taxlot 0901)	0-2'	3,929	4,4 DDE, 4,4 DDT
"ER" 64+60 to "ER" 72+40 Lt/Rt (Taxlot 0800)	0-1'	1,725	Dieldrin
"ER" 81+55 to "ER" 84+40 Lt/Rt (Taxlot 1200)	0-1'	2,627	Lead
<b>Approximate Total Quantity</b>			10,793 cy
<b>Quantity to be reused on Project</b>			0 cy
<b>Quantity to be disposed at landfill</b>			12,952 tons

- In areas where excavation is not required, leave contaminated Material and clearing and grubbing Material in place.
- Prepare a Health and Safety Plan (HASP) for work within the contaminated areas of the Project.

The May 2021 and November 2023 ODOT reports, titled "Clean Fill Determination, I-5 Aurora-Donald Interchange (Exit 278), Key #19062, Milepost 295.45 to 278.00, Pacific Highway, Marion County" and the December 2023 ODOT memo, titled "Clean Fill Determination Addendum- Tax Lot 1200, KN22505 – I-5: Aurora Donald Interchange (Exit 278) Phase 2" documenting the contaminated media identified within the Project, are available from the Engineer.

#### **00294.01 Definitions:**

**Contaminated Soil** - Soil that does not meet the DEQ definition of "Clean Fill", as defined by OAR 340-093-0030(18). This Contaminated Soil is a regulated waste, subject to OAR 340-093-0005 through OAR 340-093-0290. If the grubbing Material has been determined to be contaminated, it will be considered and treated as Contaminated Soil for the purposes of this Section.

**Shoulder Soil** - Soil outside of the existing Highway Pavement and within Highway Right-of-Way generated during Highway maintenance or construction activities. This definition applies to excess Soil generated to a maximum depth of 1.5 feet below ground surface. This

definition does not apply to Soil that is covered by existing impervious surfaces, including but not limited to curbs, sidewalks and parking lots constructed of asphalt or concrete.

**ODOT Beneficial Use Determination (ODOT BUD)** - The statewide ODOT Beneficial Use Determination (ODOT BUD), approved by DEQ (No. BUD-20181204), outlines a series of pre-approved non-residential reuse options for excess Soil Materials that do not meet DEQ's Clean Fill Standards in some circumstances. These options may vary based on project scope and location, and documentation may vary, as directed by the Engineer.

**00294.02 Testing of Contaminated Soil and Groundwater** - When additional testing of Contaminated Soil or groundwater is required to characterize the Material for reuse, recycle, or disposal, conduct the tests according to 00290.20(c).

Use analytical methods meeting DEQ's Clean Fill Guidance Screening Levels for each analyte. Contaminated Soil and groundwater sampling must be conducted by an Oregon Registered Geologist or Professional Engineer who has experience characterizing contaminated media.

Collect at least 3 composite Soil samples from taxlot 1700 ("DW" 7+50 to "DW" 10+85) as listed in Table 00294-1 and submit for the following required testing:

- Total metals (Oregon Agricultural metals (AG17) by EPA 6000 and 7000 series.
- One TCLP lead by using EPA Method 1311.
- Organochlorine pesticides using EPA Method 8081.
- Chlorinated herbicides using EPA Method 8151.

**00294.03 Submittals** - Submit the following documents:

- A site specific HASP at least 10 Calendar Days before the pre-construction conference.

Submit all modifications to the HASP that are requested by the Engineer or the qualified health and safety professional within 7 Calendar Days of the request.

- Current employee training certificates and medical surveillance information before beginning Work within the contaminated areas.

Submit the following documents within 48 hours of removal of contaminated media:

- Permits, permit applications, and documentation of compliance.
- All reuse, recycled, and disposal receipts.
- Final quantities of Soil reused, recycled, and disposed and their final location.
- All analytical test results.

**00294.05 Health and Safety Plan** - Prepare a site specific HASP that meets or exceeds the requirements of 29 CFR 1910.120 and include a personnel and Equipment decontamination plan that details how decontamination media will be contained and disposed.

Maintain a copy of the HASP on site at all times and readily available to employees and Inspectors during construction activities. If additional information becomes available regarding the site specific conditions, revise the HASP and submit the revised version to the Engineer. Review or acknowledgment of the HASP by the Engineer is not an indication or representation that the HASP is fully compliant with State or federal requirements. Compliance is the responsibility of the Contractor. Review by the Engineer will not impose liability upon the Agency or relieve the Contractor of any responsibilities under the Contract.

Do not begin Work in contaminated areas until the Engineer provides written acknowledgement of the HASP.

All personnel entering contaminated areas shall follow the requirements of the HASP.

### **Labor**

**00294.30 Personnel Qualifications** - Provide employees meeting the following requirements:

- Hazardous Waste Operations and Emergency Response (HAZWOPER) trained workers (29 CFR 1910.120) that:
  - Have completed a 40 hour HAZWOPER training course.
  - Have completed an 8 hour HAZWOPER refresher training course within the last 12 months.
  - Participates in the HAZWOPER Medical Surveillance Program.
- A Supervisor that:
  - Has at least 2 years of experience cleaning up and managing Contaminated Soil or groundwater in Oregon.
  - Meets the HAZWOPER training requirements plus completed an 8 hour HAZWOPER supervisor training course.
- An Oregon Registered Geologist or Professional Engineer who has experience handling contaminated media.

### **Construction**

**00294.40 Contaminated Soil Excavation** - Excavate and handle Contaminated Soil from Project excavations according to the following:

- Notify the Engineer 3 Calendar Days before beginning excavation activities within contaminated areas.
- Allow the Agency to collect Soil samples during excavation activities.
- Field screen Soil using a portable photo ionization detector, portable flame ionization detector, field test kits, or other instrumentation capable of detecting the contaminants identified for this Soil.
- Segregate non-Contaminated Soil from Contaminated Soil during excavation activities, based on the field screening and the provided Contaminated Soil location information.

- Load Contaminated Soil directly into trucks and transport directly to the recycling or disposal facility, or on-site reuse areas or, when approved by the Engineer, temporarily store Contaminated Soil on-site.
- Store Contaminated Soil from from taxlot 1700 ("DW" 7+50 to "DW" 10+85) as listed in Table 00294-1 in covered water tight containers or place Contaminated Soil on minimum 6 mil thick polyethylene sheeting that has an impermeable berm around the edge. Cover the Contaminated Soil with minimum 6 mil thick polyethylene sheeting. Do not allow precipitation run-off to enter the excavated Contaminated Soil. Label all stored Material with the type of Material, the contaminants, and the dates of accumulation.
- Remove contaminated media from the exterior of all vehicles before they leave the Project Site
- Cover trucks transporting contaminated Materials to prevent spillage during transit to the disposal facility according to OAR 340-093-0220.
- Where over excavation is required, backfill the excavation according to 00330.42.

**00294.41 Contaminated Soil Management** - Reuse, recycle, or dispose of Contaminated Soil according to any of the following:

**(a) Landfill Disposal:**

- Obtain the Engineer's approval of the disposal facility before disposing of the Contaminated Soil.
- Transport the Contaminated Soil to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal. Dispose of temporarily stored Contaminated Soils within 30 Days of beginning excavation work or before Second Notification, whichever occurs first.
- Complete and sign all manifests and bill-of-lading forms for handling, loading, transporting, and disposing of the Contaminated Soil.
- Pay all filing and permit fees.

**(b) Recycling:**

- Obtain the Engineer's approval of the recycling facility before disposing of the Contaminated Soil.
- Transport Contaminated Soil to a DEQ permitted recycling facility or asphalt batch plant. Recycle temporarily stored Contaminated Soils within 30 Days of beginning excavation or before Second Notification, whichever occurs first.
- Complete and sign all manifests and bill-of-Lading forms for handling, loading, transporting, and recycling the Contaminated Soil.

### **Measurement**

**00294.80 Measurement** - Work performed under this Section will be measured according to the following:

No measurement of quantities will be made for the following:

- HASP.

Soil sample and analytical testing will be measured on the unit basis for each sample submitted and tested according to 00294.02 when test results are submitted according to 00294.03.

The quantities of Contaminated Soil disposed will be measured on the weight basis, based on weigh tickets from the recycling or disposal facility.

Clearing and grubbing will be measured according to 00320.80.

### Payment

**00294.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Health and Safety Plan .....	Lump Sum
(d) Soil Sample Collection and Analytical Testing .....	Each
(e) Contaminated Soil Disposal.....	Ton

Item (d) includes mobilization, Soil sampling, testing, analyses, and preparation of reports for tests required in 00294.02. Additional testing beyond that listed in 00294.02 will only be paid if authorized by the Engineer.

Item (e) includes all costs involved with the disposal of Contaminated Soil at a recycling or disposal facility.

No separate or additional payment will be made for the excavation or reuse of Contaminated Soil or contaminated Shoulder Soil. Payment will be included in payment made for the appropriate items under which the excavation or reuse of Contaminated Soils or contaminated Shoulder Soil is required.

Clearing and grubbing will be paid for according to 00320.90.

Payment will be payment in full for removing and disposing of all Materials, and for furnishing all Equipment, labor, Plans, test results, and Incidentals necessary to complete the Work as specified.

### SECTION 00298 - WELL PRESERVATION AND ABANDONMENT

Section 00298, which is not a Standard Specification, is included in this Project by Special Provision.

### Description

**00298.00 Scope** - In addition to the requirements of Section 00290, protect, preserve, and abandon monitoring wells and water wells according to the following:

Abandon existing monitoring wells and water wells indicated in Table 00298-2 below:

Table 00298-2

Location/Station	Type	Depth below grade (feet)	Diameter (inches)	Other Well Design Information	Known Contaminants
"WB" 96+97, 18' LT	water well	130	12,16	OWRD well log MARI 65249	none

**00298.03 Submittals** - Provide the Engineer with all Permit applications, permit fees, start cards, well reports, bonds, and letters of credit required by the Oregon Water Resources Department within 48 hours of completing the work.

#### Labor

**00298.30 Personnel Requirements** - Provide contractors and workers meeting the following qualifications:

- A contractor with a current Oregon Water Well Constructor's license

#### Construction

**00298.42 Abandon Water Wells** - Abandon water wells before beginning ground disturbing construction work in the well locations according to OAR 690-220. Notify the Engineer at least 72 hours before beginning abandonment work.

#### Measurement

**00298.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

#### Payment

**00298.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the following item:

#### Pay Item

#### Unit of Measurement

(d) Abandon Water Well..... Lump Sum

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

## SECTION 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications modified as follows:

**00305.00 Scope** – Add the following to the end of this subsection:

In addition to the requirements of the ODOT *Construction Surveying Manual for Contractors*, establish Engineering Stationing at 50 foot intervals for the length of the project along the Shoulder of the Highway. Maintain the stationing so it is visible throughout construction of the project.

Settlement monitoring is required as shown and as specified in Section 00330.

- Record settlement points, settlement plates, rod elevations and adjacent fill elevations a minimum of two times per week, to a precision of 0.01 foot during fill placement. Take measurements at roughly equal time periods, e.g., 3 to 4 Days between measurements.
- Following each set of measurements, submit settlement monitoring data to the Engineer for review.

## SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

## SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications modified as follows:

**00320.40(c) Tree and Vegetation Trimming** - Replace the bullet that begins “Trim branches obstructing sight...” with the following bullet:

- Trim and remove branches, vegetation, or other materials obstructing sight distance at intersections or impairing visibility of signs, signals, illumination, and other TCD.

## SECTION 00330 - EARTHWORK

Comply with Section 00330 of the Standard Specifications modified as follows:

**00330.03 Basis of Performance** - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section except for stone embankment and extra for selected granular backfill on the excavation basis.

**00330.41(a)(4) Excess Materials** - Replace this subsection, except for the subsection number and title, with the following:



If the quantities of excavated materials are greater than required to construct embankments and to do all filling and backfilling, the Contractor may use the remaining materials to uniformly widen embankments or to flatten slopes in a manner satisfactory to the Engineer.

**00330.41(a)(5) Waste Materials** - Replace this subsection, except for the subsection number and title, with the following:

Unless otherwise specifically allowed and subject to the requirements of Section 00280, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

**00330.41(a)(9) Excavation Below Grade** - Delete subsection 00330.41(a)(9)(c).

**00330.42(c)(3) Embankment Slope Protection** - Add the following paragraph to the end of this subsection:

Construct the outer 12 inches of embankments with suitable materials to establish slope stabilization through permanent seeding. If suitable material is not available, provide suitable materials from a Contractor-provided source which conforms to the requirements of 00330.11 or 00330.13 and provides favorable conditions for germination of seed and growth of grass.

Add the following subsection:

**00330.50 Settlement Monitoring**

Install surface settlement points at the front of BR 24041 Bent 1 and Bent 3 mechanically stabilized earth abutment walls. Establish survey points at the base of the walls at the start of the wall construction and along the top face of wall immediately following wall construction. Install at least two survey points at the base of the walls and at least two survey points installed at the top of the walls during each stage of wall and Bridge construction. Do not exceed 25 foot spacing between survey points.

Install surface settlement points at the front of BR 24041 Bent 1 and Bent 3 mechanically stabilized earth abutment walls. Establish survey points at the base of the walls at the start of wall construction and along the top face of the wall immediately following wall construction. Install at least two survey points at the base of the walls and at least two survey points at the top of the walls during each stage of wall and bridge construction. The spacing between the survey points shall not exceed 25 feet.

At a minimum, install one settlement plate, as shown, along centerline of the embankment at each of the locations listed below:

Sta. "DW" 5+50  
Sta. "DW" 6+00  
Sta. "DW" 6+50

Reinstall points or plates that have been disturbed or destroyed to the same elevation as the latest reading.

Read and record the settlement points and plates according to Section 00305 and the following schedule. The monitoring schedule may be revised by the Engineer depending on the construction schedule, settlement rate or other factors.

- Take a baseline reading of top of settlement points or plate rod and adjacent site grades prior to fill placement.
- Take a reading of top of settlement rod and adjacent grade immediately prior to and following placement of additional settlement rods.
- Take a reading of the settlement point and plate rods immediately after the wall and embankment is constructed.

Do not place Aggregate Base and Asphalt Pavement between “DW” 5+25 and “DW” 6+75 until after the settlement has been found acceptable by the Engineer.

Do not begin pile driving for BR24041 until after mechanically stabilized earth abutment wall settlement has been found acceptable by the Engineer.

**00330.91(d) General Excavation** - Delete the bullet that begins "Includes Unsuitable Material...".

**00330.92 Kinds of Incidental Earthwork** - Add the following bullets to the end of the bullet list:

- Earthwork required for driveways and road approaches. Earthwork for driveways and road approaches will be that which is outside the Neat Line limits shown on the Typical Sections.
- Settlement plates, rods, and points.
- Earthwork required to replace Materials due settlement of ground or settlement of embankments.

**00330.93 Excavation Basis Payment** – Add the following to the end of the subsection:

Surveying of settlement plates or points will be paid for according to 00305.90.

## **SECTION 00332 - SUBGRADE / EMBANKMENT FOUNDATION STABILIZATION**

Section 00332, which is not a Standard Specification, is included for this Project by Special Provision.

### **Description**

**00332.00 Scope** - This Work consists of excavating and disposing of unstable Materials in excavation areas and to construct embankment foundations; placing geotextiles, stone embankment, and Aggregate backfill to the lines and grades as shown or directed.

### **Materials**

**00332.10 Materials** - Furnish Materials meeting the following requirements:

Aggregate Base .....	02630
Aggregate Subbase .....	00641.10(b)
Stone Embankment .....	00330.16
Subgrade Geotextile, Certification Level B.....	02320
Water .....	00340

**00332.16 Acceptance of Backfill** - The backfill Material will be accepted based on visual inspection. The Engineer may perform tests if deemed necessary.

### Equipment

**00332.20 General** - Provide all Equipment necessary to perform the Work according to Sections 00330, 00340, 00350, and 00641.

### Construction

**00332.40 Excavation** - Excavate unstable Material to the lines and grades as shown or directed. Dispose of the excavated Material according to 00330.41(a)(5).

**00332.41 Geotextile** - Place geotextile as shown.

**00332.42 Backfill** - Place the backfill Material to lines and grades as shown or directed, to provide a homogeneous mixture. Compact the backfill until there is no reaction or yielding under the compactor.

### Measurement

**00332.80 Measurement** - The quantities of Subgrade/embankment foundation stabilization will be measured on the area basis of surface areas stabilized to the full depth as shown. The surface area will be determined by horizontal measurements. In areas where directed to stabilize to a depth other than shown, the areas will be adjusted by converting to an equivalent number of square yards on a proportionate volume basis.

### Payment

**00332.90 Payment** - The accepted quantities of Subgrade/embankment foundation stabilization will be paid for at the Contract unit price, per square yard, for the item "\_\_\_\_\_ Inch Subgrade/Embankment Foundation Stabilization".

The depth of stabilization will be inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for excavation, geotextile, stone embankment or Aggregate backfill Material, or water.

## SECTION 00344 - TREATED SUBGRADE

Section 00344, which is not a Standard Specification, is included in this Project by Special Provision.

### Description

**00344.00 Scope** - This Work consists of treating the upper layer of Subgrade with water and either lime, chloride, or portland cement to form a stabilized Course of Material at the locations and to the lines, grades, thicknesses, and Cross Section shown or directed.

### 00344.01 Definitions:

**Treated Subgrade** - Subgrade that is improved by the addition of Soil stabilizing Materials.

### Materials

**00344.10 Soil Stabilizing Materials** - Furnish Soil stabilizing Materials meeting the following requirements:

Material	Type	Requirements
Hydrated Lime	AASHTO M 216, Type 1	Grade A
Granular Quicklime (CaO)	AASHTO T 27 and AASHTO T 219 (grading and hydroxide content)	100% passing 3/8" sieve 15% max. passing No. 100 sieve min. 85% Calcium Hydroxide
Calcium Chloride	AASHTO M 144 (sampling) AASHTO T 143 (testing)	—
Sodium Chloride	AASHTO M 143	—
Portland Cement	AASHTO M 85	Section 02010

Store Materials according to 00165.75.

**00344.11 Water** - Furnish water meeting the requirements of Section 00340.

### Construction

**00344.40 Preparation** - Before starting Subgrade Work, including backfill, complete all underground Work contemplated in the area of the Subgrade. This requirement includes Work by the Contractor, by the Agency, or by others. Drain all depressions or ruts which contain water.

**00344.41 Addition of Stabilizing Material** - Apply stabilizing Materials at a uniform rate as specified using Equipment and methods that will ensure uniformity of distribution. The use of blade graders to distribute lime will not be allowed. Allow only Equipment that is used for watering, applying and mixing the stabilizing Material to pass over the Material until after it is

mixed into the Soil. Add water, if necessary, during mixing operations to provide optimum moisture content.

Add 5 percent Portland cement to the Subgrade, calculated as a percentage of the in-place dry Soil unit weight, unless otherwise directed.

**00344.42 Mixing** - Perform mixing operations until the Treated Subgrade Material is uniform and free of streaks or pockets and all Material, other than stones, will pass a 1-inch sieve. Do not allow the content of stabilizing Material to vary by more than plus or minus 1 percent from the amount specified.

**00344.43 Finishing** - Immediately after mixing the Treated Subgrade, grade the mixture to specified line, grade and Cross Section and compact the mixture to the specified density. Compact and finish within 12 hours after compaction begins. If the Contractor has not compacted and finished the Material within 12 hours, loosen the mixture and add stabilizing Material and water as directed. Remix the freshened Material, regrade and recompact, at no additional cost to the Agency. During compaction, maintain the mixture at proper grade and Cross Section and at optimum moisture content.

**00344.44 Curing** - Limit traffic over Treated Subgrade to Equipment that does not cause any damage to the Subgrade and that does not visibly deflect, ravel or wear the surface. Keep the finished surface moist and protect from rutting, spalling, displacement and disfiguration for a period of 7 Days, or until a subsequent Course of Material is placed, which will prevent drying of the mixture by evaporation or absorption.

**00344.45 Compaction:**

(a) Achieve the required density of Treated Subgrade Materials as specified in 00330.43(b).

(b) Compact the Subgrade until it is firm and unyielding. Unyielding means no more than 1/4 inch deflection of the Subgrade when proof-rolled with a fully loaded 10 to 12-cubic yard dump truck. Test and proof-roll within 24 hours prior to placing base Material on the Subgrade.

(c) Over-excavate areas of visible deflection to a depth of 12 inches or more below Subgrade, as directed. Place fabric, backfill the over-excavated Subbase area up to the Subgrade elevation with a single Lift of 1 1/2" - 0 crushed Rock and compact. Apply the compactive effort until the density of the top 6 inches of the Subbase Rock is as specified in 00641.44(a). In addition, proof-roll these areas to verify they are firm and unyielding as specified above.

(d) Notify the Engineer if the specified compaction is not attained. The Contractor may be required to use a modified compaction procedure or apply additional compactive effort. If approved Materials meeting the Specifications cannot be compacted to the required density regardless of compactive effort or method, the Engineer may reduce the required density or direct that alternative Material be used. Do not proceed with finishing or compaction of the Subgrade until the Contractor is able to compact the Material to the satisfaction of the Engineer.

**00344.46 Tolerances:**

(a) Rework areas found to be deficient in thickness by more than 3/4 inch, and add fresh stabilizing Material in an amount equal to one-half the original amount.

(b) Finish the surface of the Treated Subgrade so that it does not vary by more than 0.06 foot from the established line, grade, and Cross Section and be free of ruts, depressions, and irregularities. When tested with a 12 foot straightedge, the maximum variation of the finished surface from the testing edge is 3/4 inch.

**Measurement**

**00344.80 Measurement** - The quantities of Treated Subgrade will be measured on the area basis, measured along the lines and grades of the area actually treated.

The quantities of Soil stabilizing Materials will be measured on the dry weight basis. Packaged Materials will be accepted at the net weight shown by the manufacturer, subject to periodic verification and approval. Provide a certificate with each shipment together with a certified copy of the weight of each delivery. Measurement of stabilizing Material will not include any which is lost, displaced, used in reworking, used in restoration Work or used contrary to direction.

**Payment**

**00344.90 Payment** - The accepted quantities of Treated Subgrade and Soil stabilizing Materials will be paid for at the Contract unit price, per unit of measurement, for the following items:

<b>Pay Item</b>	<b>Unit of Measurement</b>
(a) Treated Subgrade, ____ Inches Thick .....	Square Yard

In item (a), the depth of the Treated Subgrade will be inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for:

- draining water from the Subgrade
- Soil stabilization Work
- smoothing the Subgrade in preparation for staking
- blading, shaping and compacting the Subgrade, including Roadbed Materials, to final line, grade and Cross Section

**SECTION 00350 - GEOSYNTHETIC INSTALLATION**

Comply with Section 00350 of the Standard Specifications.

**SECTION 00390 - RIPRAP PROTECTION**

Comply with Section 00390 of the Standard Specifications.

Training

### **SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL**

Comply with Section 00405 of the Standard Specifications.

### **SECTION 00415 - VIDEO PIPE INSPECTION**

Comply with Section 00415 of the Standard Specifications.

### **SECTION 00430 - SUBSURFACE DRAINS**

Comply with Section 00430 of the Standard Specifications.

### **SECTION 00442 - CONTROLLED LOW STRENGTH MATERIALS**

Comply with Section 00442 of the Standard Specifications modified as follows:

**00442.11 Fine Aggregates** – Add the following to the end of this subsection:

Provide Fine Aggregates that are well-graded from coarse to fine with a fineness modulus between 1.40 and 3.40.

**00442.13 Compressive Strength** – Replace this subsection, except the subsection number and title with the following:

**00442.13 Compressive Strength** – Provide CLSM with a minimum 28-Day compressive strength of 500 psi and a maximum strength of 1000 psi.

**00442.14 Acceptance** – Replace this subsection, except the subsection number and title with the following:

**00442.14 Acceptance** – Acceptance of CLSM will be based 02001.60 and the following:

(a) CLSM Mix Design – Submit a mix design according to 02001.15.

(b) CLSM Compressive Strength Tests

1. Cast and cure 4 inch x 8 inch cylinders for CLSM testing according to ASTM D4832. Store and cure samples according to ASTM standards.
2. Furnish 3 CLSM test cylinders for each Day's placement. The Engineer may revise this frequency of CLSM cylinders throughout course of construction contingent upon the company performing CFA pile installation Work providing substantiated evidence of adequate strength and uniform consistency of CLSM. Evidence may consist of either previous job performance records and submittals by the Contractor or statistical demonstration of CLSM strength based upon laboratory test results from piles installed during construction,
3. Test 3 cylinders for compressive strength per ASTM D4832 at 28 Days.



Add the following subsection:

**00442.42 Mixing** – Mix the cement CLSM with approved Equipment and accurately measure all Materials by volume or weight. Rotate mixing drum a minimum of 25 revolutions following placement of grouting agent or additives in the field in order to provide proper mixing of CLSM.

- (a) Mix to homogenous CLSM having a minimum slump of 7 in. when tested with a slump cone in according to ASTM C 143. Provide slump cone and perform slump cone test at least once for each truck load of CLSM or foundation element, whichever is less, unless otherwise directed.

If agitated continuously, the CLSM may be held in the mixer or agitator for a period not exceeding 2.5 hours at grout temperatures below 70° F and for a period not exceeding 2 hours at temperatures not exceeding 100° F. Do not place CLSM when its temperature falls below 40° F or exceeds 100° F, unless approved procedures for cold or hot weather grouting are followed. Protect CLSM from physical damage or reduced strength which could be caused by frost, freezing action, or low temperature or from damage during high temperatures according to ACI 305/306. When ambient outdoor temperatures exceed 95° F, it is permissible to allow a CLSM temperature of up to 105° F provided the mixing time is reduced to 1.5 hours and a set retarder is added to the mix.

- (b) Adding Water to CLSM Onsite:

1. It is sometimes necessary to add water to the CLSM onsite to provide a consistent CLSM mixture prior to pumping. The amount of water that may be added to provide both consistent and adequate flow characteristics must not compromise the specified CLSM strength or, if specified, the water/cement ratio.
2. If the total amount of water required to provide adequate flow exceeds the amount listed in the mix design, record the amount of water added and take samples for compression testing.

Add the following subsection:

**00442.45 Testing** - Sample and test the CLSM to verify the unconfined compressive strength of the CLSM. Follow requirements for compression tests in 00442.14(b).

## **SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE**

Comply with Section 00445 of the Standard Specifications.

## **SECTION 00460 - PAVED CULVERT END SLOPES**

Comply with Section 00460 of the Standard Specifications.

**SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS**

Comply with Section 00470 of the Standard Specifications.

**SECTION 00480 - DRAINAGE CURBS**

Comply with Section 00480 of the Standard Specifications.

**SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES**

Comply with Section 00490 of the Standard Specifications.

Training

**SECTION 00620 - COLD PLANE PAVEMENT REMOVAL**

Comply with Section 00620 of the Standard Specifications modified as follows:

**00620.43 Maintenance Under Traffic** - Replace this subsection, except for the subsection number and title, with the following:

Traffic is not allowed on the cold planed surface. Before opening the area to traffic, pave the surface according to 00745.51.

**SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS**

Comply with Section 00641 of the Standard Specifications modified as follows:

**00641.10(a) Base and Shoulder Aggregate** - In the paragraph that begins "Aggregate for bases...", add the following sentence after the first sentence:

Base Aggregate shall be either 1"- 0 or 3/4"- 0 size.

## SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications.

## SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE

Comply with Section 00745 of the Standard Specifications modified as follows:

### 00745.02 Definitions -

Replace the sentence that begins "**Sublot Size** - A sublot is..." with the following paragraphs:

**Sublot Size** - Except for compaction, a sublot is 1000 Tons. The final sublot for a JMF may be increased up to a maximum of 1,500 Tons, if the production total does not reach the random number for the sublot.

A compaction sublot is 200 Tons. The final compaction sublot for a JMF may be increased up to a maximum of 400 Tons, if the production total does not reach the random number for the sublot.

Add the following definition:

**Localized Roughness** - An area that exceeds 160.0 inches per mile in a continuous International Roughness Index (IRI) evaluation over a 25.0-foot base length.

Add the following definition:

**Lot Size** - A lot consists of up to 10,000 Tons of ACP, with a maximum of 20,000 Tons for the final lot per JMF. The following circumstances will require a different lot:

- A new JMF is used. A JMF adjusted according to 00745.16 is not considered a new JMF
- The method for measuring compaction is changed
- A new compaction specification limit is required according to 00745.49(b)(3)
- A change from one test procedure for measuring asphalt content to another test procedure for measuring asphalt content occurs.

**00745.14 Tolerances and Limits** - Replace the line "**Asphalt Cement - AASHTO...**" with the following line:

Asphalt Cement - AASHTO T 308 (Ignition) and ODOT TM 323	JMF $\pm$ 0.35%
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**00745.46(b) Depositing** - Replace the paragraph that begins "Deposit ACP from..." with the following paragraph:

Deposit ACP from the hauling vehicles so segregation is prevented. Do not deliver the ACP directly into the paving machine for wearing Courses where the continuous length of the

Panel is greater than 500 feet. Deliver the ACP to the paving machine by either a windrow pick-up machine or an end-dump transfer machine.

**00745.47(a)(2) Wearing Course** - Replace this subsection, except for the subsection number and title, with the following:

Construct longitudinal joints six inches from permanent lane markings, or as shown or directed.

**00745.48(c) Bridge Deck Overlays** - Replace the paragraph that begins "Saw cut the wearing Course of Pavement ..." with the following paragraph:

Saw cut the wearing or base Course of Pavement directly over the joints in bridge decks, bridge end joints and end Panel end joints as soon as practical but within 48 hours of paving each stage of the wearing or base Course, unless otherwise directed. Saw the cut 3/8 inch wide,  $\pm$  1/8 inch, by 1/2 inch less than the thickness of the Panel of Pavement depth or 1 1/2 inches deep, whichever is less.

**00745.49(b)(1) General** - Replace the paragraph that begins "Have the CDT notify the Engineer..." with the following paragraph:

Have the CDT notify the Engineer and CAT-II when a density test is less than 90.0 percent or exceeds 95.9 percent of MAMD. Initiate an investigation to determine if the results indicate that a problem with the mix is developing. Electronically submit the results and recommendations of the CAT-II's investigation to the Engineer within two shifts of the density test. An adjustment to the JMF will not be allowed unless MDV testing supports a required change.

**00745.49(b)(2) Random Testing** - Replace the paragraph that begins "Determine the density of each subplot by averaging..." with the following paragraphs:

Correspond lots and compaction sublots with those defined in 00745.02. Provide one density test location for each compaction subplot. Notify the Engineer when rolling operations are completed in a compaction subplot and it is ready for test location identification. The Engineer will use stratified random numbers to locate the QC tests according to ODOT TM 400 Annex. ODOT TM 400 Annex is available from the Engineer. The Engineer will mark where the QC tests are to be performed.

Allow 30 minutes for the Engineer to locate the final test locations after completion of finish rolling and any additional time required for testing, prior to opening the travel lane to traffic. Have the CDT locate and document the test locations not identified within this time frame.

**00745.49(b)(2)(b) Core Correlation of Nuclear Gauge Readings** - Replace this subsection, except for the subsection number and title, with the following:

For each Lift on the Project that contains more than 2,500 Tons of ACP, correlate each nuclear gauge that will be used on that Lift. Perform core correlations and determine core correlation factors according to AASHTO T 355 and ODOT TM 327. Provide bulk specific gravity values to the Engineer within 24 hours of coring. If an Aggregate source or the asphalt cement source changes, new core correlations are required.

Apply correlation factors to all nuclear gauge readings for the Lift on which the core correlation was performed.

Both the Engineer and the Contractor may request additional core correlation of nuclear gauge readings. Core correlations requested by the Contractor or that are required due to a change in Aggregate or asphalt cement source will be at no additional cost to the Agency.

**00745.49(b)(4) Test Results** - In the paragraph that begins "Provide density results..." replace the word "sublots" with the words "compaction sublots".

Add the following subsection:

**00745.51 Opening Sections to Traffic** - Schedule Work so that, during the same shift, the surfaces being paved are paved full width and length through the wearing Course before opening to traffic.

**00745.70 Pavement Smoothness** - Replace this subsection, except for the subsection number and title, with the following:

Construct the Pavement wearing surface of Traffic Lanes to a profile that does not deviate from longitudinal and transverse smoothness more than the specified limits of 00745.73.

Perform profiling and straightedge testing under the supervision of the Engineer with Equipment furnished and operated by the Contractor at no additional cost to the Agency, according to ODOT TM 772. Complete all required smoothness testing no later than 14 Calendar Days following final completion of all Traffic Lane paving on the Project, or by October 15 of each calendar year for multiple year projects, whichever is earlier. The Contractor accepts the risk that the smoothness may be affected by exposure to traffic between the date the Traffic Lanes are paved and the date the smoothness testing is completed. If the Contractor elects to perform smoothness measurements on a Day other than the Day the Pavement is placed, additional traffic control required for smoothness measurement, and not required for other Work, will be at no additional cost to the Agency.

Add the following subsection:

**00745.72 Smoothness Testing Equipment** - Furnish all Equipment and supplies for determining smoothness.

**(a) Straightedge** - Provide one 12 foot straightedge.

**(b) Profiler** - Provide a profiling device meeting the requirements of ODOT TM 772 and certified according to ODOT TM 769.

Provide competent and experienced operator(s) for the Equipment, certified with the profiler according to ODOT TM 769. The profiler operator shall meet with the Engineer at a mutually agreed upon time prior to beginning smoothness measurements to discuss all aspects of smoothness measurement on the Project.

Add the following subsection:

**00745.73 Smoothness Testing and Surface Tolerances** - Test according to the following:

**(a) General** - Test the Base Course with a 12 foot straightedge as directed. Test the wearing Course with the profiler meeting the requirements of 00745.72(b). Compute the IRI from the profile data according to the procedures described in ODOT TM 772. Price adjustment for smoothness will be made according to 00745.96.

Before performing any smoothness measurements on the Project, verify calibration of the profiler according to the manufacturer's recommendations and ODOT TM 772.

**(b) Surface Test:**

**(1) Transverse** - Test the Base Course with the 12-foot straightedge perpendicular to the centerline, as directed. The Pavement surface shall not vary by more than 1/4 inch.

**(2) Longitudinal** - Test all Base or wearing Course sections of Pavement that are not required to be profiled according to 00745.73(c) with the 12-foot straightedge parallel to the centerline and lane dividers, as directed. The Pavement surface shall not vary by more than 1/4 inch.

**(c) Wearing Course Surface Test:**

**(1) Transverse** - Test with the 12-foot straightedge perpendicular to the centerline, as directed. The Pavement surface shall not vary by more than 1/4 inch.

**(2) Longitudinal** - Perform testing as follows:

**a. Quality Control** - Run the profiling device over each Traffic Lane for the full length of the Project.

In the presence of the Engineer and according to ODOT TM 772, obtain profiles on the Pavement surface in the right and left wheel path of the Traffic Lane along a line parallel to permanent longitudinal Pavement markings, at 3-foot and 9-foot offsets from the left edge of the Traffic Lane. Take the profile on transition areas of entrance and exit ramps, as close to the right and left wheel path of the through Traffic Lane as practical. Submit data files to the Engineer at the completion of each shift in which profiling has taken place. For the Pavement sections tested, provide the raw data files and provide electronic copies of the profile data in PPF and manufacturer proprietary formats, as required by the Engineer.

Analyze profiles according to 00745.73(d), and give the results to the Engineer no later than 24 hours following completion of required smoothness. The results shall consist of a table showing areas of Localized Roughness in each wheel path, and the left wheel path IRI, right wheel path IRI, and mean IRI (average of left and right wheel path IRI) at 0.10 mile intervals.

**b. Quality Assurance** - At the discretion of the Engineer, the Agency may perform Quality Assurance of Profiles on projects according to ODOT TM 772.

**(3) Transverse Joints** - Test with the 12-foot straightedge parallel to the centerline, as directed. The Pavement surface shall not vary by more than 1/4 inch.

**(d) Determination of the International Roughness Index:**

**(1) General** - Determine the IRI in 0.10 mile segments and partial segments of the wearing Course. Begin segments 50 feet into the Project and run consecutively in the direction of travel. A segment ends as a partial segment and a new segment begins when the segment sequence is interrupted by stage construction or by profiled areas excluded from the smoothness requirements. Minimize the number of partial segments.

The following areas of Pavement are excluded from IRI smoothness requirements and are not profiled:

- Profiles extending beyond the Project ends.
- Bridge decks, Bridge end panels, and Pavement within 50 feet of Bridge end panels.
- First and last 50 feet of the ACP paving limits of the Project.
- The 50 feet before and after No Work Areas within the Project limits.
- Ramps and auxiliary lanes that are less than 2500 feet in length.
- First 800 feet of entry ramps and the last 800 feet of exit ramps.
- The 25 feet before and after Utility appurtenances in the Traffic Lane.
- Continuous portions of Traffic Lanes with less than 0.05 mile between excluded areas.
- Portions of the Project with posted speed limits less than 45 mph.

Locate ACP IRI profiling excluded areas prior to smoothness measurement. Areas excluded from longitudinal profile measurement shall meet the straightedge requirements of 00745.73(b)(2).

**(2) Method of Analysis** - Determine the IRI for each wheel path and areas of Localized Roughness for each wheel path according to ODOT TM 772. Submit the results to the Engineer for review.

**(e) Shoulders and Paved Medians** - Test the Base and wearing Course with the 12-foot straightedge parallel to and perpendicular to the centerline for Shoulders and paved Medians, as directed by the Engineer. The Pavement surface shall not vary by more than 1/4 inch.

**00745.75 Correction of Pavement Roughness** - Replace this subsection, except for the subsection number and title, with the following:

If testing described in 00745.73 shows that the Pavement does not conform to the prescribed limits, the following applies:

**(a) General** - The Contractor is responsible for locating areas that require corrective Work.



**(b) Base Course** - If the requirements of 00745.73(b) are not met, correct according to one of the following and retest:

**(1) Cold Plane Removal** - Profile grind with Equipment meeting the requirements of 00620.20 to a maximum depth of 0.4 inch.

**(2) Grinder** - Profile grind with abrasive grinder(s), equipped with a cutting head comprised of multiple diamond blades to a maximum depth of 0.4 inch.

**(c) Wearing Course** - After locating each area of Localized Roughness and the 0.10 mile segments that have an average IRI value greater than 95.0 inches per mile, meet with the Engineer at a mutually agreed upon time and drive the Project together. During the drive-through, evaluate each area of Localized Roughness between 160.0 and 189.9 inches per mile and partial segments with an average IRI value greater than 95.0 inches per mile to determine if corrective Work is required. All 0.10 mile segments with an IRI value more than 95.0 inches per mile and all areas of Localized Roughness equal to or greater than 190.0 inches per mile require corrective action. Disagreements will be resolved by the Engineer.

Correct all areas of Localized Roughness, segments and partial segments identified for corrective Work, and any transverse joint and excluded areas that exceed the requirements of 00745.73, by one of the methods listed below and to the specified limits:

**(1) Remove and Replace** - Remove and replace the wearing surface lift.

**(2) Grind** - Profile grind with abrasive grinder(s) equipped with a cutting head comprised of multiple diamond blades to a maximum depth of 0.3 inch and apply an emulsion fog seal according to Section 00705, or as directed. Half or full lane width corrective grinding is required for areas requiring correction in one or both wheel paths as shown by the Localized Roughness, respectively. Perform corrective grinding in such a manner that the shedding of water is not interrupted across the travel lanes due to the grinding.

Following corrective Work, the Engineer will re-evaluate all corrected areas for acceptance. The Engineer may require retesting per ODOT TM 772 and 00745.73. Further corrective Work may be required. Perform all corrective Work and retesting, including traffic control, at no additional cost to the Agency.

**(d) Time Limit** - Complete correction of all surface roughness prior to application of permanent Pavement markings within 14 Calendar Days following notification, unless otherwise directed.

**00745.80 Measurement** - Add the following paragraph to the beginning of this subsection:

The quantities of ACP shown in the Contract Schedule of Items were computed on the basis of Aggregates having a specific gravity of 2.75.

Add the following paragraph to the end of this subsection:

The quantities of core correlation of nuclear gauge readings will be measured on the unit basis for each core correlation test that is completed and accepted according to

ODOT TM 327. Core correlations that are requested by the Contractor or that are required due to a change in Aggregate or asphalt cement source will not be measured.

#### **00745.90 Payment -**

Add the following Pay Item to the Pay Item list:

(c) Core Correlation of Nuclear Gauge Readings.....Each

Add the following paragraph after the paragraph that begins "In item (b)...":

Item (c) includes developing core correlation factors for all gauges to be correlated for the lift on which the core correlation was performed, according to the procedure in ODOT TM 327.

**00745.95 Price Adjustments** - Add the following two paragraphs after the bullet that begins "The adjusted target..."

If the Pay Factor (PF) for compaction is 1.00 or greater as calculated in 00165.40, use that compaction PF for the lot. If the PF for compaction is below 1.00, re-calculate the PF for compaction using a lower specification limit (LSL) of 91.5. The compaction PF re-calculated using a LSL of 91.5 will not exceed 1.00. The minimum PF of 1.00 described in 00165.40(d)(8) does not apply when re-calculating the compaction PF.

A completed lot with a CPF of between 0.95 and 1.00 will be accepted, subject to a price adjustment according to 00150.25. The basis of adjustment will be the CPF as calculated in 00165.40.

Add the following subsection:

**00745.96 Smoothness Price Adjustment** - No separate or additional payment will be made for smoothness testing.

**(a) General** - A price adjustment based on the results of the IRI will be made for each 0.10 mile segment or partial segment of Traffic Lane ACP requiring IRI measurement according to 00745.73. The price adjustment will be based on the IRI values determined according to ODOT TM 772 for each 0.10 mile segment and partial segment. Partial segments less than 0.10 mile in length shall be evaluated with the IRI price adjustment value multiplied by the ratio of the partial segment length to 0.10 mile.

A smoothness price adjustment will be made for all segments, or partial segments based on the average IRI value and the following equations:

**Schedule 1**

<b>Averaged IRI (inches/mile)</b>	<b>Equation</b>
≤ 35.00	$Y = \$500.00$
35.01 - 60.00	$Y = (- \$20.00 \times X) + \$1,200.00$
60.01 - 65.00	$Y = \$0.00$
65.01 - 95.00	$Y = (- \$20.00 \times X) + \$1,300.00$
> 95.00	Corrective Action
Y = The price adjustment for the segment or partial segment X = The averaged IRI value for the segment or partial segment	

Any positive smoothness price adjustment due to the Contractor will be made on the next monthly progress estimate following the satisfactory completion of all corrective Work and the submission of all test data for all Traffic Lane paving on the Project.

00745.96(b) applies when corrective action is taken by the Contractor, or the Engineer elects to not correct identified Areas of Localized Roughness according to 00745.45(c).

**(b) Adjustments for Sections Requiring Corrective Work or with Areas of Localized Roughness** - Segments or partial segments in which corrective Work is performed according to 00745.75(c) are subject to the price adjustments described in 00745.96(a) except that no positive price adjustment (bonus) will be due to the Contractor. If a segment or partial segment containing corrective Work is retested according to ODOT TM 772 and 00745.73, the retested average IRI value will be used for payment, except that no positive price adjustment will be made for a segment or partial segment containing corrective Work.

No segment or partial segment containing an area of Localized Roughness with a value of 160.0 inches per mile or greater will be eligible for positive price adjustment, even if corrective action is not required by the Engineer.

Segments or partial segments containing corrective Work with an IRI value of more than 95.0 inches per mile are subject to additional corrective action and retesting according to 00745.75(c). The Engineer may waive corrective action in partial segments with the application of a smoothness price adjustment based on an IRI value of 95.0 inches per mile.

## **SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES**

Comply with Section 00749 of the Standard Specifications.

## **SECTION 00755 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT**

Comply with Section 00755 of the Standard Specifications modified as follows:

**00755.11 Classes of Concrete** - Replace this subsection, except for the subsection number and title, with the following:

Furnish Class 4000 – 1 1/2" paving concrete.

**SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES**

Comply with Section 00759 of the Standard Specifications.

Training

**SECTION 00810 - METAL GUARDRAIL**

Comply with Section 00810 of the Standard Specifications.

**SECTION 00811 - CABLE BARRIER**

Comply with Section 00811 of the Standard Specifications.

**SECTION 00820 - CONCRETE BARRIER**

Comply with Section 00820 of the Standard Specifications.

**SECTION 00830 - IMPACT ATTENUATORS**

Comply with Section 00830 of the Standard Specifications.

**SECTION 00840 - DELINEATORS AND MILEPOST MARKER POSTS**

Comply with Section 00840 of the Standard Specifications.

**SECTION 00842 - FACILITY IDENTIFICATION MARKERS**

Comply with Section 00842 of the Standard Specifications modified as follows:

**00842.40(a) Stormwater Control Field Facility Markers** - Add the following to the end of this subsection:

Install field markers as indicated in Table 00842-1.

Table 00842-1

Facility Location		DFI Number	Type S1 Marker		Type S2 Marker		Type S3 Marker
Station	HWY/MP		Red (Beginning of Facility)	Green (End of Facility)	Begin	End	
Sta. "RW" 777+97 Rt.	I-5/278.31	D01415	X		X		
Sta. "RW" 778+97 Rt.	I-5/278.29	D01415		X		X	
Sta. "D2" 813+86 Rt.	I-5/278.63	D01416	X		X		X
Sta. "D2" 813+95 Rt.	I-5/278.62	D01416		X		X	
Sta. "A2" 810+59 Lt.	I-5/278.73	D00947	X		X		
Sta. "A2" 809+14 Lt.	I-5/278.76	D00947		X		X	X
Sta. "RW" 778+06 Lt.	I-5/279.35	D00948	X		X		
Sta. "RW" 776+76 Lt.	I-5/279.38	D00948		X		X	
Sta. "D2" 814+41 Lt.	I-5/278.62	D00949	X		X		
Sta. "D2" 816+25 Lt.	I-5/278.58	D00949		X		X	
Sta. "RW" 844+50 Rt.	I-5/278.05	D01417	X		X		
Sta. "RW" 845+50 Rt.	I-5/278.03	D01417		X		X	
Sta. "A2" 809+15 Lt.	I-5/278.76	D00950	X		X		
Sta. "A2" 807+05 Lt.	I-5/278.80	D00950		X		X	

### SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications.

### SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications.

### SECTION 00856 - SURFACE MOUNTED TUBULAR MARKERS

Comply with Section 00856 of the Standard Specifications.

**SECTION 00857 - RUMBLE STRIPS**

Comply with Section 00857 of the Standard Specifications.

**SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE**

Comply with Section 00865 of the Standard Specifications.

**SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS**

Comply with Section 00867 of the Standard Specifications.

Training

## SECTION 00902 - CROSSWALK CLOSURE SUPPORTS

Section 00902, which is not a Standard Specification, is included in this Project by Special Provision.

### Description

**00902.00 Scope** - This Work consists of constructing crosswalk closure supports and associated signs as shown.

### Materials

**00902.10 Materials** - Furnish Materials meeting the following requirements:

Commercial Grade Concrete.....	00440
Steel .....	01070.10 and 01070.12
Signs.....	00940

### Construction

**00902.40 General** - Install crosswalk closure supports and associated signs as shown or directed.

### Measurement

**00902.80 Measurement** - The quantities of crosswalk closure supports will be measured on the unit basis. No separate measurement will be made for signs attached to crosswalk closure supports.

### Payment

**00902.90 Payment** - The accepted quantities of Work done under this Section will be paid for at the Contract unit price, per each, for the item "Crosswalk Closure Supports".

Payment will be payment in full for furnishing and placing all Materials, including signs, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

## SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications.

## SECTION 00910 - WOOD SIGN POSTS

Comply with Section 00910 of the Standard Specifications.



**SECTION 00920 - SIGN SUPPORT FOOTINGS**

Comply with Section 00920 of the Standard Specifications modified as follows:

**00920.80 Measurement** - Add the following to the end of this subsection:

The estimated quantities of concrete for minor sign supports are:

<b>Support Type</b>	<b>Quantity</b>
Multi-Post Breakaway Sign Supports	4.64 cu. Yd.
Triangular Base Breakaway Sign Supports	12.71 cu. yd.
Perforated Steel Square Tube Slip Base Sign Supports	1.35 cu. yd.
Perforated Steel Square Tube Anchor Sign Supports	2.52 cu. yd.

**SECTION 00921 - MAJOR SIGN SUPPORT DRILLED SHAFTS**

Comply with Section 00921 of the Standard Specifications modified as follows:

**00921.80 Measurement** - Add the following to the end of this subsection:

The estimated quantities of Materials for the sign support drilled shaft foundations are:

<b>Location</b>	<b>Material</b>	<b>Quantity</b>
Structure Type Cantilever Br No. 24035	Concrete Class 3600	3 cu. yds.
	Concrete Class 4000	13 cu. yds.
	Uncoated Reinforcement Grade 60	2900 pounds
	Drilled Shaft Excavation	16 cu. yds.
	CSL Tubes	105 feet
	CSL Test	1 each

**SECTION 00930 - METAL SIGN SUPPORTS**

Comply with Section 00930 of the Standard Specifications modified as follows:

**00930.80 Measurement** - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Item	Estimated Quantity (Pound)
<b>Major Sign Supports</b>	
Monotube Cantilever Sign Structure, Str. No. 24035	14,600
<b>Mounts</b>	
Bridge Structure Mounts	6,400
Exit Number Mounts	80
Secondary Sign Mounts	300
<b>Minor Sign Supports</b>	
Multi-Post Breakaway Sign Supports	1832
Triangular Base Breakaway Sign Supports	4555
Perforated Steel Square Tube Slip Base Sign Supports	1170
Perforated Steel Square Tube Anchor Sign Supports	1340

#### **SECTION 00940 - SIGNS**

Comply with Section 00940 of the Standard Specifications modified as follows:

Add the following subsection:

##### **00940.12 Sign Coatings -**

Furnish all signs on the Project with a shop-applied anti-graffiti coating on both the background and legend sheeting according to 02910.70, regardless of substrate Material.

**00940.40 General** - Add the following sentence to the end of the paragraph that begins "Fabricate all components...":

For signs that require anti-graffiti coating, fabricate all components of each individual sign with sheeting and anti-graffiti coating from the same supplier to ensure that all components are compatible and are warrantable by the manufacturer.

**00940.47 Sign Erecting** - Add the following paragraph to the end of this subsection:

Trim and remove branches, vegetation, or other Materials obstructing the visibility of signs by Public Traffic, as directed.

##### **00940.90 Payment -**

Add the following paragraphs to the end of this subsection:

No separate or additional payment will be made for anti-graffiti coating of signs.

Trimming and removal of branches, vegetation, or other Materials will be paid for according to 00320.90.

## **SECTION 00942 - PERMANENT BARRICADES**

Section 00942, which is not a Standard Specification, is included in this Project by Special Provision.

### **Description**

**00942.00 Scope** - This Work consists of furnishing, fabricating, and installing permanent Type III barricades as shown.

### **Materials**

**00942.10 Materials** - Furnish Materials for permanent Type III barricades meeting the following requirements:

Hardware .....	02910.40
Plywood .....	02910.11
Posts.....	02110.40
Reflective Sheeting (Type III or Type IV).....	02910.20

### **Construction**

**00942.40 General** - Construct permanent barricades as shown.

Place reflective sheeting on the horizontal member before assembling the required splice.

A sheeting manufacturer approved lubricant may be used on the nylon and metal washers to prevent sign sheeting deformation. Replace damaged horizontal members or horizontal members with sheet deformation at no additional cost to the Agency.

### **Measurement**

**00942.80 Measurement** - The quantities of permanent barricades will be measured on the unit basis.

### **Payment**

**00942.90 Payment** - The accepted quantities of permanent barricades will be paid for at the Contract unit price, per each, for the item "Permanent Type III Barricades".

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for excavation and backfill.

## SECTION 00950 - REMOVAL OF ELECTRICAL SYSTEMS

Comply with Section 00950 of the Standard Specifications modified as follows:

**00950.42 Salvaging and Stockpiling Materials** - Add the following to the end of this subsection:

The following Materials will remain the property of the Agency. Salvage the Materials and stockpile them at the locations indicated. Contact Region 2 Electrical Crew at Scott.CARRIGER@odot.oregon.gov or (503) 932-1481 to confirm delivery 48 hours prior to delivery.

Materials	Stockpile Locations
<p>I-5 SB Exit Ramp:</p> <ul style="list-style-type: none"> <li>• Traffic Sensor Radar Units</li> <li>• VMS Signs and Cabinets</li> <li>• Fiber Optic Interconnect DIN Rail Brackets</li> <li>• Transformer Cabinet</li> <li>• Fixed Cameras and Power Supplies</li> <li>• Radios</li> <li>• VMS Support Structures</li> <li>• Wood Poles</li> <li>• ITS Cabinets</li> </ul> <p>Ehlen Rd/Bent Road Intersection:</p> <ul style="list-style-type: none"> <li>• Vehicle Signal Heads</li> <li>• Pedestrian Signals and Pushbuttons</li> <li>• Traffic Signal Cabinets and peripherals including ATC controller, Communications Equipment</li> <li>• Traffic Signal Service Cabinets</li> <li>• Radar Detector Units</li> </ul>	<p>ODOT's Traffic Signal Services 2445 Liberty St NE Salem, OR 97301</p>

## SECTION 00960 - COMMON PROVISIONS FOR ELECTRICAL SYSTEMS

Comply with Section 00960 of the Standard Specifications modified as follows:

**00960.30 Licensed Electricians** – Replace this subsection, except for the subsection number and title, with the following:

According to the Oregon Administrative Rule 918-282-0120(1), no person or Entity shall allow any individual to perform electrical work for which the individual is not properly registered or licensed. Every person who installs electrical systems on the Project shall submit a copy of their electrical license or apprentice registration to the Engineer prior to performing any Work. They must be licensed as an S or a J under Oregon Administrative Rule 918-282-0140 or 918-282-0170.

Add the following subsection:

**00960.42(c) Metallic Conduit** – Paint the following with rust-preventative coating:

- Threads on all metal conduit.
- Areas where the coating has been damaged so underlying metal is exposed.
- Exposed, ungalvanized threads resulting from field cuts.

If corrosive Soil conditions exist, coat metallic conduit with a nonmetallic coating or wrap with corrosion protection tape at least 10 mils thick.

Add the following subsection:

**00960.42(d) Connecting Non-Metallic Conduit to Metallic Conduit** - Use a nonmetallic female threaded connector to connect nonmetallic conduit to metallic conduit.

Add the following subsection:

**00960.45(h) Metallic Junction Boxes and Lids** - Bond metal junction boxes and lids to form a continuous effectively grounded and bonded system with metallic conduit, grounding wire, metal standards and controller cabinets. Leave enough slack in the bond wire connected to the lid to allow complete removal of the lid. Junction boxes only containing circuits that operate at less than 25 V do not need to be bonded.

**00960.46 Service Cabinet and Electrical Energy** -

Add the following to the end of the paragraph that begins “Install service cabinet and associated equipment...”

Field testing for Intelligent Transportation Systems (ITS) does not require prior electrical hook-up.

Add the following to the end of the subsection:

Table 00960-1 contains Utility contact information to arrange for the Utility to make electrical hookups:

Table 00960-1

Location	Utility	Utility Contact Person's Name, Email and Phone Number	Utility Job Number
I-5 SB Ramp/Ehlen Rd (Illumination)	PGE	Jacob Haivala <a href="mailto:jacob.haivala@pgn.com">jacob.haivala@pgn.com</a> 503-530-9396	M3387198
Ehlen Rd/Bents Road (Signal)	PGE	Jacob Dietz <a href="mailto:jacob.dietz@pgn.com">jacob.dietz@pgn.com</a> 503- 503-510-4993	M3435322
I-5 NB Ramp/Ehlen Rd (Signal)	PGE	Jacob Dietz <a href="mailto:jacob.dietz@pgn.com">jacob.dietz@pgn.com</a> 503- 503-510-4993	M3435298
I-5 NB Ramp/Ehlen Rd (Camera)	PGE	Jacob Dietz <a href="mailto:jacob.dietz@pgn.com">jacob.dietz@pgn.com</a> 503- 503-510-4993	M3435328
I-5 SB Ramp/Ehlen Rd (Signal)	PGE	Jacob Dietz <a href="mailto:jacob.dietz@pgn.com">jacob.dietz@pgn.com</a> 503- 503-510-4993	M2963869

Furnish and install a meter base approved by the serving Utility (with cover by the Utility), where shown.

## SECTION 00962 - METAL ILLUMINATION AND TRAFFIC SIGNAL SUPPORTS

Comply with Section 00962 of the Standard Specifications modified as follows:

**00962.05(a) Traffic Signal Mast Arm Supports** - Add the following to the end of this subsection:

The following standard signal mast arm pole shop drawings are prequalified for use on the Project:

Valmont Industries Inc.

Drg. DB00719 page 1, Rev. P, 6/8/18  
 Drg. DB00719 page 2, Rev. P, 6/8/18  
 Drg. DB00719 page 3, Rev. P, 6/8/18  
 Drg. DB00719 page 4, Rev. P, 6/8/18  
 Drg. DB00719 page 5, Rev. P, 6/8/18  
 Drg. DB01290 page 1, Rev. D, 9/22/20  
 Drg. DB01290 page 2, Rev. D, 9/22/20  
 Drg. DB01290 page 3, Rev. D, 9/22/20  
 Drg. DB01290 page 4, Rev. D, 9/22/20

Ameron Pole Products Division

Drg. OR13TR10, Rev. E, 8/27/18  
 Drg. OR13TR11, Rev. F, 8/27/18  
 Drg. OR13TR12, Rev. G, 8/27/18  
 Drg. OR13TR13, Rev. C, 8/27/18

**00962.05(c) Illumination Supports** - Add the following to the end of this subsection:

The following standard luminaire support shop drawings are prequalified for use on the Project:

Valmont Industries Inc.	Drg. DB01371 page 1, Rev. B, 1/24/22
	Drg. DB01371 page 2, Rev. B, 1/24/22
	Drg. DB01371 page 3, Rev. B, 1/24/22
	Drg. DB01371 page 4, Rev. B, 1/24/22
	Drg. DB01372 page 1, Rev. B, 4/11/22
	Drg. DB01372 page 2, Rev. B, 4/11/22
	Drg. DB01372 page 3, Rev. B, 4/11/22
	Drg. DB01372 page 4, Rev. B, 4/11/22

### SECTION 00963 - SIGNAL SUPPORT DRILLED SHAFTS

Comply with Section 00963 of the Standard Specifications.

### SECTION 00965 - METAL CAMERA POLES AND FOUNDATIONS

Section 00965, which is not a Standard Specification, is included in this Project by Special Provision.

#### Description

**00965.00 Scope** - This Work consists of furnishing, fabricating, galvanizing, and installing Materials for camera poles and foundations. The location of the camera pole is approximate, with exact locations established in the field.

**00965.01 Regulations, Standards, and Codes** - All designs and Workmanship shall conform to the following standards where applicable:

- *AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.*
- *Standards of the American Society for Testing and Materials (ASTM).*
- *American Welding Society (AWS) - Steel D1.1.*

Wherever reference is made to any of the standards mentioned above, the reference means the code, order, or standard in effect on the date the Project is advertised unless specified otherwise on the Plans or Special Provisions.

Do not begin installations until all permits are obtained and copies are given to the Engineer.

**00965.02 Calculations and Drawings** - Within 30 Calendar Days after execution of the Contract, submit at least six copies of the calculations and shop drawings.

All engineered details and drawings which are not prepared by the Agency, but are required in the Contract Documents, shall be submitted for review prior to fabrication. Designs, details, plans and calculations shall be stamped and submitted according to 00150.35.

Upon completion of the installation, submit six copies of all changes made from the original Plans. The information furnished shall include all modifications made and shall represent the Material installed and in operation. It shall be sufficiently detailed to enable maintenance forces to replace or repair any part of the Project under routine or emergency maintenance by direct reference.

**00965.05 Design and Performance** - All camera poles shall be designed to the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*.

**(a) Design** - Design camera poles and foundations according to the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals 5th Edition* with all interim revisions. Design factors include:

- Basic wind speed (3 second gust) 110 mph
- Gust factor (G) 1.14
- Importance factor (Ir) 1.0 (50 year recurrence interval)
- Fatigue category II

Galloping and truck gust fatigue checks are not required.

**(b) Performance Calculations** - Design the camera pole to support the specified camera and accessories. Include all portions of the effective projected area of the complete lowering system and camera Equipment to be mounted on the pole along with the weight when designing the pole to meet the specified deflection performance criteria. The pole top deflection shall not exceed 1 inch in a 30 mph (non-gust) wind. The calculations shall include a pole, base plate, handhole, and anchor bolt analysis. The pole calculations shall be analyzed at the pole base, at 5 foot pole intervals/segments, hand hole locations, and at any other critical pole section. At each of these locations, provide the following information:

- The pole's diameter, thickness, section modulus, moment of inertia, and cross sectional area.
- The centroid, weight, projected area, drag coefficient, velocity pressure, and wind force of each pole segment.
- The axial force, shear force, primary moment, total moment, axial stress, bending stress, allowable axial stress, allowable bending stress, and combined stress ratio (CSR).
- The pole's angular and linear deflection.

The weight of a slip base pole and its attachments above the anchor plate shall be kept to a minimum and shall not exceed 1,000 pounds. Determine the total weight of the pole with all appurtenances attached to the pole and submit this with the design calculations.

Hand hole design requirements include:

- Calculations for the moment of inertia, section modulus, and area at the hand hole centerline that show that these values are equal to or greater than the full pipe section properties without a hand hole.



- Calculations that show that the net area of bar forming the hand hole frame is not less than 120 percent of pole cross section removed.
- Calculations that show that the combined stress ratio (CSR) for the steel pole at the centerline elevation of the hand hole is less than or equal to 0.60.

### Materials

**00965.10 Materials** - Furnish Materials meeting the following requirements:

Anchor Rods, Nuts, and Washers .....	02560.30
Commercial Grade Concrete .....	00440
Reinforcement .....	00530

Furnish steel pole Materials meeting the requirements of Section 02530 modified as follows:

- Provide steel sheet for pole and arms meeting the requirements of ASTM A595, Grade A or B, ASTM A572, or approved equal.
- Provide all other steel sheet and plate meeting the requirements of ASTM A36 or ASTM A572, or approved equal.
- Supplementary Requirement S18 (ASTM A6), maximum tensile strength, is required.
- Galvanized base plates and small and hidden pieces do not require controlled silicon content.

Provide anchor rods conforming to ASTM F1554 Grade 55 for fixed base foundations and ASTM A449 Type 1 for Slip Base foundations. Galvanize anchor bolts, nuts, and washers according to 02560.40(a).

### Construction

**00965.41 Excavation** - Protect all existing pipes that become a part of a foundation as directed by the Engineer and cooperate with Utilities according to 00150.50.

Do all excavation, backfilling and resurfacing Work necessary to complete the Work. This includes removal and replacement of curbs, sidewalks, paved surfaces and other materials. On completion of the Work, replace and finish all surfaces to correspond with the existing surfaces.

Furnish, place, and remove any shoring required to prevent caving of walls.

When excavating in paved areas, cut with an approved Pavement cutting saw to a depth of at least 2 inches along the neat boundaries of the area to be removed. Cut sharp and well-defined Pavement edges with no evidence of cracking, delaminating, or stressing.

Restore all disturbed landscaping and underground systems to original condition at no additional cost to the Agency upon completion of the Work. Use hand excavation if directed.

**(a) Excavation for Poles Foundations** - Make all excavations for pole foundations to the Neat Lines of the foundations. Hand excavation may be required. Place the concrete directly against the sides of the excavation in undisturbed or well-compacted Material.

**(b) Disposition of Waste Materials** - Dispose of all waste Materials on completion of the Work according to 00290.20, or as directed.

**00965.43 Foundations** - Set forms square and true to line and grade. Construct forms of rigid Materials that remain in position until the concrete has set. Use a steel template to accurately locate the anchor bolts and hold them plumb and in proper alignment. Out-of-position anchor rods and anchor rods installed more than 40V:1H out of plumb are cause for rejection of the foundation. Field bending of anchor bolts and field modification of the base plate are not allowed. Where breakaway bases are specified, the post stub projection shall not exceed the limits shown.

Construct foundations of concrete according to Section 00440 and applicable portions of 00540.48(a). Place concrete:

- With a continuous pour.
- To the elevation shown or directed.
- With conduit ends and anchor rods held securely in proper vertical position and height with a manufacturer's recommended template until the concrete sets.

Maintain rebar clearances during concrete pour.

Finish tops of foundations to Roadway, sidewalk or curb grade, or as directed.

Finish exposed concrete foundations to present a smooth, neat appearance. Fill all holes.

Make no adjustment of anchor rods after concrete has set. Any adjustment made may be cause for rejection of the foundation.

Remove forms and place subsequent loading according to Table 00540-1.

Where obstructions prevent the construction of planned foundations, construct the foundations in the location directed. Any extra cost due to the site change will be paid according to 00195.20.

If it is determined that foundations must extend deeper than shown, the extra foundation depth will be paid according to 00195.20.

**00965.46 Steel Camera Poles** - Camera poles include the pole shaft, hand holes, base plate, top tenon assembly, and anchor rod assembly. Poles up to 50 feet in length shall be one piece construction. Poles greater than 50 feet in length shall be of two piece construction. Pole shafts shall be round, 8 sided, 12 sided, or 16 sided with a constant linear taper of 0.14 inch per foot, and contain only one longitudinal seam weld. Unless shown or specified, circumferential welded tube butt splices are not permitted. Laminated tubes are not permitted. Do not erect poles until the Engineer has made a visual inspection of pole welding.

Fabricate entrance openings in steel poles and tenons, including handholes, before galvanizing.

**(a) Deviation from Straightness** - After the poles are delivered to the Project Site, and before they are erected on the foundations, the Contractor may be required to check any or all poles for deviation from straightness according to the following:

**(1) Deviation in One Plane and One Direction Only** - A straight line joining the surface of the pole at the base and the same surface of the pole at the top shall not be more than 1/2 inch from the surface of the pole for each 10 feet of length from the closest of these points. The opposite surface shall meet the same requirement.

**(2) Deviation in Any Plane** - A straight line connecting the midpoint of the pole at the base, with the midpoint at the top, shall not pass through the surface of the pole at any intermediate point.

Any pole not meeting these requirements will be rejected. If more than 25 percent of the poles fail to meet these requirements, sufficient cause exists to reject the entire shipment of poles for the Project.

**(b) Welding** - Weld steel camera poles according to the American Welding Society (AWS) D1.1. The fabricator shall inspect welds in accordance with details and requirements called out on the Contract Documents. This requirement will override all appropriate weld inspection requirements called out in Section 5.15 WELDING CONNECTIONS in AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*. Submit all testing procedures for Engineer's review prior to starting inspection. Submit certified copies of inspection reports to the Engineer for review.

Tackers and welders shall be qualified in accordance with the code. Tube longitudinal seam welds shall be free of cracks and excessive undercut, performed with automatic processes, and be visually inspected. Magnetic particle inspect longitudinal welds that are suspected to contain defects. Ultrasonically or radiographically inspect all circumferential butt-welded pole and arm splices. Longitudinal seam welds within 6 inches of complete penetration pole to base plate welds shall be complete penetration welds.

If requested by the Engineer, additional weld inspection may be required upon arrival of the Material at the Project Site. If defects are found by this additional inspection, the Contractor shall be responsible for the additional testing and repair costs. If no defects are found, the Engineer will be responsible for the additional inspection costs.

**(c) Welding Steel After Galvanizing** - No field welding of galvanized steel will be allowed. Perform all welding in a shop. The effected piece shall have the existing galvanizing removed from the heat affected area before welding. Perform the weld, remove the galvanizing totally from the entire piece, and hot-dipped galvanized it. A submittal for review according to 00150.35(b)(1) is required that includes the following:

- Explanation for modification.
- Name of shop performing the Work.
- Welding procedure.
- Description of the Work that will be performed.
- Name of the shop performing the hot-dipped galvanizing.

**(d) Identifying Tags** - Attach a stainless steel identifying tag to all poles. The tags shall be at least 1/16 inch thick. Tag lettering shall be at least 1/4 inch in height, and be stamped into the tag. Attach tags with stainless steel pop rivets of at least 3/16 inch nominal body diameter. Do not locate pop rivet holes within 6 inches of welds. Locate the pole tag approximately 5 feet above the bottom of the base plate. Drill holes for pop rivets prior to hot-dip galvanizing. Remove excess hot-dip galvanizing from holes and repair according to ASTM A780.

Tags shall include the following information if applicable:

- Manufacturer
- Month and year of manufacture
- Structure Number
- Top Tenon Yield (ksi)
- Top Tenon Flange Plate Yield (ksi)
- Pole thickness (inch)
- Base Plate Yield (ksi)
- Anchor Rod Yield (ksi)

**(e) Hand Holes** - The inside dimensions of the hand hole shall be 5 inches wide and 28 inches tall. The hand hole location and all other dimensions shall be as shown. The hand hole shall have a tapped hole for mounting the portable winch.

**(f) Pole Top Tenon** - The pole shall have a custom plate mounted tenon that allows the field modification of the arm/camera orientation up to 360 degrees. The tenon shall have mounting holes and slot as required for the mounting of the camera-lowering system. The tenon shall be of dimensions necessary to facilitate camera lowering device component installation. Each slot shall be parallel to the pole centerline for mounting the lowering device.

**(g) Base Plates** - Integrally weld the base plates to the tubes with a telescopic welded joint or a full penetration butt weld with backup bar.

**(h) Grounding Connection** - For standard four-bolt anchor base poles, provide a 1/2 inch, Type 308, 309 or 310 stainless steel stud on the inside of the shaft. Locate the stud directly opposite and level with the handhole in the pole. Attach grounding electrode conductors and bonding conductors to the stud with a grounding wire clamp, "acorn style".

**(i) Erecting Steel Camera Poles** - Erect steel camera poles on concrete foundations and according to the recommendations of the pole manufacturer and as shown. Exercise reasonable care to prevent marking the finish and damaging poles.

Bolt protrusion on slip base poles shall not interfere with the breakaway action of pole. File sharp edges smooth and repair according to ASTM A780.

**(1) Repair Damaged Finish** - Repair damaged galvanizing according to ASTM A780. Minor scratches less than 3 inches long by 3/16 inch wide or an area of 1/2 square inch can be repaired with the sprayed zinc method.

**(2) Assembly of Supports and Bolt Tightening** - Nuts shall have full thread engagement.

**a. Anchor Rods for Fixed Base Camera Pole Supports** - After foundation concrete strength and curing requirements are satisfied and after inspection of the foundation, pole installation may begin.

Lubricate anchor rods and nuts according to 02560.70. Estimate the required rake, if any, and set the lubricated leveling nuts accordingly, so that when pole installation is complete and all appurtenances are installed on the pole, the top of the pole is plumb with the base of the pole.

Verify the orientation of the camera arm with the Engineer before installing the pole.

Lift the pole into position on the leveling nuts and washers. Make sure all leveling nuts and washers are in full contact with the base plate.

Install washers and lubricated top nuts, and bring to a snug tight condition. Snug tight is defined as the condition when all plies of the connection are in firm contact, and can be obtained by the full effort of a worker on the end of a 12 inch long wrench. Several passes may be required to obtain uniform snug tightness.

When all anchor rods are snug tight, proceed with installation of arms and other appurtenances, if not previously installed. When installation of arms and appurtenances is complete, and the pole is plumb, final anchor rod tightening may begin. If the pole is not plumb, adjust as required and repeat snug tightening as described above. As a safety measure, provide crane support of the pole until anchor rods tightening is completed.

Mark the position of each turned element (nut or bolt head) with a felt tip pen or similar marker. Rotate each top nut past snug tight by the amount shown in 00965.46(i)(2)(d). Several passes may be required to obtain uniform final tightness. "Cheater" bars or slugging wrenches are allowed if required for large diameter anchor rods.

**b. Anchor rods for Slip Base (Break-away) Camera Supports** - After foundation concrete strength and curing requirements are satisfied and after inspection of the foundation, pole installation may begin.

Furnish, at no additional cost to the Agency, a calibrated torque wrench of a capacity appropriate to the size and type of the bolts being tightened. Confirm the accuracy of the calibrated torque wrench through calibration by an approved independent testing agency at least once a year.

Lubricate anchor rods and nuts according to 02560.70. Estimate the required rake, if any, and set the lubricated leveling nuts accordingly, so that when pole installation is complete and all appurtenances are installed on the pole, the top of the pole is plumb with the base of the pole.

Install the anchor plate on the leveling nuts and washers. Make sure all leveling nuts and washers are in full contact with base plate.

Install washers and lubricated top nuts, and bring to a snug tight condition. Snug tight is defined as the condition when all plies of the connection are in firm contact, and can be obtained by the full effort of a worker on the end of a 12 inch long wrench. Several passes may be required to obtain uniform snug tightness.

Verify the orientation of the camera arm with the Engineer before installing the pole.

When all anchor rods are snug tight, proceed with the "Slip Base Bolting Procedure" as shown on the Plans. When the "Slip Base Bolting Procedure" is complete, final anchor rod tightening may begin. As a safety measure, provide crane support of the pole until anchor rod tightening is complete.

Mark the position of each turned element (nut or bolt head) with a felt tip pen or similar marker. Rotate the top nut of each anchor rod past snug tight by the amount shown in .d below. Several passes may be required to obtain uniform final tightness. "Cheater" bars or slugging wrenches are allowed if required for large diameter anchor rods.

**c. High-Strength Bolts in Camera Arm-to-Pole Connections** - Do not reuse galvanized high strength bolts. Retightening previously tightened bolts that may have been loosened by the tightening of adjacent bolts will not be considered a reuse.

Lubricate high-strength bolts according to 02560.70. Provide all high-strength bolts with hardened flat washers under the element turned during tightening.

If arms or appurtenances are attached after pole erection, support them until bolts are snug tight.

Install high-strength bolt connections to a snug tight condition. Snug tight is defined as the condition when all plies of the connection are in firm contact, and can be obtained by the full effort of a worker on the end of a 12 inch long wrench. Several passes may be required to obtain uniform snug tightness.

Mark the position of each turned element (nut or bolt head) with a felt tip pen or similar marker. Rotate each top nut past snug tight by the amount shown in .d below. Several passes may be required to obtain uniform final tightness.

**d. Final Tightening** - Required final tightening of anchor rods and high-strength bolts are shown in the following Table:

Connection Type	Rotation Past Snug Tight
ASTM A449 Type 1 Anchor Rods	60° (1/6 turn)
ASTM F1554 Gr. 55 Anchor Rods	60° (1/6 turn)
ASTM F3125, Grade A325 Arm Connection Bolts	60° (1/6 turn)

**e. Bolt Inspection** - The Engineer will observe the installation and tightening operations to ensure that proper procedures are followed. All inspections will be visual and no testing will be conducted.

Top surface of bolts or rods that are not flush or do not extend beyond the top of the nut requires the rejection of the installation.

### Measurement

**00965.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

### Payment

**00965.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract Lump Sum amount for the item "Camera Poles and Foundations".

Payment will be payment in full for furnishing and installing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

## SECTION 00970 - HIGHWAY ILLUMINATION

Comply with Section 00970 of the Standard Specifications modified as follows:

Add the following subsection:

**00970.15 LED Luminaires on Traffic Signal Supports** - Furnish one of the following approved models or an approved equal:

- Signify - LUMEC LED - RoadFocus RFL,  
RFL-135W80LED4K-G2-R3M-UNV-DMG-PH9-GY3

When higher light output is desired, higher wattage luminaires up to 170 watt within the same brand/model listed above, may be furnished.

When furnishing an LED luminaire model that is not specified as approved, the luminaire shall meet the requirements of 02926.54.

Add the following subsection:

**00970.16 LED Luminaires on Freeway Interchange Lighting Systems** - Furnish one of the following models or an approved equal:

- Signify - LUMEC LED - RoadFocus,  
Luminaire 1: RFL-135W80LED4K-G2-R3M-HVU-DMG-PH9-GY3  
Luminaire 2: RFL-215W96LED4K-G2-R3M-HVU-DMG-PH9-GY3
- Current LED - Evolve  
Luminaire 1: ERLH-H-14-C3-40-D-GR

Luminaire 2: ERL2-H-25-B3-40-D-GR

- CREE LED - Traveyo Series Extra Large,  
Luminaire 1: TRVLG-A-HT-3ME-16L-40K7-UH-GY-N  
Luminaire 2: TRVXL-A-HT-3ME-30L-40K7-UH-GY-N

When higher light output is desired, higher wattage luminaires up to 250 watt within the same brand/model listed above, may be furnished.

When furnishing an LED luminaire model that is not specified as approved, the luminaire shall meet the requirements of 02926.54.

**00970.90 Payment** - Replace the paragraph that begins "Item (e) includes..." with the following paragraph:

Item (e) includes all refurbishing, reinstalling, and other Work as specified or shown.

## **SECTION 00985 - ITS ELECTRICAL SYSTEM INSTALLATION**

Section 00985, which is not a Standard Specification, is included in this Project by Special Provision.

### **Description**

**00985.00 Scope** - In addition to requirements of Section 00960, install ITS electrical system as shown or specified. Install Agency-furnished Equipment listed in 00160.30.

**00985.01 Regulations, Standards, and Codes** - Comply with the following standards where applicable:

- Underwriters Laboratories (UL)
  - 50-2015 - Enclosures for Electrical Equipment, Non-Environmental Considerations
  - 508A-2018 - Standard for Industrial Control Panels
  - 1561-2011 - Standard for Dry-Type General Purpose and Power Transformers
  - 1581-2001 - Reference Standard for Electrical Wires, Cables, and Flexible Cords
  - 1685-2015 - Standard for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables
  - 83-2017 - Thermoplastic-Insulated Wires and Cables

**00985.02 Submittals** - Submit according to 00150.37, within 30 Calendar Days after execution of the Contract, the following:

- Camera lowering system according to 00985.20

Include the manufacturer's name, model numbers, catalog sheets and other descriptive literature of proposed Materials. Provide the catalog sheets and literature including technical



data, physical properties and operational description in sufficient detail to demonstrate the Equipment meets these specifications.

### Materials

**00985.18 Conduit Seal** - Furnish conduit plug Material used to seal the ends of conduit composed of duct seal that is UL listed clay putty Material designed to seal electrical conduit. Seal all conduit impacted by the Project.

**00985.19 Electrical Splice Materials** - Furnish electrical splice Material meeting the following requirements:

- **Split Bolt** - Made of silicon bronze to securely join the wires both mechanically and electrically.
- **Heat-Shrink Tubing** - Surface-irradiated tube complying with UL 486, rated at 194 °F, with 600 V inner melting wall or liner to provide void-free encapsulated insulation.
- **Insulating Rubber Tape** - Electrical grade, nondrying, rubber based, elastic type conforming to ASTM D4388.
- **Insulating Vinyl Plastic Tape** - Comply with ASTM D3005, Type II and UL 510.

### 00985.20 Camera Lowering System:

**(a) General Description** - Design the camera lowering system to support and lower a traffic surveillance IP camera, lens, Pan/Tilt mechanism, associated cabling and connectors, and other supporting field components without damage or causing degradation of camera operations. Provide a lowering system that consists of a suspension contact unit, divided channel support arm, and a pole adapter for attachment to a pole top junction box and camera connection box. Design the divided support arm and receiver brackets to self-align the contact unit with the pole centerline during installation and ensure the contact unit cannot twist under high wind conditions.

**(b) Lowering Tool** - Operate the camera lowering system by the use of a portable lowering tool. The lowering tool consists of a metal frame winch assembly with a cable, a quick release connector, and adjustable clutch and a variable speed heavy duty electric motor. Provide a lowering tool that is compatible with accessing the support cable through the hand hole of the pole. Provide a lowering tool with a reduction gear for ease of service and operation. Equip the lowering tool with a positive braking mechanism to secure the cable reel during raising and lowering operations and to prevent freewheeling. The use of a strap to attach the lowering device will not be accepted.

**(c) Materials** - Furnish pulleys that have sealed, self-lubricating bearings. Provide a lowering cable that is a stainless steel cable with a minimum breaking strength of 1700 lbs.

Protect all electrical and video connections between the fixed assembly and the lowering portion of the connection block from exposure to the weather by a waterproof seal. Design the electrical connections (contacts) to minimize loss. The ground wire or pin shall be the last electrical connection to disengage when servicing.

**(d) Suspension Contact Unit** - Provide a suspension contact unit that allows the camera, Pan/Tilt Unit and dome assembly to easily separate from the camera pole for

lowering purposes. Only the stainless steel lowering cable is permitted to move within the pole or lowering device during lowering or raising. Provide a locking mechanism between the fixed and moveable components. When latched, all weight shall be removed from the lowering cable. Provide a suspension contact unit that has a heavy duty cast tracking guide to allow latching in the same position every time. House the suspension contact unit in a weatherproof enclosure with a gasket to seal the interior.

### Construction

**00985.40 Installation** - Install the Materials as specified, shown, and according to the manufacturer's instructions.

Install the Agency-furnished Materials listed in 00160.30; and all other Incidental items necessary to complete the Work as shown.

**00985.41 Metallic Conduit** - If corrosive Soil conditions exist, coat metallic conduit with a nonmetallic coating or wrap with corrosion protection tape at least 10 mils thick.

**(a) Metallic Conduit** - Paint the following with rust-preventative coating:

- Threads on all metal conduit
- Areas where the coating has been damaged so underlying metal is exposed.
- Exposed, non-galvanized threads resulting from field cuts.

**(b) Bushings** - Furnish and install bushing according to the following:

- **Metallic Bushing** - Use metallic bushings with rigid metallic elbows, metallic risers, and junction boxes containing circuits less than 25 V.
- **Metallic Bonding Bushing** - Use metallic bonding bushings with rigid metallic elbows, metallic risers, and junction boxes containing 25 V or greater circuits.

**00985.42 Cable and Wire** - Install No. 16 AWG TFFN orange base with blue tracetone wire in all conduits as a locate wire. Leave slack as required in 00985.43 and install a wire nut. Do not join multiple locate wires under a common wire nut unless otherwise shown.

Tape the ends of unused conductors with insulated vinyl plastic tape.

Install polyethylene pull line in all new conduits for future use. Leave 6 feet of slack pull line. If an existing pull line is used, replace the existing pull line with a new pull line during the installation.

Arrange wiring neatly within cabinets and junction boxes. Use electrical lubricants when inserting conductors in conduit. Before pulling wires through underground conduit runs, blow the conduit out with 120 cubic feet per minute compressed air.

Do not use tapes, straps, ties or other binding Materials to bundle single conductors or cables together inside conduits or poles. Bundling of conductors or cables are allowed at the terminating end points for pulling only.

Pull all wire and cable by hand and on a straight line with the conduit opening to prevent damage to wire and cable insulation. Use a pulley device to achieve a straight pull if pulls are made with poles or controller cabinet in place.

**00985.43 Conductor Slack** - Leave slack in each wire and cable as follows:

- 2 feet in junction boxes and poles
- 6 feet in the first junction box nearest the controller cabinet
- 6 feet in controller cabinet and service cabinet

**00985.44 Identification and Marking** - Clearly and permanently label all cables and wiring between subsystems. Mark all conductors within 2 inches of wire terminations by means of imprinted tubular white or yellow plastic wire markers at termination points. Install marker nomenclature that is visible without moving wires or markers. Use thermal transfer label printer with minimum 3/4" tape.

**00985.45 Covers and Guarding** - Furnish covers or guarding for live parts of terminations on circuits of 50 V or more to ground.

**00985.46 Conductor Splicing** - Install all conductors as shown without splicing. Field verify lengths prior to ordering cables. If splicing is required to complete Work as shown, then submit the method using all Materials listed in 00985.19 and the location of splicing for approval by Engineer before construction.

**00985.50 Camera Installation** - Install Agency-furnished camera and accessories, which consists of the camera, housing, mounting bracket, power supply, and associated wiring as shown and specified. Final aiming of the camera to be completed by the Agency.

#### **Measurement**

**00985.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

#### **Payment**

**00985.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Electrical Systems Installation".

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for pick-up and installation of the Agency furnished Materials.

### **SECTION 00987 - TELECOMMUNICATIONS**

Section 00987, which is not a Standard Specification, is included in this Project by Special Provision.

### Description

**00987.00 Scope** - This Work consists of furnishing and installing fiber optic cabling for the telecommunications of Intelligent Transportation Systems (ITS) devices.

**00987.01 Regulations, Standards, and Codes** - Comply with the following standards where applicable:

- Telecommunications Industry Association (TIA/EIA)
  - EIA-455-3A (FOTP-3) Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components
  - EIA-455-33 (FOTP-33) Fiber Optic Cable Tensile Loading and Bending Test
  - EIA-455-41 (FOTP-41) Compressive Loading Resistance of Fiber Optic Cables
  - EIA-455-81 (FOTP-81) Compound Flow (Drip) Test for Filled Fiber Optic Cable
  - EIA-455-82 (FOTP-82) Fluid Penetration Test for Fluid Blocked Fiber Optic Cable
  - EIA-455-104 (FOTP-104) Fiber Optic Cable Cyclic Flexing Test
  - EIA-455-171 (FOTP-171) Attenuation by Substitution Measurement for Short-Length Multimode Graded-Index and Single Mode Optical Fiber Cable Assemblies
  - EIA/TIA-568-B.3 Optical Fiber Cabling Components
  - EIA/TIA-758 Customer Owned Outside Plant Telecommunications Cabling
  - EIA-598-B Optical Fiber Cable Color Coding
- American National Standards Institute/Insulated Cable Engineers Association (ANSI/ICEA)
  - ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable
- International Telecommunication Union - Telecommunication Standardization Sector (ITU-T)
  - G.652 (11/09) Characteristics of a single-mode optical fiber and cable Telecommunications Industry Association (TIA)
  - G.652 (11/16) Characteristics of a single-mode optical fiber and cable

**00987.02 Submittals** - Within 30 Calendar Days after the execution of the Contract, submit the following:

- Outside plant fiber optic cable according to 00987.10
- Fiber Optics Installer or Fiber Optics Technician Certification according to 00987.30.
- OSP cable installation procedure according to 00987.40(a)
- Fiber optic cable test plan according to 00987.41(a)
- Factory testing according to 00987.41(b)
- Arrival on-site testing according to 00987.41(c)
- Fiber optic cable testing according to 00987.41(d) and (f)

Include the manufacturer's name, model numbers, catalog sheets and other descriptive literature of proposed Materials. Provide the catalog sheets and literature including technical

data, physical properties and operational description in sufficient detail to demonstrate the Equipment meets these specifications.

### Materials

**00987.10 Outside Plant Fiber Optic Cable** - Furnish and install outside plant (OSP) single mode fiber optic (SMFO) cable containing single mode dual window (1310 nm and 1550 nm) fibers.

**(a) Optical Fiber** - Meet optical, mechanical and environmental requirements for all usable fibers in buffer tubes.

**(b) Fiber Characteristics and Tests** - Meet the requirements in Table 00987-1 for single mode fibers:

**Table 00987-1**

<b>Fiber Characteristic Table</b>	
Parameters:	Single Mode
Type:	Step Index
Core diameter:	8.3 $\mu\text{m}$ (nominal)
Cladding diameter	125 $\mu\text{m} \pm 1.0 \mu\text{m}$
Core to cladding offset:	$\leq 1.0 \mu\text{m}$
Coating:	dual layer, UV-cured acrylate strippable mechanically or chemically without damaging fibers
Optical fibers:	doped silica core with concentric silica cladding
Coating diameter:	250 $\mu\text{m} \pm 15 \mu\text{m}$
Cladding non-circularity defined as:	$\leq 2.0\%$ [1-(min. cladding dia÷max. cladding dia.)]x100 FOP cable: all dielectric, gel-filled or water blocking tape, duct-type
Proof/Tensile Test:	345 MPa, min
Attenuation at 1310 nm:	$\leq 0.4 \text{ dB/km}$
Attenuation at 1550 nm:	$\leq 0.4 \text{ dB/km}$
Design Standard:	ANSI/ICEA S-87-640
Test cable according to:	EIA-455-25 (FOTP-25) EIA-455-33 (FOTP-33 Condition II) EIA-455-41 (FOTP-41) EIA-455-81 (FOTP-81) EIA-455-82 (FOTP-82) EIA-455-104 (FOTP-104 Conditions I and II)
Test optical fiber according to:	EIA-455-3A (FOTP-3)
Attenuation at the Water Peak:	$\leq 2.1 \text{ dB/km @ } 1383 \pm 3 \text{ nm}$
Chromatic Dispersion	
Zero Dispersion Wavelength:	1301.5 to 1321.5 nm
Zero Dispersion Slope:	$\leq 0.092 \text{ ps}/(\text{nm}^2 \cdot \text{km})$
Maximum Dispersion:	$\leq 3.3 \text{ ps}/(\text{nm}^2 \cdot \text{km})$ for 1285 – 1330 nm

	$\leq 0.092 \text{ ps}/(\text{nm}^2 \cdot \text{km})$ for 1550 nm
Cut-Off Wavelength:	$< 1250 \text{ nm}$
Mode Field Diameter	$9.3 \pm 0.5 \mu\text{m}$ at 1310 nm
Petermann II	$10.5 \pm 1.0 \mu\text{m}$ at 1550 nm

**(c) Color Coding** - Distinguish each fiber from others in the same tube or cable by means of color coding according to the following:

- |                |                 |
|----------------|-----------------|
| 1. Blue (BL)   | 7. Red (RD)     |
| 2. Orange (OR) | 8. Black (BK)   |
| 3. Green (GR)  | 9. Yellow (YL)  |
| 4. Brown (BR)  | 10. Violet (VL) |
| 5. Slate (SL)  | 11. Rose (RS)   |
| 6. White (WT)  | 12. Aqua (AQ)   |

Target colors according to the Munsell color shades and comply with EIA/TIA-598.

The color formulation needs to be compatible with the fiber coating and the buffer tube filling compound, be heat stable, not fade, smear, be susceptible to migration, and it must not affect the transmission characteristics of the optical fibers and not cause the fibers to stick together.

**(d) Cable Construction** - Furnish fiber optic cables with the following components:

**(1) Buffer Tubes** - Furnish clearance in the loose buffer tubes with fibers and the inside of the tube to allow for expansion without constraining the fiber. The fibers are to be loose or suspended within the tubes. Do not adhere the fibers to the inside of the buffer tube. Do not exceed a maximum of 12 fibers in each buffer tube. Furnish the number of fibers per cable as shown.

Extrude loose buffer tubes from a Material having a coefficient of friction sufficiently low to allow free movement of the fibers. Furnish Material that is tough and abrasion resistant to furnish mechanical and environmental protection of the fibers, yet designed to permit safe intentional "scoring" and breakout, without damaging or degrading the internal fibers.

Furnish buffer tube filling compound that is a water blocking tape or gel based filling compound with anti-oxidant additives to prevent water intrusion and migration homogenous hydrocarbon. Furnish filling compound that is non-toxic, dermatologically safe to exposed skin, as well as chemically and mechanically compatible with all cable components, non-nutritive to fungus, non-hygroscopic and electrically non-conductive. Furnish filling compound free from dirt and foreign matter and be readily removable with conventional nontoxic solvents.

Strand buffer tubes around a central member by a method, such as reverse oscillation stranding process that will prevent stress on the fibers when the cable jacket is placed under strain.

**(2) Central Member** - Furnish a central member that functions as an anti-buckling element that is a glass reinforced plastic rod with similar expansion and contraction characteristic as the optical fibers and buffer tubes. To ensure the proper spacing between buffer tubes during stranding, a symmetrical linear overcoat of polyethylene may be applied to the central member to achieve the optimum diameter.

**(3) Filler Rods** - Fillers may be included in the cable to maintain the symmetry of the cable cross section. Furnish filler rods that are solid medium or high-density polyethylene. Filler rods are to be the same diameter as the outer diameter of the buffer tubes.

**(4) Stranding** - Strand completed buffer tubes around the over-coated central member using stranding methods, lay lengths and positioning such that the cable meets mechanical, environmental and performance specifications. A polyester binding is to be applied over the stranded buffer tubes to hold them in place. Apply binders with sufficient tension to secure the buffer tubes to the central member without crushing the buffer tubes. Furnish a binder that is non-hygroscopic, non-wicking, and dielectric with low shrinkage.

**(5) Core and Cable Flooding** - Furnish a cable core that contains a water blocking tape Material to prevent water ingress and migration. Furnish water blocking tape Material that is either a polyolefin-based compound, which fills the cable core interstices, or an absorbent polymer, which fills voids and swells to block the ingress of water. The flooding compound or Material needs to be homogeneous, non-hygroscopic, non-conductive, and non-nutritive to fungus. Furnish compound or Material that is nontoxic, dermatologically safe and compatible with other cable components.

**(6) Tensile Strength Member** - Furnish tensile strength by high tensile strength aramid yarns or fiberglass, which are helically stranded evenly around the cable, core and not adhere to other cable components.

**(7) Ripcord** - Furnish cable that contains at least one ripcord under the jacket for easy sheath removal.

**(8) Outerjacket** - Furnish jacket that is free of holes, splits, and blisters and be medium or high density polyethylene, or medium density cross linked polyethylene with minimum nominal jacket thickness of  $1 \text{ mm} \pm 0.076 \text{ mm}$ . Apply jacketing Material directly over the tensile strength members and water blocking Materials and not adhere to the aramid strength Material. The polyethylene needs to contain carbon black to provide ultraviolet light protection and not promote the growth of fungus.

Mark the jacket or sheath with the manufacturer's name, the words "Optical Cable", the number of fibers, "SM", year of manufacture, and sequential measurement markings every meter. The marking is to be of contrasting color to the cable jacket.

**(e) Packaging and Shipping Requirements** - Pack completed cable on reels for shipment. Wrap cable in weather and temperature resistant covering. Seal both ends of cable to prevent ingress of moisture. Secure each cable end to the reel to prevent the cable from coming loose during transit. Have at least 6 feet of cable length accessible for testing purposes.

Label each cable reel with a durable, weatherproof label showing manufacturer's name, cable type, actual length of cable on the reel, Contractor's name, contract number, and reel number. Include a shipping record in a weatherproof envelope showing the above information and include the date of manufacturer, cable characteristics (size, attenuation, bandwidth), factory test results, cable identification number and any other pertinent information.

Minimum hub diameter of reel needs to be at least thirty times the cable diameter. Fiber optic cable is to be continuous length on each reel. Mark reel indicating direction reel should be rolled to prevent loosening of cable.

Furnish installation procedures and technical support information at delivery.

**00987.14 Warning Tags** - Furnish warning tags with a long life Material, orange in color, and marked in a permanent and consistent manner with black lettering.

Include the text "CAUTION FIBER OPTIC CABLE" on all warning tags and show the cable fiber count.

Attach warning tags to fiber optic cables using UV-resistant zip ties according to the manufacturer's recommendations. Do not affix in a manner that causes damage to the fiber.

Attach warning tags to the cables in at least two locations in junction boxes and handholes, and at least one location in cabinets.

**00987.15 Labels** - Use labels to identify cables and jumpers and patch cords at all termination points, junction boxes, handholes, and cabinets. Use labels to identify all communications Equipment and devices in junction boxes, handholes, and cabinets. Use yellow or white colored labels with permanent black lettering. Mechanically imprint labels, do not use handwritten labels.

Use tubular plastic labels on cables and jumpers and patch cords. Label duplex jumpers to provide a visual distinction between the two fibers. Provide labels with the following information:

- Owner
- Number of fibers
- Fiber number
- Cable origin
- Cable destination

### **Labor**

**00987.30 Fiber Optic Work** - Individuals performing fiber optic installation are to possess either a Fiber Optics Installer or Fiber Optics Technician Certification recognized by the Electronics Technicians Association (ETA) or a Fiber Optics for ITS certificate from the International Municipal Signal Association (IMSA). Submit a copy of certification to the Engineer prior to performing any Work.



## Construction

### 00987.40 Fiber Optic Cable Installation and Setup:

**(a) OSP Cable Installation** - Submit a fiber optic cable installation plan including the manufacturer's recommended procedures for pulling fiber optic cable for review 30 Calendar Days of execution of the Contract. Use mechanical aids to install cable. Place tension measuring device or breakaway swivel between ends of cable grip and pull rope to ensure tension does not exceed 80 percent of recommended tension or 500 pounds, whichever is less. Use cable grips with a ball bearing swivel for installing fiber optic cable to prevent cable from twisting during installation.

During installation, maintain a minimum bend radius of 20 times the outside diameter of the cable per EIA/TIA-568-B.3. Do not stress the cable beyond the minimum bend radius. Install fiber optic cable using cable pulling lubricant as recommended by the manufacturer. Use a non-abrasive pull tape. Station personnel at each splice vault and hand hole to lubricate the cable and prevent kinking or other damage. Install fiber optic cable without splices, except as specifically allowed for on the plans, as described herein, or as directed. Divide slack equally on each side of splice closures. Following installation of cable in conduit, seal all entrances in cabinets, junction boxes and vaults with duct sealing compound to keep out moisture, foreign Materials, and rodents.

### 00987.41 Fiber Optic Testing:

**(b) Factory Testing** - Documentation of compliance with the fiber specifications as listed herein is to be supplied by the original Equipment manufacturer. Before shipment, but while on the shipping reel, test 100 percent of all fibers for attenuation. Maintain copies of the results on file by the manufacturer with a file identification number, attached to the cable reel in a waterproof envelope, and submitted to the Contractor and Engineer.

**(c) Arrival On-Site Testing** - Physically inspect each cable upon delivery. Attenuation test 100 percent of the fibers to confirm that the cable meets the requirements at wavelengths of both 1310 nm and 1550 nm with the Optical Time Domain Reflectometer (OTDR) test Equipment. The failure of any single fiber in the cable is cause for rejection of the entire reel. Record test results and compare and file with the copy accompanying the shipping reel in a waterproof envelope. Do not install the cable until completion of this test sequence and the Engineer provides written approval. Submit copies of traces and test results to the Engineer. If the tests are unsatisfactory, the reel of cable is considered unacceptable and all records corresponding to that reel are to be marked accordingly. Replace the unsatisfactory reels of cable with new reels of cable. Test the new reels of cable to demonstrate acceptability. Submit copies of the test results to the Engineer.

**(d) Fiber Optic Cable Testing** - Testing is to include the tests on elements of the passive fiber optic components: (1) at the factory; (2) after delivery to the project site, but prior to installation; (3) after installation, but prior to connection to any other portion of the system. Provide all personnel, Equipment, instrumentation, and Materials necessary to perform all on-site testing.

Provide documentation of all test results to the Engineer at most 3 Days after the test is completed. At least 21 Calendar Days prior to the arrival of cable on site, provide detailed

field testing procedures. In the procedures include the test involved and method by which tests are to be conducted. Include in the notification the model, manufacturer, configuration, calibration, and alignment procedures for all proposed test Equipment

**(f) Cable Verification:**

**(1) OTDR Testing** - Once the cabling system has been installed and is ready for splicing, test all fiber links with the OTDR test Equipment for attenuation at wavelengths of both 1310 nm and 1550 nm. Index matching gel is not allowed in connectors during testing. Record, date and compare test results and file with previous copies. Submit hard copy printout of traces and test results to the Engineer. Use OTDR test Equipment capable of recording and displaying anomalies of at least 0.02 dB. Calibrate the OTDR with traceability to a national metrology unit such as the National Institute of Standards and Technology (NIST).

**(3) Test Failures** - If the attenuation measured after installation does not match the attenuation measured on-site before installation then the fiber optic link will be rejected. Replace the unsatisfactory segments of cable with a new segment of cable. Complete the OTDR testing for the repair to determine acceptability. Submit copies of the test results to the Engineer. The removal and replacement of a segment of cable will be interpreted as the removal and replacement of a single continuous length of cable. The removal of only the small section containing the failure and therefore introducing new unplanned splices is not allowed.

**(4) Allowed Loss** - Evaluate fiber optic cable tests based on the following maximum allowable loss per EIA/TIA-568-B.3:

- Fiber on-reel: 0.40 dB/km at 1310nm and 0.30 dB/km at 1550nm
- Installed fiber: 0.40 dB/km at 1310nm and 0.30 dB/km at 1550nm
- Per connector: 0.75 dB bi-directional average

Losses exceeding the above limits are only allowed with written approval from the Engineer.

### **Measurement**

**00987.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

### **Payment**

**00987.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

<b>Pay Item</b>	<b>Unit of Measurement</b>
(a) Telecommunications, Material .....	Lump Sum
(b) Telecommunications, Installation .....	Lump Sum

Item (a) includes furnishing outside plant fiber optic cable, fiber optic jumpers, fiber optic patch cable, splice closures, splice trays, and all other Incidental items necessary to complete the Work.

Item (b) includes installation and testing of all Materials as shown or specified.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for required submittals and documentation.

No separate or additional payment will be made for replacement of disturbed earthwork, base, and surfacing.

### **SECTION 00990 - TRAFFIC SIGNALS**

Comply with Section 00990 of the Standard Specifications modified as follows:

Add the following subsection:

**00990.40 Work in Existing Controller Cabinets** - Install new field wiring as shown into the existing controller cabinet without terminating.

New control Equipment installed as shown in an existing controller cabinet will be tested prior to installation according to 00990.70.

At existing controller cabinets the Agency will be responsible for:

- Storage, delivery, installation, and activation of new control Equipment
- Any required modifications to existing control Equipment or existing field wiring terminations
- Terminating new field wiring

Prior to the anticipated installation of new control Equipment, modification of existing control Equipment, or modification of existing field wiring terminations, schedule field testing according to 00990.70(g). Field testing and activation of the new control Equipment or modifications will occur within the same Work shift. Be present at the Project Site during field testing.

Add the following subsection:

**00990.45 Repair Open Holes In Metal Poles, Pedestals, and Mast Arms** – Repair holes in metal poles, pedestals, and mast arms caused by removal of Equipment using pipe plugs. For holes larger than 1 inch in diameter or of irregular shape, submit method and Materials to be used.

### **00990.90 Payment -**

In the paragraph that begins “No separate or additional payment will be...”, add the following bullet to the bullet list:

- Conduit installed according to 00960.42(f)

Crosswalk closure supports will be paid for according to 00902.90.

Training

## SECTION 01011 - STORMWATER CONTROL, PONDS

Section 01011, which is not a Standard Specification, is included for this Project by Special Provision.

### Description

**01011.00 Scope** - This Work consists of furnishing and installing stormwater ponds as shown.

### Materials

**01011.10 Materials** - Furnish Material meeting the following requirements:

Concrete .....	00440
Facility Field Markers .....	00842.10
Manholes, Catch Basins, and Inlets .....	00470.11
Riprap .....	00390.11
Storm Sewer Pipe .....	00445.11

### Construction

**01011.40 General** - Construct storage facility as shown. Perform excavation and fine grading Work only when the facility area is dry and only from the top of the pond area. Do not stockpile Material in the facility area.

**01011.41 Storage Pond** - Scarify the Soil as described in Method "D" according to Section 01040.48(d).

**01011.43 Facility Field Markers** - Install field markers as shown and according to Section 00842.

### Maintenance

**01011.70 Cleaning** - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

### Measurement

**01011.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

#### Storage Pond C Quantities:

Item	Quantity
Excavation .....	389 Cu. Yd.
Loose Riprap, Class 50 .....	5.4 Cu. Yd.
Concrete Storm Sewer Manhole (Flow Control) .....	1 Each
Concrete Inlet, Type D .....	1 Each
12 Inch Storm Sewer Pipe .....	25 Foot

**Storage Pond D01416 Quantities:**

Item	Quantity
Excavation .....	910 Cu. Yd.
Loose Riprap, Class 50.....	5.4 Cu. Yd.
Concrete Storm Sewer Manhole (Flow Control) .....	1 Each
Concrete Inlet, Type D .....	1 Each
12 Inch Storm Sewer Pipe .....	26 Foot

**Storage Pond D00947 Quantities:**

Item	Quantity
Excavation .....	7,176 Cu. Yd.
Loose Riprap, Class 50.....	2.7 Cu. Yd.
Concrete Storm Sewer Manhole (Flow Control) .....	1 Each
Concrete Inlet, Type D .....	1 Each
12 Inch Storm Sewer Pipe .....	18 Foot

Field facility markers will be measured according to 00842.80.

**Payment**

**01011.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item:

**Pay Item Unit of Measurement**

(a) Storage Pond, ..... Lump Sum

The drainage facility identification number will be inserted in the blank.

Field facility markers will be paid for according to 00842.90.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

## **SECTION 01012 - STORMWATER CONTROL, WATER QUALITY BIOFILTRATION SWALE**

Section 01012, which is not a Standard Specification, is included for this Project by Special Provision.

**Description**

**01012.00 Scope** - This Work consists of furnishing and installing a water quality biofiltration swale as shown.

**Materials**

**01012.10 Materials** - Furnish Material meeting the following requirements:

Concrete .....	00440
Facility Field Markers .....	00842.10
Manholes, Catch Basins, and Inlets .....	00470.11
Slope and Channel Liner Matting .....	00280.14(e)
Riprap .....	00390.11

**01012.11 Porous Pavers** - Furnish medium duty porous pavers from the QPL.

**01012.12 Water Quality Mixture** - Furnish medium compost meeting the requirements of Section 03020. Furnish Soil meeting the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
No. 4	100
No 10	95 - 100
No. 40	40 - 60
No. 100	10 - 25
No. 200	5 - 10

Sample Soil according to AASHTO R 90. Determine sieve analysis according to AASHTO T 27 and AASHTO T 11.

Blend the medium compost and Soil so that the mixture:

- Is composed of between 20 percent and 25 percent medium compost Material and between 75 percent and 80 percent Soil Material.
- Has a pH between 5.5 and 8.0.
- Does not have clumps greater than 3 inches in any direction.

**01012.13 Plastic Board** - Furnish plastic board meeting the following requirements:

- Is HDPE or LDPE consisting of recycled plastic.
- Does not contain wood.
- Smooth and free of splinters.
- Includes an ultra-violet inhibitor.

**01012.15 Slope and Channel Liner Matting** - Furnish channel liner matting meeting the requirements of 00280.14(e) for resistance to shear stresses calculated for a 10-year storm event.

### Construction

**01012.40 General** - Construct water quality biofiltration swale facility as shown. Perform excavation, fine grading, and placement Work only when the facility area is dry and only from the top of the swale area. Do not stockpile excavated Material in the facility area. Perform Work in sequence as follows:

**(a) Scarify** - Scarify the subsoil area a minimum 12 inches deep.

**(b) Placement of Water Quality Mixture** - Place the water quality mixture in maximum 12 inch Lifts. Compact each Lift with a water filled landscape roller.

**(c) Pervious Pavers** - Install pervious pavers for full length of swale and full width of channel bottom. Fasten adjoining paver panels together.

**(d) Seeding** - Seed according to 01030.13.

**(e) Slope and Channel Liner Matting** - After seeding install slope and channel liner matting as shown or directed.

**(f) Check Dams** - Install temporary check dams spaced as shown or directed.

**(g) Plastic Boards** - Install plastic boards plumb, level and perpendicular to swale flow line. Key and embed plastic boards horizontally into side slopes of swale to a depth not less than 12 inches.

**01012.41 Facility Field Markers** - Install field markers as shown and according to Section 00842.

#### Maintenance

**01012.70 Cleaning** - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

**01012.71 Removal** - Remove temporary erosion and sediment control features according to 00280.70 only after water quality vegetation has met the establishment requirements of 01030.60.

#### Measurement

**01012.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

#### Water Quality Swale D01415 Quantities:

Item	Quantity
Excavation .....	33 Cu. Yd.
Loose Riprap, Class 50.....	1.1 Cu. Yd.
Water Quality Mixture .....	22 Cu. Yd.
Plastic Board Flow Spreader.....	8 Foot
Matting, Type B.....	480 Sq. Yd.
Porous Pavers .....	400 Sq. Ft.

#### Water Quality Swale D01417 Quantities:

Item	Quantity
Excavation .....	181 Cu. Yd.
Loose Riprap, Class 50.....	2.2 Cu. Yd.



Water Quality Mixture .....	56 Cu. Yd.
Plastic Board Flow Spreader.....	14 Foot
Matting, Type B.....	349 Sq. Yd.
Porous Pavers .....	1000 Sq. Ft.

**Water Quality Swale D00948 Quantities:**

Item	Quantity
Excavation .....	92 Cu. Yd.
Loose Riprap, Class 50.....	1.3 Cu. Yd.
Water Quality Mixture .....	36 Cu. Yd.
Plastic Board Flow Spreader.....	27 Foot
Matting, Type B.....	476 Sq. Yd.
Porous Pavers .....	650 Sq. Ft.

**Water Quality Swale D00949 Quantities:**

Item	Quantity
Excavation .....	41 Cu. Yd.
Loose Riprap, Class 50.....	0.6 Cu. Yd.
Water Quality Mixture .....	41 Cu. Yd.
Plastic Board Flow Spreader.....	32 Foot
Ditch Inlet, Type D .....	1 Each
Matting, Type B.....	1354 Sq. Yd.
Porous Pavers .....	744 Sq. Ft.

**Water Quality Swale D00950 Quantities:**

Item	Quantity
Excavation .....	70 Cu. Yd.
Loose Riprap, Class 50.....	0.9 Cu. Yd.
Water Quality Mixture .....	70 Cu. Yd.
Plastic Board Flow Spreader.....	50 Foot
Ditch Inlet, Type D .....	1 Each
Matting, Type B.....	1500 Sq. Yd.
Porous Pavers .....	1260 Sq. Ft.

**Water Quality Swale A Quantities:**

Item	Quantity
Excavation .....	22 Cu. Yd.
Loose Riprap, Class 50.....	1.1 Cu. Yd.
Water Quality Mixture .....	22 Cu. Yd.
Plastic Board Flow Spreader.....	1 Foot
Matting, Type B.....	377 Sq. Yd.
Porous Pavers .....	400 Sq. Ft.

Field facility markers will be measured according to 00842.80.

### Payment

**01012.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Water Quality Swale, \_\_\_\_\_".

The drainage facility identification number will be inserted in the blank.

Field facility markers will be paid for according to 00842.90.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

## SECTION 01013 - STORMWATER CONTROL, WATER QUALITY BIOSLOPE

Section 01013, which is not a Standard Specification, is included for this Project by Special Provision.

### Description

**01013.00 Scope** - This Work consists of furnishing and installing a water quality bioslope as shown.

### Materials

**01013.10 Materials** - Furnish Material meeting the following requirements:

Drainage Geotextile, Type 1.....	02320
Facility Field Markers .....	00842.10
Granular Drain Backfill Material.....	00430.11
Shoulder Aggregate .....	02640.10
Subsurface Drain Pipe .....	00430.10

**01013.11 Ecology Mix** - Furnish an ecology mix composed of the following:

- 3/8" - No. 8 mineral Aggregate gradation meeting the requirements of Section 00680.
- Horticultural grade perlite in a pelletized or granular form, meeting the following gradation:

Sieve Size	Percent Passing (by Weight)
------------	-----------------------------

No. 4	99 - 100
No. 18	30 max
No. 30	10 max

- Agricultural grade dolomite lime in a pelletized or granular form, meeting the following gradation:

Sieve Size	Percent Passing (by Weight)
------------	-----------------------------

No. 8	80 min
No. 60	25 min

- Agricultural grade gypsum consisting of Calcium Sulfate ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) in a pelletized or granular form, meeting the following gradation:

Sieve Size	Percent Passing (by Weight)
------------	-----------------------------

1/4"	99 - 100
No. 20	20 max

Blend the mineral Aggregate, perlite, dolomite, and gypsum so that the mixture is composed of:

- 3 cubic yards of mineral Aggregate per 1 cubic yard of perlite
- 40 pounds of dolomite per 1 cubic yard of perlite
- 12 pounds of gypsum per 1 cubic yard of perlite

Mix the Aggregate, perlite, dolomite, and gypsum before delivery to the Project. Mix the Materials in the presence of the Engineer. Provide at least 5 Calendar Days' notice to the Engineer before beginning mixing.

### Construction

**01013.40 General** - Construct water quality bioslope facility as shown. Perform excavation and placement Work only when the facility area is dry. Do not stockpile excavated Material in the facility area.

**(a) Laying Pipe** - Lay the pipe according to Section 00445. Place pipe with perforations upslope.

**(b) Joining Pipe** - Fasten pipes together with coupling fittings or bands as specified for the type of pipe used. Cap the upstream end of the pipe.

**(c) Inspection and Repair** - Place the ecology mix only after the pipe is laid, joined, and inspected. Remove and reinstall or replace all pipe that is out of alignment, has settled, or is damaged at no additional cost to the Agency.

**(d) Compaction** - After placing the ecology mix and shoulder Aggregate, compact by saturating with water.

### Maintenance

**01013.70 Cleaning** - Remove all accumulated sediment and debris before completing the facility.

### Measurement

**01013.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

#### Bioslope A Quantities:

Item	Quantity
Excavation .....	283 Cu. Yd.
Mineral Aggregate .....	61 Cu. Yd.
Perlite .....	20 Cu. Yd.
Dolomite .....	809 Lbs.
Gypsum .....	243 Lbs.
Crushed Shoulder Aggregate.....	81 Cu. Yd.
Drainage Geotextile, Type 1 .....	1132 Sq. Yd.
Granular Drain Backfill .....	116 Cu. Yd.
Sanitary Cleanout .....	3 Each
6 Inch Subsurface Drain Pipe .....	728 Foot

#### Bioslope B Quantities:

Item	Quantity
Excavation .....	61 Cu. Yd.
Mineral Aggregate .....	13 Cu. Yd.
Perlite .....	4 Cu. Yd.
Dolomite .....	176 Lbs.
Gypsum .....	53 Lbs.
Crushed Shoulder Aggregate.....	18 Cu. Yd.
Drainage Geotextile, Type 1 .....	246 Sq. Yd.
Granular Drain Backfill .....	25 Cu. Yd.
Sanitary Cleanout .....	2 Each
6 Inch Subsurface Drain Pipe .....	158 Foot

#### Bioslope C Quantities:

Item	Quantity
Excavation .....	263 Cu. Yd.
Mineral Aggregate .....	56 Cu. Yd.
Perlite .....	19 Cu. Yd.
Dolomite .....	751 Lbs.
Gypsum .....	225 Lbs.
Crushed Shoulder Aggregate.....	75 Cu. Yd.
Drainage Geotextile, Type 1 .....	1052 Sq. Yd.
Granular Drain Backfill .....	108 Cu. Yd.
Sanitary Cleanout .....	3 Each
6 Inch Subsurface Drain Pipe .....	676 Foot

**Bioslope D Quantities:**

Item	Quantity
Excavation .....	404 Cu. Yd.
Mineral Aggregate .....	87 Cu. Yd.
Perlite .....	29 Cu. Yd.
Dolomite .....	1156 Lbs.
Gypsum .....	347 Lbs.
Crushed Shoulder Aggregate.....	116 Cu. Yd.
Drainage Geotextile, Type 1 .....	1618 Sq. Yd.
Granular Drain Backfill .....	166 Cu. Yd.
Sanitary Cleanout .....	5 Each
6 Inch Subsurface Drain Pipe .....	1040 Foot

**Bioslope E Quantities:**

Item	Quantity
Excavation .....	78 Cu. Yd.
Mineral Aggregate .....	17 Cu. Yd.
Perlite .....	6 Cu. Yd.
Dolomite .....	223 Lbs.
Gypsum .....	67 Lbs.
Crushed Shoulder Aggregate.....	22 Cu. Yd.
Drainage Geotextile, Type 1 .....	313 Sq. Yd.
Granular Drain Backfill .....	32 Cu. Yd.
Sanitary Cleanout .....	2 Each
6 Inch Subsurface Drain Pipe .....	201 Foot

**Bioslope F Quantities:**

Item	Quantity
Excavation .....	89 Cu. Yd.
Mineral Aggregate .....	19 Cu. Yd.
Perlite .....	6 Cu. Yd.
Dolomite .....	253 Lbs.
Gypsum .....	76 Lbs.
Crushed Shoulder Aggregate.....	25 Cu. Yd.
Drainage Geotextile, Type 1 .....	355 Sq. Yd.
Granular Drain Backfill .....	36 Cu. Yd.
Sanitary Cleanout .....	2 Each
6 Inch Subsurface Drain Pipe .....	228 Foot

**Bioslope G Quantities:**

Item	Quantity
Excavation .....	49 Cu. Yd.
Mineral Aggregate .....	10 Cu. Yd.

Perlite .....	3 Cu. Yd.
Dolomite .....	139 Lbs.
Gypsum .....	42 Lbs.
Crushed Shoulder Aggregate.....	14 Cu. Yd.
Drainage Geotextile, Type 1 .....	194 Sq. Yd.
Granular Drain Backfill .....	20 Cu. Yd.
Sanitary Cleanout .....	2 Each
6 Inch Subsurface Drain Pipe .....	125 Foot

### Payment

**01013.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Bioslope, \_\_\_\_\_".

The drainage facility identification number will be inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

### SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

**01030.13(f) Types of Seed Mixes** - Add the following to the end of this subsection:

Provide the following seed mix formulas:

- Temporary Seeding:**

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
Triticum aestivum x elytrigia elongata (Sterile wheat nurse crop)	36.0
Poa secunda (Sandberg Bluegrass)	3.0
Hordeum brachyantherum (Meadow Barley)	26.0
Bromus Carinatus (California Brome)	24.0
Festuca roemeri var. roemeri (Roemer's Fescue)	5.0
Trifolium repens (White Clover)	3.0

- Permanent Seeding, Mix No. 1 (Water Quality Swale Mix):**

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
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Triticum aestivum x elytrigia elongate (Sterile wheat nurse crop)	36.0
Elymus glaucus (Blue Wildrye)	24.0
Bromus carinatus (California Brome)	26.0
Agrostis exarata (Spike Bentgrass)	0.50
Deschampsia cespitosa (Tufted Hairgrass)	1.0
Symphyotrichum subspicatum (Western Aster)	0.5

- **Permanent, Seeding Mix No. 2 (Field Mix):**

<b>Botanical Name (Common Name)</b>	<b>PLS Specified Rate (lb/acre)</b>
Triticum aestivum x elytrigia elongate (Sterile wheat nurse crop)	36.0
Poa secunda (Sandberg Bluegrass)	2.0
Hordeum brachyantherum (Meadow Barley)	26.0
Bromus Carinatus (California Brome)	24.0
Festuca roemerii var. roemerii (Roemer's Fescue)	4.0
Sidalcea malviflora ssp. Virgata (Rose Checkermallow)	0.75
Asclepias speciosa (Showy Milkweed)	8.0
Eschscholzia californica (California Poppy)	1.75
Camassia quamash (Small Camas)	1.5
Gilia capitata (Blue Field Gilia)	0.5
Ranunculus occidentalis (Western Buttercup)	0.5
Prunella vulgaris v. lanceolata (Lance Self-heal)	0.75
Clarkia amoena (Farewell to Spring)	0.3
Achillea millefolium (Western Yarrow)	0.2

- **Permanent, Seeding Mix No. 3:**

<b>Botanical Name (Common Name)</b>	<b>PLS Specified Rate (lb/acre)</b>
Triticum aestivum x elytrigia elongate	36.0

(Sterile wheat nurse crop)  
*Lolium perenne* 'multiflorum'  
 (Annual Ryegrass) 11.0

- **Wetland Seeding:**

<b>Botanical Name (Common Name)</b>	<b>PLS Specified Rate (lb/acre)</b>
<i>Beckmannia syzigachne</i> (American sloughgrass)	3.0
<i>Carex obnupta</i> (Slough sedge)	8.0
<i>Glyceria occidentalis</i> (Western mannagrass)	17.0
<i>Juncus patens</i> (Spreading rush)	0.2

- **Lawn Seeding:**

<b>Name</b>	<b>PLS Specified Rate (lb/acre)</b>
Fine Fescue**	32.0
Perennial Ryegrass**	100.0
Kentucky Bluegrass**	16.0
Colonial Bentgrass**	4.0

\*\* Furnish strong growing, site appropriate, disease resistant varieties

**01030.15 (a) Hydromulch from Cellulose, Wood, or Straw Fiber** - Replace this subsection, except for the subsection number and title with the following:

High Performance - Flexible Growth Media (HP-FGM) that is comprised of thermally processed virgin wood fibers, wetting agents, crimped biodegradable interlocking fibers and micro-pore granules having the following characteristics:

Property	Test Method	Tested Value
Mass per unit area	ASTM D6566	≥11.6 oz./sq yd
Thickness	ASTM D6525	≥0.22"
Water Holding Capacity	ASTM6567	≥1700%
Cover Factor	Large Scale Testing	≤0.01
Vegetation establishment	ASTM D7322	≥ 800%
Functional Longevity	ASTM D5338	≤ 18 months

**01030.15 Mulch** - Add the following paragraphs and bullets to the end of this subsection:

Furnish straw mulch for all temporary roadside erosion control seeding, except hydromulch may be used under the following conditions:

- Spring planting west of the Cascades between March 1 and May 15.



- Slopes are steeper than 1V to 1.5H and longer than 16 feet.
- Residential or commercial sites with low erosion potential such as sidewalk, Median, or parking lot planter strips.

Projects that have variable slopes may include straw mulch and hydromulch when approved.

**01030.41 Area Preparation** – Replace the bullet that begins “Wetland Seeding...” with the following bullet:

- Wetland Seeding – Prepare areas for hand seeding or other means after removal of temporary access matting installed per the requirements of 00290.41. Rake areas by hand to roughen ground surface slightly and to loosen and lift any existing matted down vegetation by temporary access methods.

**01030.42 Weed Control** - Add the following paragraphs and bullets after the paragraph that begins "If a pesticide has been approved for..." and before subsection (a):

The Specified Weeds and plant species to be removed include the following:

All areas of ground disturbance within project limits that will be seeded or planted are included in the weed management area.

The Specified Weeds and plant species to be removed include the following:

- Reed Canarygrass (*Phalaris arundinacea*), Purple loosestrife (*Lythrum salicaria*), Himalayan blackberry (*Rubus discolor* or *R. procerus*) and Evergreen blackberry (*Rubus laciniatus*), Scotch broom (*Cytisus scoparius*), Hedge bindweed (*Calystegia sepium*), Giant hogweed (*Heracleum Mantegazzianum*), Canadian thistle (*Cirsium arvense*), Butterfly bush (*Buddleia* spp.), Common reed (*Phragmites australis*) and Japanese knotweed (*Polygonum cuspidatum*), English Ivy (*Hedera helix*).
- All Oregon Department of Agriculture List A & B noxious weeds not listed above.

Add the following subsection:

**01030.42(e) Herbicide Application** – Obtain written approval from the Engineer prior to application of herbicides in sensitive areas. Apply herbicides at the lowest effective label rates. Mix herbicides a minimum of 150 feet away from natural water bodies. Wash spray tanks a minimum of 300 feet from any natural water body. Utilize a non-hazardous indicator dye during herbicide applications within 100 feet of natural water bodies. Keep spray nozzles as low as possible and utilize the largest droplet size possible in order to minimize drift. Provide documentation of wind speed & direction, air temperature, ground temperature, and date of application to the Engineer within 5 Days of broadcast herbicide applications.

Do not apply herbicides during the following conditions:

- When Soil is saturated, except for Soil-activated herbicides.
- Within 48 hours prior to and during a forecasted rain event of sufficient severity as to cause surface runoff, except Soil-activated herbicides.
- When wind speeds exceed 10 miles per hour, or are less than 2 miles per hour.
- During temperature inversions.

- When ground temperatures exceed 80 degrees Fahrenheit.

Adhere to the adjuvant application limitations in Table 01030-2:

**Table 01030-2**

Adjuvant Type	Trade Name	Limitations
Surfactant	Agri-Dex	Do not apply within RWA
Surfactant	LI 700	Do not apply within RWA
Drift Retardant	41-A	Do not apply within RWA
Drift Retardant	Vale	Do not apply within 150 feet of natural water bodies

During herbicide application, adhere to the buffer distance requirements in Table 01030-3:

**Table 01030-3**

Herbicide	Application Buffer Width (feet)					
	Perennial Streams and Wetlands, and Intermittent Streams and Roadside Ditches with flowing or standing water present			Dry Intermittent Streams, Dry Intermittent Wetlands, Dry Roadside Ditches		
	Broadcast Spraying	Spot Spraying	Hand Selective	Broadcast Spraying	Spot Spraying	Hand Selective
Labeled for Aquatic Use						
aquatic glyphosate	100	waterline	waterline	50	none	none
aquatic imazapyr	100	15	waterline	50	none	none
aquatic triclopyr-TEA	<b>Not Allowed</b>	15	waterline	<b>Not Allowed</b>	none	none
Low Risk to Aquatic Organisms						
Imazapic	100	15	RWA boundary	50	none	none
Clopyralid	100	15	RWA boundary	50	none	none
metsulfuron-methyl	100	15	RWA boundary	50	none	none
Moderate Risk to Aquatic Organisms						
Imazapyr	100	50	RWA boundary	50	15	RWA Boundary
sulfometuron-methyl	100	50	5	50	15	RWA Boundary
Chlorsulfuron	100	50	RWA boundary	50	15	RWA Boundary
High Risk to Aquatic Organisms						
Picloram	100	50	50	100	50	50
Sethoxydim	100	50	50	100	50	50

**01030.90 Payment** - Add the following bullets at the end of the paragraph that begins "No separate or additional payment...":

- Providing and placement of Soil amendments.

- Providing water and watering for seeding establishment.

## **SECTION 01040 - PLANTING**

Comply with Section 01040 of the Standard Specifications modified as follows:

**01040.13(a)(1) Sampling** - Replace this subsection, except for the subsection number and title, with the following:

Perform Soil Tests in each of the following areas:

- Permanent seeding areas along Ehlen Road
- Permanent seeding areas between the Highway on and off ramps and the Highway
- Permanent seeding areas in the Highway Median
- Planting areas after Imported Topsoil has been spread where shown.

Take five samples from locations typical of conditions across each area for each Soil Test. For each Soil Test, mix the five samples into one test sample. Furnish Soil fertility test results that provide information on available nutrient content and fertility status of the Soil. Conduct sampling procedures according to the Oregon State University Extension Service handout EC 628, How to Take a Soil Sample... and Why.

**01040.14 Topsoil** - Add the following to the beginning of this subsection:

Import Topsoil per the requirements of section 01040.14 and 01040.14(b).

**01040.15 Soil Conditioners** – Add the following to the end of this subsection:

Provide fine compost Soil conditioner for lawn areas.

Provide written verification within 10 Calendar Days after the date of preconstruction conference that Compost Material meeting Specifications is secured by a supplier.

**01040.19(e) Availability** – Add the following to the end of this subsection:

When any specified plant species is not available, provide a proposed substitute at the time the availability submittal is made. The Engineer will respond within 21 Days to submittals.

**01040.20(e) Wood Chip Mulch** - Add the following to the end of this subsection:

Provide wood chip mulch in the following size range:

- Minimum 95% passing 2" sieve size
- Maximum 30% passing No. 4 sieve size

Handle and transport wood chips with Equipment that is clean with no traces of noxious weeds or invasive vegetation.

**01040.43(c) Hauling and Spreading** – Add the following to the end of this subsection:

Place Topsoil and prepare shrub and tree planting areas according to 01040.48(a) Method "A" (Cultivated Planting Areas, Non-lawn)

**01040.48(a) Method "A" (Cultivated Planting Areas, Non-lawn)** – Replace the paragraph that begins "Cultivate plant beds to a depth..." with the following paragraph:

Set Subgrade elevations to allow space for placement of imported Topsoil. Cultivate plant bed Subgrade areas to a depth of 6 inches. Provide and place a 12 inch depth of imported Topsoil in tree and shrub planting areas and a 6 inch depth of imported Topsoil where shown and as required in this section. Place Topsoil depths greater than 6 inches in Lifts no more than 6 inches in depth. Incorporate the first Lift of Topsoil with sub-soil to a depth of 8 inches and subsequent Lifts placed and lightly tamped between Lifts. After the Topsoil has been spread, rake up, remove, and dispose of all large clods, hard lumps, litter, and Rocks 2 inches in diameter and larger. In addition, add Soil amendments, Soil bio-amendments and fertilizers according to the Soil Test report recommendations into the top 12 inches of Topsoil.

**01040.48(c) Method "C" (Sod Lawn and Seeded Lawn Areas)** – Replace the Material application rates with the following:

Material	Rate (per 100 square yards)
Soil Conditioner	3 cubic yards
Fertilizer	10 pounds
Lime	40 pounds

**01040.48(d) Method "D" (Rough Areas Seeded for Revegetation or Erosion Control)** – Add the following to the beginning of this subsection:

Use method D for Permanent seeding areas where shown. Decompact compacted Soils by ripping to a depth of 24 inches in all areas where Soil is compacted including where found as an existing condition, or as a result of construction activities or as result of a compacted condition as result of removal of overburdening Soils. Till all areas to a depth of 6 inches.

**01040.49 General Planting** - Add the following four paragraphs to the beginning of this subsection:

In planting areas, locate trees at least 10 feet from the edge of plant beds, other trees, fences, and ditch bottoms, unless otherwise specified.

The planting design may be adjusted to fit site conditions, with prior Engineer approval. Verify Utility locations prior to planting. With Engineer's prior approval, adjust planting locations to avoid conflicts with Utilities. Verify with Engineer prior to planting to ensure that new trees are planted outside Clear Zone limits.

Adjust plant locations to avoid conflict with signs, sight lines, utility poles and lines, and other appurtenances. In case of conflict, defer to Engineer for placement.

Place plants and mass groups of plants for optimal survival. Layout shrubs in groupings of same species plant types ranging in number between 5 to 15 plants per each grouping.

**01040.53 (b)(2) Wood Chips** - Replace the paragraph the begins "Spread wood chips..." with the following paragraph:

Spread wood chips in planting areas shown to a nominal depth of 4 inches. Add 15 pounds of Ammonium Nitrate per 1,000 square feet to neutralize nitrogen loss. Move wood chip mulch away from plant stems and tree trunks to a distance not less than 4 inches.

**01040.71 Plant Care and Success Criteria** - Add the following to the end of this subsection:

The following watering frequencies are required:

- Conifer trees, water at a frequency of 1 time per week and 10 gallons per event.
- All shrubs, water at a frequency of 1 time per week 5 gallons per event.

**01040.90 Payment** - Add the following bullets at the end of the paragraph that begins "No separate or additional payment...":

- Providing and application of Ammonium Nitrate with wood chip mulch
- Providing water and watering for plant establishment.

## **SECTION 01050 - FENCES**

Comply with Section 01050 of the Standard Specifications.

## **SECTION 01091 - WATERWAY ENHANCEMENTS**

Section 01091, which is not a Standard Specification, is included in this Project by Special Provision.

### **Description**

**01091.00 Scope** - This Work consists of constructing waterway enhancements such as engineered streambed Material, and other types of waterway items as shown or directed.

**01091.05 Pre-Work Meeting** - Attend a pre-work meeting at the Project Site with the Engineer, at a mutually agreed upon time, at least 8 Calendar Days prior to implementation of any waterway enhancement Work. Required attendees include:

- Engineer
- Contractor
- Waterway Enhancement Subcontractors
- ODOT Region Environmental Coordinator
- ODOT Hydraulics Designer

The pre-work meeting agenda typically includes the methods of accomplishing all phases of the waterway enhancement Work, including:

- temporary water management (TWM)
- fish salvage plan and strategy
- environmental risks discussion
- turbidity monitoring
- energy dissipation
- dewatering and re-watering plan and strategy
- site clean-up expectations
- circumstances under which contacting the Engineer is required

Representatives from interested permitting agencies will be invited by the Agency.

### Materials

**01091.10 Material** - Furnish Materials meeting the following requirements:

Streambed Gravels are classified as follows:

- Streambed Sand
- Streambed sediment

Provide a streambed Material mix of the following streambed Gravels with the associated ratios:

#### Engineered Streambed Material:

Streambed sediment: 75% by volume  
Streambed Sand: 25% by volume

Thoroughly blend streambed Gravels before placement. Acceptance of the Engineered Streambed Material will be based upon visual inspection by the Engineer.

**(a) Loose Riprap** - Provide loose riprap meeting the requirements of Section 00390.

**(b) Engineered Streambed Material** - Provide uncrushed, free of deleterious Material, hard, durable Material that is well graded from the maximum size to the minimum size meeting the following test requirements for quality:

Aggregate Property	Test Method	Requirement
Degradation Factor	ODOT TM 208	15 min,
L.A. Wear, 500 Rev.	AASHTO T 96	50% max
Bulk Specific Gravity	ODOT TM 203	2.55 min.

- **Streambed Sand:** Grade Sand to meet the following requirements expressed as a percentage by weight:

Sieve	Percent Passing			
	Natural Sand		Manufactured Sand	
	Min.	Max.	Min.	Max.
No. 4	99	100	99	100
No. 8	90	100	90	100
No. 16	60	90	60	90
No. 30	35	70	35	70
No. 50	10	30	20	40
No. 100	0	5	10	25
No. 200	0	3	0	10

- **Streambed Sediment** - Grade streambed sediments according to the following requirements expressed as a percentage by weight:

Sieve Size	Percent Passing
2 1/2" square	100
2" square	65 - 100
1" square	50 - 85
U.S. No. 4	26 - 44
U.S. No. 40	16 max.
U.S. No. 200	5.0 - 9.0

(c) **Stone Embankment** - Provide stone embankment meeting the requirements of Section 00330.

### Construction

**01091.40 General** - Obtain all permits and perform Work in and around water according to Section 00290, Section 00245 and the following:

(c) **Loose Riprap** - Place loose riprap Material within the stream channel as shown or as directed.

(d) **Engineered Streambed Material** - Place engineered streambed Material in the stream channel as shown or directed. Place the streambed Material in lifts no thicker than 12 inches. Provide streambed Material in its final location with a well graded mix of streambed sediments and streambed Cobbles.

Construct streambed Material to ensure that low stream flows are conveyed above the finished channel. Pressure apply water to each placed layer to facilitate filling the interstitial voids of the streambed Materials with streambed Sand. The voids are satisfactorily filled when water equivalent to the flow rate of the stream does not go subsurface and there is visual acceptance by the Engineer. If water is not present in the stream, apply water to the stream channel for visual acceptance by the Engineer.

(e) **Streambed Sand** - Place streambed Sand in the streambed lifts as directed. Do not change the finished channel elevation or affect the channel shape as shown.

(f) **Stone Embankment** - Place stone embankment Material as shown or directed.

### Measurement

**01091.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

The estimated quantities of Materials required for streambed enhancement are:

Item	Quantity
Loose riprap, Class 50.....	23 cu. yd.
Engineered Streambed Materials .....	156 cu. yd.
Stone Embankment .....	1,345 cu. yd.

### Payment

**01091.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Streambed Enhancement".

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.



**SECTION 02001 - CONCRETE**

Comply with Section 02001 of the Standard Specifications modified as follows:

Add the following subsection:

**02001.15(c)(15) LWFA** - Submit most recent ASTM C330 test report.

Add the following subsection:

**02001.20(f) Internal Curing** - For HPC(IC) concrete, internally cure the mixture according to the following:

- Substitute 350 lbs (SSD) LWFA for standard Fine Aggregate.

Add the following subsection:

**02001.30(e)(2) Lightweight Fine Aggregate for Internal Curing** - Use lightweight Fine Aggregate (LWFA) according to ASTM C1761 for Internally Cured (IC) concrete. Provide a Test Report from within the last calendar year showing the product meets ASTM C330.

Maintain the LWFA at or above Saturated Surface Dry (SSD) condition by uniformly saturating and allowing drain down prior to batching and verify moisture condition by sampling and testing according to ODOT TM 249. Maintain the SSD condition during all batching operations.

**SECTION 02910 - SIGN MATERIALS**

Comply with Section 02910 of the Standard Specifications modified as follows:

**02910.70 Anti-Graffiti Coating for Signs:**

**(a) General** - Use anti-graffiti coating from the QPL. Apply anti-graffiti coating over both the background and legend sheeting, per the manufacturer's recommendation.

**(b) Acceptance** - Furnish a quality compliance certificate according to 00165.35, certifying that the anti-graffiti coating used is an acceptable product on the QPL.

\*\*\* END OF SPECIAL PROVISIONS \*\*\*

Training

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Training

**SECTION II. SCHEDULE OF ITEMS**

Payment for work done under this Contract will be made at the unit prices listed on the inserted sheet or sheets which follow. The quantities given are approximate only, and it is neither expressly nor by implication agreed that the actual amounts of work to be done and paid for will be in accord therewith.

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
SECTION 0001 TEMPORARY FEATURES AND APPURTENANCES					
0010	0100-0101000T TRAINING	HOUR	9,300.00	20.00	186,000.00
0020	0210-0100000A MOBILIZATION	LUMP SUM	ALL	5,328,118.79	5,328,118.79
0030	0221-0100000A TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LUMP SUM	ALL	1,350,000.00	1,350,000.00
0040	0222-0102000J TEMPORARY SIGNS	SQFT	5,000.00	25.00	125,000.00
0050	0222-0162000E SEQUENTIAL ARROW SIGNS	EACH	2.00	7,000.00	14,000.00
0060	0222-0164000E PORTABLE CHANGEABLE MESSAGE SIGNS	EACH	10.00	16,500.00	165,000.00
0070	0222-0167500E RADAR SPEED TRAILER	EACH	4.00	10,000.00	40,000.00
0080	0223-0168000T FLAGGERS	HOUR	2,500.00	68.90	172,250.00
0090	0223-0168100E FLAGGER STATION LIGHTING	EACH	6.00	3,540.00	21,240.00
0100	0223-0169000E TRAFFIC CONTROL SUPERVISOR	EACH	520.00	830.00	431,600.00
0110	0223-0169500T BPA SAFETY WATCHER	HOUR	400.00	131.00	52,400.00
0120	0224-0104000E TEMPORARY BARRICADES, TYPE II	EACH	40.00	91.50	3,660.00
0130	0224-0105000E TEMPORARY BARRICADES, TYPE III	EACH	60.00	286.00	17,160.00
0140	0224-0145000E TEMPORARY PLASTIC DRUMS	EACH	700.00	66.81	46,767.00

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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
0150	0225-0149000E TEMPORARY FLEXIBLE PAVEMENT MARKERS	EACH	6,000.00	2.30	13,800.00
0160	0225-0153000F TEMPORARY STRIPING	FOOT	215,000.00	0.21	45,150.00
0170	0225-0153100E TEMPORARY PAVEMENT LEGENDS	EACH	38.00	143.00	5,434.00
0180	0225-0153200J TEMPORARY PAVEMENT BARS	SQFT	600.00	6.85	4,110.00
0190	0225-0154000F STRIPE REMOVAL	FOOT	76,000.00	0.67	50,920.00
0200	0225-0155100J LEGEND REMOVAL	SQFT	480.00	9.15	4,392.00
0210	0225-0156000J BAR REMOVAL	SQFT	150.00	9.15	1,372.50
0220	0226-0126100F TEMPORARY BARRIER	FOOT	49,700.00	18.00	894,600.00
0230	0226-0133000E TEMPORARY IMPACT ATTENUATOR, SAND BARREL SYSTEM	EACH	4.00	2,500.00	10,000.00
0240	0226-0134000E TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM	EACH	20.00	1,000.00	20,000.00
0250	0226-0136000E MOVING TEMPORARY IMPACT ATTENUATORS, SAND BARREL SYSTEM	EACH	4.00	1,000.00	4,000.00
0260	0226-0137000E MOVING TEMPORARY IMPACT ATTENUATORS, NARROW SITE SYSTEM	EACH	9.00	1,000.00	9,000.00
0270	0226-0138000E TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED	EACH	5.00	18,000.00	90,000.00
0280	0226-0141100E REFLECTIVE BARRIER PANELS	EACH	4,000.00	20.00	80,000.00
0290	0226-0141300E REPAIR TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM	EACH	30.00	1.00	30.00



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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
0300	0226-0141400E REPAIR TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED	EACH	5.00	1.00	5.00
0310	0226-0141500E REPAIR TEMPORARY IMPACT ATTENUATOR, SAND MODULE	EACH	130.00	1.00	130.00
0320	0226-0141800F TEMPORARY GLARE SCREENS	FOOT	1,800.00	29.00	52,200.00
0330	0226-0141900F MOVING TEMPORARY GLARE SCREENS	FOOT	2,700.00	12.50	33,750.00
0340	0227-0157000A TEMPORARY ILLUMINATION	LUMP SUM	ALL	200,000.00	200,000.00
0350	0228-0141600F PEDESTRIAN CHANNELIZING DEVICES	FOOT	315.00	40.00	12,600.00
0360	0228-0167670E TEMPORARY CURB RAMP, CONSTRUCTED	EACH	2.00	3,000.00	6,000.00
0370	0230-0200000A CONSTRUCT AND REMOVE TEMPORARY ROADBED AND SURFACING	LUMP SUM	ALL	3,950,000.00	3,950,000.00
0380	0240-0100000A TEMPORARY DRAINAGE FACILITIES	LUMP SUM	ALL	300,000.00	300,000.00
0390	0245-0100000A TEMPORARY WATER MANAGEMENT FACILITY AT STATION "DW" 6+25	LUMP SUM	ALL	15,000.00	15,000.00
0400	0256-0109100A TEMPORARY RETAINING WALL A	LUMP SUM	ALL	5,000.00	5,000.00
0410	0256-0109100A TEMPORARY RETAINING WALL B	LUMP SUM	ALL	5,000.00	5,000.00
0420	0256-0109100A TEMPORARY RETAINING WALL C	LUMP SUM	ALL	5,000.00	5,000.00
0430	0256-0109100A TEMPORARY RETAINING WALL D	LUMP SUM	ALL	5,000.00	5,000.00
0440	0256-0109100A TEMPORARY RETAINING WALL E	LUMP SUM	ALL	5,000.00	5,000.00

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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
0450	0256-0109100A TEMPORARY RETAINING WALL F	LUMP SUM	ALL	5,000.00	5,000.00
0460	0280-0100000A EROSION CONTROL	LUMP SUM	ALL	25,000.00	25,000.00
0470	0280-0101000J PLASTIC SHEETING	SQYD	5,000.00	4.75	23,750.00
0480	0280-0104010R TEMPORARY MULCHING, HYDROMULCH	ACRE	9.00	2,000.00	18,000.00
0490	0280-0104020R TEMPORARY MULCHING, STRAW	ACRE	10.00	3,000.00	30,000.00
0500	0280-0105020J MATTING, TYPE B	SQYD	1,030.00	10.00	10,300.00
0510	0280-0106060E CHECK DAM, TYPE 6	EACH	166.00	175.00	29,050.00
0520	0280-0110010E CONSTRUCTION ENTRANCE, TYPE 1	EACH	7.00	4,500.00	31,500.00
0530	0280-0112500E CONCRETE WASHOUT FACILITY	EACH	1.00	5,000.00	5,000.00
0540	0280-0113000F SEDIMENT FENCE	FOOT	4,500.00	2.50	11,250.00
0550	0280-0114030E INLET PROTECTION, TYPE 3	EACH	130.00	150.00	19,500.00
0560	0280-0114040E INLET PROTECTION, TYPE 4	EACH	10.00	150.00	1,500.00
0570	0280-0114070E INLET PROTECTION, TYPE 7	EACH	17.00	150.00	2,550.00
0580	0280-0115030F SEDIMENT BARRIER, TYPE 3	FOOT	12,450.00	3.50	43,575.00
0590	0290-0100000A POLLUTION CONTROL PLAN	LUMP SUM	ALL	500.00	500.00

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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
0600	0290-0102000A WORK CONTAINMENT PLAN	LUMP SUM	ALL	500.00	500.00
0610	0290-0200000A TURBIDITY MONITORING	LUMP SUM	ALL	2,500.00	2,500.00
0620	0294-0100000A HEALTH AND SAFETY PLAN	LUMP SUM	ALL	1,500.00	1,500.00
0630	0294-0200010M CONTAMINATED SOIL DISPOSAL	TON	12,952.00	40.00	518,080.00
0640	0294-0700000E SOIL SAMPLE COLLECTION AND ANALYTICAL TESTING	EACH	3.00	4,500.00	13,500.00
0650	1999-9Z90000J CONSTRUCTION MATS	SQFT	4,500.00	10.00	45,000.00
SECTION 0002 ROADWORK					
0660	0305-0100000A CONSTRUCTION SURVEY WORK	LUMP SUM	ALL	500,000.00	500,000.00
0670	0310-0106000A REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL	375,000.00	375,000.00
0680	0320-0100000A CLEARING AND GRUBBING	LUMP SUM	ALL	375,000.00	375,000.00
0690	0330-0101000K DITCH EXCAVATION	CUYD	354.00	31.00	10,974.00
0700	0330-0105000K GENERAL EXCAVATION	CUYD	142,000.00	22.20	3,152,400.00
0710	0330-0132000K EXTRA FOR SELECTED GRANULAR BACKFILL MATERIAL	CUYD	1,950.00	69.00	134,550.00
0720	0344-0102000J TREATED SUBGRADE, 12 INCHES THICK	SQYD	93,500.00	6.50	607,750.00
0730	0350-0100000J DRAINAGE GEOTEXTILE, TYPE 1	SQYD	150.00	6.00	900.00

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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
0740	0350-0101000J DRAINAGE GEOTEXTILE, TYPE 2	SQYD	3,094.00	3.45	10,674.30
0750	0350-0105000J SUBGRADE GEOTEXTILE	SQYD	105,000.00	1.40	147,000.00
0760	0390-0105000K LOOSE RIPRAP, CLASS 50	CUYD	28.00	300.00	8,400.00
0770	0390-0129000K KEYED RIPRAP, CLASS 50	CUYD	23.00	300.00	6,900.00
0780	0390-0139000E RIPRAP BASINS	EACH	12.00	1,200.00	14,400.00
0790	1999-9Z90000I 18 INCH SUBGRADE/EMBANKMENT FOUNDATION STABILIZATION	SQYD	22,000.00	32.00	704,000.00
0800	1999-9Z90000I 90 INCH SUBGRADE/EMBANKMENT FOUNDATION STABILIZATION	SQYD	350.00	180.00	63,000.00
SECTION 0003 DRAINAGE AND SEWERS					
0810	0405-0106000K TRENCH FOUNDATION	CUYD	153.00	250.00	38,250.00
0820	0415-0100000F MAINLINE VIDEO INSPECTION	FOOT	22,000.00	8.15	179,300.00
0830	0430-0100060F 6 INCH DRAIN PIPE	FOOT	3,169.00	32.00	101,408.00
0840	0430-0101000E SUBSURFACE DRAIN OUTLETS	EACH	9.00	1,850.00	16,650.00
0850	0445-010012AF 12 INCH CULVERT PIPE, 5 FT DEPTH	FOOT	284.00	154.00	43,736.00
0860	0445-010012BF 12 INCH CULVERT PIPE, 10 FT DEPTH	FOOT	78.00	120.00	9,360.00
0870	0445-010018AF 18 INCH CULVERT PIPE, 5 FT DEPTH	FOOT	13.00	290.00	3,770.00



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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
0880	0445-0100940F 96 INCH CULVERT PIPE	FOOT	137.00	485.00	66,445.00
0890	0445-035006AF 6 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	220.00	80.00	17,600.00
0900	0445-035012AF 12 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	3,672.00	139.00	510,408.00
0910	0445-035012BF 12 INCH STORM SEWER PIPE, 10 FT DEPTH	FOOT	1,576.00	240.00	378,240.00
0920	0445-035012CF 12 INCH STORM SEWER PIPE, 20 FT DEPTH	FOOT	160.00	355.00	56,800.00
0930	0445-035018AF 18 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	262.00	255.00	66,810.00
0940	0445-035018BF 18 INCH STORM SEWER PIPE, 10 FT DEPTH	FOOT	301.00	290.00	87,290.00
0950	0445-035018CF 18 INCH STORM SEWER PIPE, 20 FT DEPTH	FOOT	158.00	400.00	63,200.00
0960	0445-035018DF 18 INCH STORM SEWER PIPE, OVER 20 FT DEPTH	FOOT	90.00	485.00	43,650.00
0970	0445-035024AF 24 INCH STORM SEWER PIPE, 5 FT DEPTH	FOOT	175.00	270.00	47,250.00
0980	0445-035024BF 24 INCH STORM SEWER PIPE, 10 FT DEPTH	FOOT	480.00	310.00	148,800.00
0990	0445-035030CF 30 INCH STORM SEWER PIPE, 20 FT DEPTH	FOOT	400.00	505.00	202,000.00
1000	0445-035030DF 30 INCH STORM SEWER PIPE, OVER 20 FT DEPTH	FOOT	453.00	540.00	244,620.00
1010	0445-0680000E SLIP JOINTS, 6 X 6 X 6 INCH	EACH	14.00	85.00	1,190.00

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## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1020	0445-0700120E SLOPED END SECTIONS, 12 INCH	EACH	16.00	200.00	3,200.00
1030	0445-0700180E SLOPED END SECTIONS, 18 INCH	EACH	2.00	200.00	400.00
1040	0445-0735010E CONCRETE PIPE ANCHORS	EACH	1.00	1,925.00	1,925.00
1050	0460-0100000J PAVED CULVERT END SLOPES	SQFT	700.00	40.00	28,000.00
1060	0470-0101000E CONCRETE STORM SEWER MANHOLES	EACH	9.00	6,600.00	59,400.00
1070	0470-0103000E CONCRETE MANHOLES, WITH INLET	EACH	18.00	6,700.00	120,600.00
1080	0470-0106000E CONCRETE MANHOLES, LARGE PRECAST	EACH	12.00	11,800.00	141,600.00
1090	0470-0110000E CONCRETE MANHOLES, WATER QUALITY	EACH	1.00	7,500.00	7,500.00
1100	0470-0307000E CONCRETE INLETS, TYPE CG-2	EACH	13.00	3,850.00	50,050.00
1110	0470-0311000E CONCRETE INLETS, TYPE D	EACH	12.00	3,900.00	46,800.00
1120	0470-0313000E CONCRETE INLETS, TYPE G-1	EACH	1.00	4,200.00	4,200.00
1130	0470-0315000E CONCRETE INLETS, TYPE G-2	EACH	17.00	3,900.00	66,300.00
1140	0470-0317000E CONCRETE INLETS, TYPE G-2M	EACH	1.00	5,000.00	5,000.00
1150	0470-0319000E CONCRETE INLETS, TYPE G-2MA	EACH	4.00	4,000.00	16,000.00
1160	0480-0100000F DRAINAGE CURBS	FOOT	230.00	45.00	10,350.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1170	0490-0104000E CONNECTION TO EXISTING STRUCTURES	EACH	8.00	2,250.00	18,000.00
1180	0490-0117000E FILLING ABANDONED STRUCTURES	EACH	16.00	2,700.00	43,200.00
1190	0490-0120000E MINOR ADJUSTMENT OF MANHOLES	EACH	7.00	1,500.00	10,500.00
1200	0490-0121000E MAJOR ADJUSTMENT OF MANHOLES	EACH	3.00	2,500.00	7,500.00
1210	0490-0123000E EXTRA FOR MANHOLES OVER EXISTING SEWERS	EACH	5.00	3,750.00	18,750.00
SECTION 0004 STRUCTURE NO. 24041					
1220	0501-0100000A BRIDGE REMOVAL WORK	LUMP SUM	ALL	350,000.00	350,000.00
1230	0510-0100000A SHORING, CRIBBING, AND COFFERDAMS	LUMP SUM	ALL	750,000.00	750,000.00
1240	0510-0101000A STRUCTURE EXCAVATION	LUMP SUM	ALL	225,000.00	225,000.00
1250	0510-0108000A GRANULAR STRUCTURE BACKFILL	LUMP SUM	ALL	55,000.00	55,000.00
1260	0520-0100000A FURNISH PILE DRIVING EQUIPMENT	LUMP SUM	ALL	75,000.00	75,000.00
1270	0520-0127000F FURNISH PP 16 X 0.5 STEEL PILES	FOOT	4,290.00	65.00	278,850.00
1280	0520-0141000F FURNISH PP 16 X 0.5 TEST PILES	FOOT	470.00	70.00	32,900.00
1290	0520-0312000E DRIVE PP 16 X 0.5 STEEL PILES	EACH	82.00	2,500.00	205,000.00
1300	0520-0325000E DRIVE TEST PILES	EACH	6.00	4,500.00	27,000.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1310	0520-0329000E PILE LOAD TEST (DYNAMIC)	EACH	6.00	5,000.00	30,000.00
1320	0520-0423000E PP 16 X 0.5 STEEL PILE SPLICES	EACH	2.00	2,500.00	5,000.00
1330	0530-0104000A REINFORCEMENT, GRADE 100	LUMP SUM	ALL	3,000.00	3,000.00
1340	0530-0104000A REINFORCEMENT, GRADE 60	LUMP SUM	ALL	250,000.00	250,000.00
1350	0530-0104000A REINFORCEMENT, GRADE 80	LUMP SUM	ALL	175,000.00	175,000.00
1360	0530-0104100A COATED REINFORCEMENT, GRADE 80	LUMP SUM	ALL	250,000.00	250,000.00
1370	0540-0102000A FOUNDATION CONCRETE, CLASS 4000	LUMP SUM	ALL	485,000.00	485,000.00
1380	0540-0203100A DECK CONCRETE, CLASS HPC4500	LUMP SUM	ALL	875,000.00	875,000.00
1390	0540-0302000A GENERAL STRUCTURAL CONCRETE, CLASS 4000	LUMP SUM	ALL	550,000.00	550,000.00
1400	0540-0401000J SAW CUT TEXTURING	SQYD	2,834.00	6.90	19,554.60
1410	0000-0100000A DELETED BID ITEM	LUMP SUM	ALL	0.00	0.00
1420	0545-0100100J REINFORCED CONCRETE BRIDGE APPROACH SLABS	SQYD	659.00	515.00	339,385.00
1430	0550-0142000F 33 INCH PRECAST PRESTRESSED BOX BEAMS	FOOT	3,444.00	725.00	2,496,900.00
1440	0564-0100000A FALL ARREST SYSTEM	LUMP SUM	ALL	20,000.00	20,000.00
1450	0582-0020000E BEARING DEVICES, 8 INCH WIDE, 42 INCH LONG, 2.25 INCH THICK	EACH	42.00	2,300.00	96,600.00



Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1460	0583-0202000F GRC CONDUIT SYSTEM, 1 INCH DIAMETER	FOOT	190.00	16.00	3,040.00
1470	0583-0202000F GRC CONDUIT SYSTEM, 3/4 INCH DIAMETER	FOOT	210.00	11.00	2,310.00
1480	0585-0200100A ASPHALTIC PLUG JOINT SEALS	LUMP SUM	ALL	23,500.00	23,500.00
1490	0587-0126100A TYPE "F" CONCRETE RAIL, 42 INCH	LUMP SUM	ALL	140,000.00	140,000.00
1500	0599-0100000J CONCRETE SLOPE PAVING	SQFT	6,060.00	19.10	115,746.00
1510	0599-0103000F SLOPE PAVING CURBS	FOOT	89.00	227.00	20,203.00
SECTION 0005 STRUCTION NO. 24239					
1520	0510-0101000A STRUCTURE EXCAVATION	LUMP SUM	ALL	50,000.00	50,000.00
1530	0530-0104000A REINFORCEMENT, GRADE 60	LUMP SUM	ALL	40,000.00	40,000.00
1540	0540-0301000A GENERAL STRUCTURAL CONCRETE, CLASS 3300	LUMP SUM	ALL	350,000.00	350,000.00
1550	0543-0100000J ARCHITECTURAL TREATMENT	SQYD	390.00	103.00	40,170.00
1560	0543-0200000A TEST PANELS	LUMP SUM	ALL	6,000.00	6,000.00
1570	0596-D001000F PREDRILLING AND ENCASING SOLDIER PILES	FOOT	1,673.00	140.00	234,220.00
1580	0596-D002000F W18 X 40 STEEL SOLDIER PILES	FOOT	1,157.00	42.00	48,594.00
1590	0596-D002000F W18 X 55 STEEL SOLDIER PILES	FOOT	473.00	55.00	26,015.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1600	0596-D003000J LAGGING	SQFT	3,200.00	17.50	56,000.00
1610	0596-D004000A WALL DRAINAGE AND FILTER SYSTEM	LUMP SUM	ALL	50,000.00	50,000.00

## SECTION 0006 STRUCTURE NO. 24308

1620	0596-A002000A RETAINING WALL, MSE	LUMP SUM	ALL	775,000.00	775,000.00
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## SECTION 0007 STRUCTURE NO. 24309

1630	0596-A002000A RETAINING WALL, MSE	LUMP SUM	ALL	925,000.00	925,000.00
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## SECTION 0008 STRUCTURE NO. 24316

1640	0330-0126000K STONE EMBANKMENT	CUYD	257.00	54.90	14,109.30
1650	0510-0101000A STRUCTURE EXCAVATION	LUMP SUM	ALL	29,400.00	29,400.00
1660	0510-0106000A GRANULAR WALL BACKFILL	LUMP SUM	ALL	11,500.00	11,500.00
1670	0510-0108000A GRANULAR STRUCTURE BACKFILL	LUMP SUM	ALL	41,000.00	41,000.00
1680	0530-0104000A REINFORCEMENT, GRADE 60	LUMP SUM	ALL	63,100.00	63,100.00
1690	0540-0302000A GENERAL STRUCTURAL CONCRETE, CLASS 4000	LUMP SUM	ALL	175,000.00	175,000.00

## SECTION 0009 BASES

1700	0620-0104000J COLD PLANE PAVEMENT REMOVAL, 0 - 2 INCHES DEEP	SQYD	12,000.00	3.65	43,800.00
1710	0620-0120000J COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP	SQYD	37,500.00	3.65	136,875.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1720	0620-0123000J COLD PLANE PAVEMENT REMOVAL, 4 INCHES DEEP	SQYD	2,800.00	7.85	21,980.00
1730	0641-0102000M AGGREGATE BASE	TON	85,500.00	32.14	2,747,970.00

## SECTION 0010 WEARING SURFACES

1740	0730-0100000M EMULSIFIED ASPHALT FOR TACK COAT	TON	80.00	0.01	0.80
1750	0745-0302000M LEVEL 3, 1/2 INCH ACP	TON	31,500.00	106.50	3,354,750.00
1760	0745-0331000M LEVEL 3, 1/2 INCH ACP IN LEVELING	TON	590.00	155.00	91,450.00
1770	0745-0402000M LEVEL 4, 1/2 INCH ACP	TON	21,000.00	116.00	2,436,000.00
1780	0745-0620000M PG 64-22 ASPHALT IN LEVEL 3, 1/2 INCH ACP	TON	2,000.00	0.01	20.00
1790	0745-0640100M PG 70-22ER ASPHALT IN LEVEL 4, 1/2 INCH ACP	TON	1,300.00	0.01	13.00
1800	0745-0900000E CORE CORRELATION OF NUCLEAR GAUGE READINGS	EACH	21.00	3,500.00	73,500.00
1810	0749-0100000E EXTRA FOR ASPHALT APPROACHES	EACH	10.00	3,500.00	35,000.00
1820	0755-0108000J CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 12 INCHES THICK	SQYD	16,500.00	132.00	2,178,000.00
1830	0755-0400000F TERMINAL EXPANSION JOINT	FOOT	156.00	250.00	39,000.00
1840	0759-0103000F CONCRETE CURBS, CURB AND GUTTER	FOOT	1,800.00	45.00	81,000.00
1850	0759-0106000F CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB	FOOT	4,800.00	27.00	129,600.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
1860	0759-0110000F CONCRETE CURBS, STANDARD CURB	FOOT	370.00	29.00	10,730.00
1870	0759-0118000F CONCRETE CURBS, MOUNTABLE CURB	FOOT	70.00	36.00	2,520.00
1880	0759-0122000J CONCRETE ISLANDS	SQFT	58,000.00	11.50	667,000.00
1890	0759-0126000J CONCRETE DRIVEWAYS	SQFT	480.00	16.25	7,800.00
1900	0759-0128000J CONCRETE WALKS	SQFT	15,500.00	11.75	182,125.00
1910	0759-0140000J 6 INCH CONCRETE SURFACING	SQFT	1,100.00	16.50	18,150.00
1920	0759-0154100E EXTRA FOR NEW CURB RAMPS	EACH	31.00	2,750.00	85,250.00
1930	0759-0510000J TRUNCATED DOMES ON NEW SURFACES	SQFT	398.00	35.00	13,930.00
1940	0759-0520000J TRUNCATED DOMES ON EXISTING SURFACES	SQFT	26.00	100.00	2,600.00
SECTION 0011 PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES					
1950	0810-0126000E GUARDRAIL TRANSITION	EACH	1.00	4,800.00	4,800.00
1960	0810-0128000E GUARDRAIL CONNECTIONS	EACH	1.00	1,200.00	1,200.00
1970	0810-0129000E GUARDRAIL TERMINALS, NON-FLARED	EACH	1.00	4,600.00	4,600.00
1980	0810-0131000E GUARDRAIL TERMINALS, NON-FLARED, TEST LEVEL 2	EACH	1.00	4,000.00	4,000.00
1990	0810-0132000E GUARDRAIL TERMINALS, FLARED, TEST LEVEL 2	EACH	1.00	3,800.00	3,800.00



Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
2000	0810-0132200E GUARDRAIL TERMINALS, DOWNSTREAM ANCHOR TERMINAL	EACH	1.00	2,300.00	2,300.00
2010	0810-0146100F MIDWEST GUARDRAIL SYSTEM, TYPE 2A	FOOT	1,125.00	38.00	42,750.00
2020	0810-0146100F MIDWEST GUARDRAIL SYSTEM, TYPE 3	FOOT	12.50	76.00	950.00
2030	0811-0101000F CABLE BARRIER, TEST LEVEL 3	FOOT	5,403.00	37.00	199,911.00
2040	0811-0103000E CABLE BARRIER TERMINALS	EACH	8.00	6,500.00	52,000.00
2050	0820-0100000F CONCRETE BARRIER	FOOT	1,837.00	133.00	244,321.00
2060	0820-0127000F CONCRETE BARRIER, TALL	FOOT	3,974.00	183.00	727,242.00
2070	0820-0400000F SECURING CONCRETE BARRIER	FOOT	4,257.00	39.20	166,874.40
2080	0820-0510000F REMOVE AND REINSTALL EXISTING CONCRETE BARRIER, TALL	FOOT	431.00	20.00	8,620.00
2090	0830-0123000E IMPACT ATTENUATOR, TYPE J	EACH	2.00	50,500.00	101,000.00
2100	0840-0100000E DELINEATORS, TYPE 1	EACH	220.00	80.00	17,600.00
2110	0840-0104200E DELINEATORS, TYPE 4 ALTERNATE 2	EACH	50.00	60.00	3,000.00
2120	0840-0105000E DELINEATORS, TYPE 5	EACH	160.00	20.00	3,200.00
2130	0840-0106000E MILEPOST MARKER POSTS	EACH	4.00	300.00	1,200.00
2140	0842-0101001E FACILITY FIELD MARKERS, TYPE S1 GREEN	EACH	7.00	75.00	525.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
2150	0842-0102001E FACILITY FIELD MARKERS, TYPE S1 RED	EACH	7.00	75.00	525.00
2160	0842-0103001E FACILITY FIELD MARKERS, TYPE S2	EACH	14.00	150.00	2,100.00
2170	0842-0104001E FACILITY FIELD MARKERS, TYPE S3	EACH	2.00	80.00	160.00
2180	0842-0401000E BRIDGE IDENTIFICATION MARKERS	EACH	2.00	250.00	500.00
2190	0855-0100100E MONO-DIRECTIONAL WHITE TYPE I MARKERS	EACH	140.00	8.25	1,155.00
2200	0855-0102100E BI-DIRECTIONAL YELLOW TYPE I MARKERS	EACH	320.00	8.50	2,720.00
2210	0855-0106100E MONO-DIRECTIONAL WHITE TYPE IAR MARKERS, RECESSED	EACH	620.00	16.50	10,230.00
2220	0856-0101000E PERMANENT SURFACE MOUNTED TUBULAR MARKERS	EACH	30.00	250.00	7,500.00
2230	0857-0101000L CONTINUOUS RUMBLE STRIPS	MILE	1.20	4,000.00	4,800.00
2240	0857-0101500L GAP PATTERN RUMBLE STRIPS	MILE	1.55	3,200.00	4,960.00
2250	0865-0116600F THERMOPLASTIC, EXTRUDED, SURFACE, PROFILED	FOOT	48,100.00	1.45	69,745.00
2260	0865-0207000F THERMOPLASTIC, WET WEATHER, GROOVED, NON-PROFILED	FOOT	38,000.00	2.50	95,000.00
2270	0867-0103000E PAVEMENT LEGEND, TYPE B: ARROWS	EACH	53.00	500.00	26,500.00
2280	0867-0145100J PAVEMENT BAR, TYPE B-HS	SQFT	1,600.00	13.50	21,600.00
2290	0867-0169000E PAVEMENT LEGEND, TYPE B: YIELD LINE TRIANGLE	EACH	20.00	85.00	1,700.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
SECTION 0012 PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS					
2300	0902-0101000E CROSSWALK CLOSURE SUPPORTS	EACH	10.00	1,250.00	12,500.00
2310	0905-0100000A REMOVE EXISTING SIGNS	LUMP SUM	ALL	20,000.00	20,000.00
2320	0905-0101000A REMOVE AND REINSTALL EXISTING SIGNS	LUMP SUM	ALL	10,000.00	10,000.00
2330	0910-0100000K WOOD SIGN POSTS	FBM	1,475.00	13.50	19,912.50
2340	0920-0100000A SIGN SUPPORT FOOTINGS	LUMP SUM	ALL	65,000.00	65,000.00
2350	0921-0501000F 60 INCH DIAMETER SIGN SUPPORT DRILLED SHAFT FOUNDATION	FOOT	22.00	1,500.00	33,000.00
2360	0930-0104000A MONOTUBE CANTILEVER SIGN STRUCTURES	LUMP SUM	ALL	90,000.00	90,000.00
2370	0930-0105000A BRIDGE STRUCTURE MOUNTS	LUMP SUM	ALL	80,000.00	80,000.00
2380	0930-0106000A EXIT NUMBER SIGN MOUNTS	LUMP SUM	ALL	750.00	750.00
2390	0930-0110000A SECONDARY SIGN MOUNTS	LUMP SUM	ALL	500.00	500.00
2400	0930-0111000A MULTI-POST BREAKAWAY SIGN SUPPORTS	LUMP SUM	ALL	18,500.00	18,500.00
2410	0930-0112000A TRIANGULAR BASE BREAKAWAY SIGN SUPPORTS	LUMP SUM	ALL	57,500.00	57,500.00
2420	0930-0114000A PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS	LUMP SUM	ALL	15,000.00	15,000.00
2430	0930-0117000A PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LUMP SUM	ALL	9,000.00	9,000.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
2440	0940-0201000J SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	560.00	30.00	16,800.00
2450	0940-0202000J SIGNS, STANDARD SHEETING, SHEET ALUMINUM	SQFT	910.00	20.00	18,200.00
2460	0940-0204100J SIGNS, WIDE ANGLE SHEETING, EXTRUDED ALUMINUM	SQFT	620.00	35.00	21,700.00
2470	0940-0205100J SIGNS, WIDE ANGLE SHEETING, SHEET ALUMINUM	SQFT	50.00	35.00	1,750.00
2480	0942-0100000E PERMANENT TYPE III BARRICADES	EACH	2.00	2,000.00	4,000.00
2490	0950-0101000A REMOVAL OF ELECTRICAL SYSTEMS	LUMP SUM	ALL	10,000.00	10,000.00
2500	0963-0101000F 36 INCH DIAMETER SIGNAL SUPPORT DRILLED SHAFT	FOOT	18.50	750.00	13,875.00
2510	0963-0102000F 42 INCH DIAMETER SIGNAL SUPPORT DRILLED SHAFT	FOOT	193.00	850.00	164,050.00
2520	0965-0100000A CAMERA POLES AND FOUNDATIONS	LUMP SUM	ALL	50,000.00	50,000.00
2530	0970-0100000A POLE FOUNDATIONS	LUMP SUM	ALL	100,000.00	100,000.00
2540	0970-0104000A LUMINAIRES, LAMPS, AND BALLASTS	LUMP SUM	ALL	30,000.00	30,000.00
2550	0970-0105000A SWITCHING, CONDUIT, AND WIRING	LUMP SUM	ALL	650,000.00	650,000.00
2560	0970-0200000A LIGHTING POLES AND ARMS	LUMP SUM	ALL	235,000.00	235,000.00
2570	0985-0110000A ELECTRICAL SYSTEMS INSTALLATION	LUMP SUM	ALL	115,000.00	115,000.00
2580	0987-0100000A TELECOMMUNICATIONS, MATERIAL	LUMP SUM	ALL	5,000.00	5,000.00



Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
2590	0987-0110000A TELECOMMUNICATIONS, INSTALLATION	LUMP SUM	ALL	125,000.00	125,000.00
2600	0990-0101000A TRAFFIC SIGNAL INSTALLATION, EHLEN RD AT BENTS RD	LUMP SUM	ALL	450,000.00	450,000.00
2610	0990-0101000A TRAFFIC SIGNAL INSTALLATION, I-5 NB RAMPS	LUMP SUM	ALL	325,000.00	325,000.00
2620	0990-0101000A TRAFFIC SIGNAL INSTALLATION, I-5 SB RAMPS	LUMP SUM	ALL	340,000.00	340,000.00
SECTION 0013 RIGHT-OF-WAY DEVELOPMENT AND CONTROL					
2630	1011-0100000A STORAGE POND, C	LUMP SUM	ALL	35,000.00	35,000.00
2640	1011-0100000A STORAGE POND, D00947	LUMP SUM	ALL	195,000.00	195,000.00
2650	1011-0100000A STORAGE POND, D01416	LUMP SUM	ALL	50,000.00	50,000.00
2660	1012-0100000A WATER QUALITY SWALE, A	LUMP SUM	ALL	11,000.00	11,000.00
2670	1012-0100000A WATER QUALITY SWALE, D00948	LUMP SUM	ALL	17,500.00	17,500.00
2680	1012-0100000A WATER QUALITY SWALE, D00949	LUMP SUM	ALL	25,000.00	25,000.00
2690	1012-0100000A WATER QUALITY SWALE, D00950	LUMP SUM	ALL	35,000.00	35,000.00
2700	1012-0100000A WATER QUALITY SWALE, D01415	LUMP SUM	ALL	12,500.00	12,500.00
2710	1012-0100000A WATER QUALITY SWALE, D01417	LUMP SUM	ALL	27,500.00	27,500.00
2720	1013-0100000A BIOSLOPE A	LUMP SUM	ALL	45,000.00	45,000.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
2730	1013-0100000A BIOSLOPE B	LUMP SUM	ALL	11,000.00	11,000.00
2740	1013-0100000A BIOSLOPE C	LUMP SUM	ALL	42,500.00	42,500.00
2750	1013-0100000A BIOSLOPE D	LUMP SUM	ALL	62,500.00	62,500.00
2760	1013-0100000A BIOSLOPE E	LUMP SUM	ALL	15,000.00	15,000.00
2770	1013-0100000A BIOSLOPE F	LUMP SUM	ALL	15,000.00	15,000.00
2780	1013-0100000A BIOSLOPE G	LUMP SUM	ALL	8,000.00	8,000.00
2790	1030-0101000R WEED CONTROL	ACRE	21.65	1,600.00	34,640.00
2800	1030-0103000R TEMPORARY SEEDING	ACRE	19.00	7,725.00	146,775.00
2810	1030-0109000R PERMANENT SEEDING, MIX NO. 1	ACRE	2.67	7,460.00	19,918.20
2820	1030-0110000R PERMANENT SEEDING, MIX NO. 2	ACRE	17.80	9,540.00	169,812.00
2830	1030-0111000R PERMANENT SEEDING, MIX NO. 3	ACRE	0.60	6,750.00	4,050.00
2840	1030-0113000R WETLAND SEEDING	ACRE	0.05	18,000.00	900.00
2850	1030-0138000J LAWN SEEDING	SQYD	2,443.00	4.85	11,848.55
2860	1040-0100000E SOIL TESTING	EACH	4.00	500.00	2,000.00
2870	1040-0101000K TOPSOIL	CUYD	637.00	90.00	57,330.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
2880	1040-0107000K SOIL CONDITIONER	CUYD	73.00	100.00	7,300.00
2890	1040-0110000E CONIFER TREES, 2 FT HEIGHT	EACH	82.00	55.00	4,510.00
2900	1040-0112000E CONIFER TREES, 4 FT HEIGHT	EACH	30.00	325.00	9,750.00
2910	1040-0148000E DECIDUOUS TREES, #2 CONTAINER	EACH	81.00	75.00	6,075.00
2920	1040-0153000E SHRUBS, #1 CONTAINER	EACH	486.00	15.00	7,290.00
2930	1040-0154000E SHRUBS, #2 CONTAINER	EACH	766.00	24.00	18,384.00
2940	1040-0193000K WOOD CHIP MULCH	CUYD	386.00	80.00	30,880.00
2950	1050-0104000F TYPE 2 FENCE	FOOT	3,670.00	17.50	64,225.00
2960	1050-0118000E 24 FOOT DOUBLE GATES	EACH	1.00	5,500.00	5,500.00
2970	1050-0119000E 28 FOOT DOUBLE GATES	EACH	1.00	5,500.00	5,500.00
2980	1050-0135000F CL-4 CHAIN LINK FENCE	FOOT	260.00	50.00	13,000.00
2990	1050-0135000F CL-4R CHAIN LINK FENCE	FOOT	543.00	65.00	35,295.00
3000	1091-0100000A STREAMBED ENHANCEMENT	LUMP SUM	ALL	115,000.00	115,000.00
SECTION 0014 ADDED BID ITEMS					
3010	0330-0126000K STONE EMBANKMENT	CUYD	520.00	60.00	31,200.00

Training

## SCHEDULE OF ITEMS

I-5: AURORA DONALD INTERCHANGE (EXIT 278) PHASE 2 (C15498)

HP CIVIL INC

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
3020	0543-0100000J ARCHITECTURAL TREATMENT STRUCTURE #24308	SQYD	241.00	22.00	5,302.00
3030	0543-0100000J ARCHITECTURAL TREATMENT STRUCTURE #24309	SQYD	326.00	22.00	7,172.00
3040	0298-0400000A ABANDON WATER WELLS	LUMP SUM	ALL	5,500.00	5,500.00

Total Bid: \$53,281,187.94



Training

## SECTION III. CONTRACT

THIS CONTRACT, made and entered into, in duplicate, this

APR 02 2024

by and between the State of Oregon, by and through its Transportation Commission and its Department of Transportation, hereinafter called "State", and HP Civil Inc., an Oregon corporation, authorized to do business in the State of Oregon, hereinafter called "Contractor",

## WITNESSETH:

That the said Contractor, in consideration of the sums to be paid by the State in the manner and at the time herein provided, and in consideration of the other covenants and agreements herein contained, hereby agrees to perform and complete the work herein described and provided for and to furnish all necessary machinery, tools, apparatus, equipment, supplies, materials and labor and do all things in accordance with the applicable Plans, the applicable Standard Specifications, the Special Provisions and other required provisions bound herewith or incorporated therein, and in accordance with such alterations or modifications of the same as may be made by the Engineer or the State, and according to such directions as may from time to time be made or given by the Engineer under the authority and within the meaning and purpose of this Contract. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the Contractor.

That the applicable Plans, the applicable Standard Specifications, the Special Provisions and other required provisions bound herewith or incorporated therein and the Schedule of Items bound herewith are hereby specifically referred to and by this reference made a part hereof, and shall by such reference have the same force and effect as though all of the same were fully written or inserted herein.

That the Contractor shall faithfully complete and perform all of the obligations of this Contract, and in particular shall promptly, as due, make payment of all just debts, dues, demands and obligations incurred in the performance of said Contract; and shall not permit any lien or claim to be filed or prosecuted against the State. It is expressly understood that the laws of the State of Oregon shall govern this Contract in all things.

In consideration of the faithful performance of all of the obligations, both general and special, herein set out, and in consideration of the faithful performance of the work as set forth in this Contract, the applicable Plans, Standard Specifications, Special Provisions, other required provisions, Schedule of Items, and all general and detailed Specifications and Plans which are a part hereof, and in accordance with the directions of the Engineer and to the Engineer's satisfaction, and, on Federal-Aid Projects, to the satisfaction of the Federal Highway Administration, or its authorized representative, in conformity with the requirements of the Federal-Aid Road Act and all amendments thereto, the State agrees to pay to the said Contractor the amount earned, as determined from the actual quantities of work performed and the prices and other bases of payment specified and taking into consideration any amounts that may be deductible under the terms of the Contract, and to make such payments in the manner and at the times provided in the applicable Standard Specifications or Special Provisions.

I-5: Aurora Donald Interchange (Exit 278) Phase 2, Contract No. 15498

IN WITNESS WHEREOF, the parties hereto have subscribed their names and affixed their respective official seals as of the date first above written.

The execution of this public improvement Contract is authorized by the Director of the Oregon Department of Transportation through duly adopted Delegation Orders and Letters of Authority.

Marie Wright  
Oregon Department of Transportation

APR 02 2024  
Date

Contractor: HP Civil Inc.  
Address: 8795 Aumsville Highway SE, Salem, Oregon 97317  
Phone: 503-769-2466  
Email: [estimating@hpcivil.com](mailto:estimating@hpcivil.com)

202060  
Oregon Construction Contractors Board  
Registration Number

02/18/26  
Expiration Date

By [Signature]  
Authorized Official Signature

03/18/2024  
Date

John A. J. Smith  
Printed Name

By [Signature]  
Authorized Official Signature

LARRY GESCHER  
Printed Name

I-5: Aurora Donald Interchange (Exit 278) Phase 2, Contract No. 15498

SECTION IV. PERFORMANCE BOND

Bond No. 2341999

KNOW ALL MEN BY THESE PRESENTS: That, HP Civil Inc., an Oregon corporation,

as principal, and

*Swiss Re Corporate Solutions America Insurance Corporation*

as Surety, are jointly and severally held and bound unto the State of Oregon, in the sum of

Fifty-three Million Two Hundred Eighty-one Thousand One Hundred Eighty-seven Dollars and Ninety-four Cents (\$53,281,187.94)

for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators and assigns or successors and assigns, firmly by these presents.

THE CONDITION OF THIS BOND IS SUCH

That, whereas the said principal herein has made and entered into a certain Contract, a copy of which is attached hereto, with the State of Oregon by and through its Transportation Commission and its Department of Transportation, which Contract, together with the applicable Plans, Standard Specifications, Special Provisions, and Schedule of Items, is by this reference made a part hereof, whereby the said principal agrees to do in accordance with the certain terms conditions, requirements, Plans and Specifications set out in said Contract and all authorized modifications of the Contract which increase the amount of the work and the amount of the Contract. Notice to the Surety of any of the immediately foregoing is waived.

NOW, THEREFORE, if the principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the said Contract, in all respects, and shall well and truly and fully do and perform all construction work (and design, if any) and all other work and matters and things by it undertaken to be performed under said Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, and shall indemnify and save harmless the State of Oregon, the Oregon Transportation Commission, the Oregon Department of Transportation and their respective members, officers, employees, and agents, against any direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the said Contract by the said Contractor or any subcontractors and shall in all respects perform said Contract according to applicable law, then this obligation is to be void, otherwise to remain to full force and effect.

I-5: Aurora Donald Interchange (Exit 278) Phase 2, Contract No. 15498

Nonpayment of the bond premium will not invalidate this bond nor shall the State of Oregon, by and through its Transportation Commission or its Department of Transportation, be obligated for the payment thereof.

Witness our hands this 18<sup>th</sup> day of March, 2024.

Contractor: HP Civil Inc.  
 Address: 8795 Aumsville Highway SE, Salem, Oregon 97317  
 Phone: 503-769-2466  
 Email: [estimating@hpcivil.com](mailto:estimating@hpcivil.com)

By [Signature]  
 Authorized Official Signature

By [Signature]  
 Authorized Official Signature

SWISS Re Corporate Solutions  
America Insurance Corporation  
 Surety

By [Signature]  
 Signature  
 Attorney in Fact

Tracy Stewart  
 Printed Name  
 Attorney in Fact  
 (A Power of Attorney for the Attorney in Fact  
 must be attached to this bond)

By [Signature]  
 Agent (Required) Tracy Stewart  
 Agent Phone Number: (503) 362-2711  
 Agent Email: tracye@gsadnwski.com

Surety's Seal  
 Must be affixed

[9]

I-5: Aurora Donald Interchange (Exit 278) Phase 2, Contract No. 15498

SECTION V. PAYMENT BOND

Bond No. 2346999

KNOW ALL MEN BY THESE PRESENTS: That, HP Civil Inc., an Oregon corporation.

as principal, and

*Smss Re Corporate Solutions America Insurance Corporation*

as Surety, are jointly and severally held and bound unto the State of Oregon, in the sum of

Fifty-three Million Two Hundred Eighty-one Thousand One Hundred Eighty-seven Dollars and Ninety-four Cents (\$53,281,187.94)

for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators and assigns or successors and assigns, firmly by these presents.

THE CONDITION OF THIS BOND IS SUCH

That, whereas the said principal herein has made and entered into a certain Contract, a copy of which is attached hereto, with the State of Oregon by and through its Transportation Commission and its Department of Transportation, which Contract, together with the applicable Plans, Standard Specifications, Special Provisions, and Schedule of Items, is by this reference made a part hereof, whereby the said principal agrees to do in accordance with the certain terms, conditions, requirements, Plans and Specifications set out in said Contract and authorized modifications of the Contract which increase the amount of the work and the amount of the Contract. Notice to the Surety of any of the immediately foregoing are waived.

NOW, THEREFORE, if the principal herein shall make payment promptly, as due to all subcontractors and to all persons supplying to the Contractor or any subcontractors, equipment, supplies, labor or materials for the prosecution of the work, or any part thereof, provided for in said Contract, and shall pay all contribution of amounts due its workers compensation carrier and the State Unemployment Compensation Trust Fund from such Contractor or subcontractors incurred in the performance of said Contract, and pay all sums of money withheld from the Contractor's employees and payable to the Revenue Department; and shall pay all other just debts, dues and demands incurred in the performance of the said Contract and shall pay the State of Oregon, by and through its Transportation Commission and its Department of Transportation, such damages as may accrue to the State under said Contract, then this obligation is to be void, otherwise to remain in full force and effect.

I-5: Aurora Donald Interchange (Exit 278) Phase 2, Contract No. 15498

Nonpayment of the bond premium will not invalidate this bond nor shall the State of Oregon, by and through its Transportation Commission and its Department of Transportation, be obligated for the payment thereof.

Witness our hands this 18<sup>th</sup> day of March, 2024.

Contractor: HP Civil Inc.  
 Address: 8795 Aumsville Highway SE, Salem, Oregon 97317  
 Phone: 503-769-2466  
 Email: estimating@hpcivil.com

By [Signature]  
 Authorized Official Signature

By [Signature]  
 Authorized Official Signature

Swiss Re Corporate Solutions  
American Insurance Corporation  
 Surety

By Tracy Stewart  
 Signature  
 Attorney in Fact

Tracy Stewart  
 Printed Name  
 Attorney in Fact  
 (A Power of Attorney for the Attorney in Fact  
 must be attached to this bond)

By Tracy Stewart  
 Agent (Required) Tracy Stewart  
 Agent Phone Number: (503) 362-2711  
 Agent Email: tracy@agsadowski.com

Surety's Seal  
 Must be affixed

I-5: Aurora Donald Interchange (Exit 278) Phase 2, Contract No. 15498

## SECTION VI. CERTIFICATION OF WORKERS' COMPENSATION COVERAGE

### OREGON TRANSPORTATION COMMISSION OREGON DEPARTMENT OF TRANSPORTATION

The Contractor, for the purposes of this Contract, hereby certifies that it is currently providing Oregon Workers' Compensation coverage for all its employees and will maintain coverage throughout the course of the Project through one of the following methods:

1. ☒ "Carrier-Insured Employer" (State Accident Insurance Fund Corp. or other authorized insurer)

Insurance Company Name SAIF

ID/Policy Number 787699

2. ☐ "Self-Insured Employer" (Certified by the Workers' Compensation Division)

ID number as assigned by the  
Workers' Compensation Division \_\_\_\_\_

3. ☐ I am an independent contractor and will perform all work under this contract without the assistance of others.

In the event of cancellation or change in the information above, Contractor certifies that it will immediately notify the Oregon Department of Transportation of said cancellation or change and will obtain alternate coverage.

Dated 03/12/ 2024

[Signature]  
(Contractor's Signature)

### REMINDER - ADDITIONAL INFORMATION NEEDED

Has your insurance carrier filed with Oregon Workers' Compensation Division a guaranty contract as proof of coverage for your employees working in Oregon?

For filing information, contact the Workers' Compensation Division at Labor and Industries Building: Salem, OR 97301; Phone (503) 947-7810.





