

**SPECIAL PROVISIONS
FOR HIGHWAY CONSTRUCTION**



**OREGON DEPARTMENT OF TRANSPORTATION
SALEM, OREGON**



**GRADING, DRAINAGE, PAVING, SIGNING, ILLUMINATION, AND
ROADSIDE DEVELOPMENT
WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS PROJECT
LOWER COLUMBIA RIVER, NORTHEAST PORTLAND STADIUM
FREEWAY
MULTNOMAH COUNTY
APRIL 16, 2026**

PREFACE

General:

These Specifications, provisions, and Special Provisions are issued for the information of Bidders submitting Bids for the Project or Work described herein at the time and place specifically indicated herein, subject to such revision as may be made in accordance with provisions stated below, and will be incorporated in and made a part of any Contract for said Project or Work that may be awarded on the basis of a Bid received at said specifically indicated time and place.

Revisions Prior to Bid Closing:

All information herein is subject to revision by the Agency at any time prior to the time specified herein for the receiving of Bids. Prospective Bidders for the Work are responsible for checking the Agency website for Addenda. The website should be checked weekly until the week of Bid Closing and daily the week of Bid Closing.

Booklet May Be Retained by Bidder:

This booklet need not be returned to the Agency, either with the Bid or otherwise.

DESCRIPTION OF WORK
and
TIME AND PLACE OF RECEIVING BIDS

The work to which the Specifications, provisions, and Special Provisions contained herein apply, the time and place at which Bids for the Work are to be received, and other information pertinent to the Specifications and provisions, including any statements required to accompany the Bid, and their application are described and stated on the sheet or sheets inserted between printed pages [2] and [3] hereof.

DESCRIPTION OF WORK

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah 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 16th day of April 2026. Bids will be received by BJ McCartney, Construction Contracts Manager.

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

Submit paper bids to BJ McCartney, 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 #33
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 1st 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).

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:

Jamie Miller, PE, Project Manager, 3700 SE 92nd Ave, Portland 97266; or
Email BarlowCrew1823@odot.oregon.gov. All requests for information must be in writing with
reference to the Project name.

**Willamette River: Stormwater Source
Control Improvements Project**

TABLE OF CONTENTS FOR SPECIAL PROVISIONS

REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONTRACTS (FHWA-1273)	
ON-SITE WORKFORCE AFFIRMATIVE ACTION REQUIREMENTS FOR WOMEN AND MINORITIES ON FEDERAL-AID CONTRACTS	
EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS	
SUSPENSION OF DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS	
APPRENTICESHIP REQUIREMENTS	
OUTREACH, RECRUITMENT AND RETENTION	
TRIBAL EMPLOYMENT RIGHTS ORDINANCE	
INDIAN PREFERENCE IN EMPLOYMENT ON FEDERAL-AID HIGHWAY PROJECTS	
MEMORANDUM OF UNDERSTANDING	
INDIAN EMPLOYMENT GOALS AND COMPLIANCE FEE	
PROJECT WAGE RATES	
WORK TO BE DONE.....	1
SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS	2
SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES.....	4
SECTION 00130 - AWARD AND EXECUTION OF CONTRACT	6
SECTION 00140 - SCOPE OF WORK.....	6
SECTION 00150 - CONTROL OF WORK.....	7
SECTION 00160 - SOURCE OF MATERIALS	19
SECTION 00165 - QUALITY OF MATERIALS	23
SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES.....	24
SECTION 00180 - PROSECUTION AND PROGRESS.....	27
SECTION 00190 - MEASUREMENT OF PAY QUANTITIES	30
SECTION 00195 – PAYMENT	32
SECTION 00196 - PAYMENT FOR EXTRA WORK.....	38
SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK.....	38
SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS.....	39
SECTION 00210 – MOBILIZATION	40
SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC	40
SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL	45
SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS.....	47
SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES	49
SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES	50
SECTION 00225 - TEMPORARY PAVEMENT MARKINGS	50
SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS	50
SECTION 00228 - TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING	52
SECTION 00241 - TEMPORARY DEWATERING.....	52
SECTION 00270 - TEMPORARY FENCES	60
SECTION 00280 - EROSION AND SEDIMENT CONTROL.....	60
SECTION 00290 - ENVIRONMENTAL PROTECTION	64
SECTION 00294 - CONTAMINATED MEDIA.....	69
SECTION 00305 - CONSTRUCTION SURVEY WORK.....	76
SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS	76
SECTION 00320 - CLEARING AND GRUBBING.....	76
SECTION 00330 - EARTHWORK.....	76

**Willamette River: Stormwater Source
Control Improvements Project**

SECTION 00350 - GEOSYNTHETIC INSTALLATION	76
SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL	78
SECTION 00415 - VIDEO PIPE INSPECTION	78
SECTION 00440 - COMMERCIAL GRADE CONCRETE	80
SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE	80
SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS	84
SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES	87
SECTION 00495 - TRENCH RESURFACING	88
SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL	89
SECTION 00520 - DRIVEN PILES	94
SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE	95
SECTION 00535 - POST-INSTALLED ANCHOR SYSTEMS	97
SECTION 00540 - STRUCTURAL CONCRETE	98
SECTION 00563 – STAIRS, WALKWAY, & RAILING FOR DRAINAGE STRUCTURE ACCESS	107
SECTION 00581 - BRIDGE DRAINAGE SYSTEMS	109
SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS	110
SECTION 00730 - EMULSIFIED ASPHALT TACK COAT	111
SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE	111
SECTION 00748 - ASPHALT CONCRETE PAVEMENT REPAIR	112
SECTION 00754 - PLAIN CONCRETE PAVEMENT REPAIR	112
SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES	124
SECTION 00760 - UNIT PAVERS	125
SECTION 00765 - TACTILE SURFACE INDICATORS	127
SECTION 00820 - CONCRETE BARRIER	130
SECTION 00842 - FACILITY IDENTIFICATION MARKERS	130
SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS	130
SECTION 00855 - PAVEMENT MARKERS	131
SECTION 00857 - RUMBLE STRIPS	132
SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS – DURABLE	132
SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS	132
SECTION 00868 - COLORED LANE MARKINGS	132
SECTION 00902 - CROSSWALK CLOSURE SUPPORTS	133
SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS	133
SECTION 00920 - SIGN SUPPORT FOOTINGS	133
SECTION 00930 - METAL SIGN SUPPORTS	134
SECTION 00940 - SIGNS	135
SECTION 00950 - REMOVAL OF ELECTRICAL SYSTEMS	136
SECTION 00960 - COMMON PROVISIONS FOR ELECTRICAL SYSTEMS	136
SECTION 00970 - HIGHWAY ILLUMINATION	138
SECTION 01010 - STORMWATER CONTROL, WATER QUALITY STRUCTURES	142
SECTION 01030 - SEEDING	147
SECTION 01040 – PLANTING	151
SECTION 01050 - FENCES	155
SECTION 01069 - METAL HANDRAIL AND PEDESTRIAN FENCE	155
SECTION 01140 - POTABLE WATER PIPE AND FITTINGS	157
SECTION 01180 – UTILITY PUMP STATION	157

**Willamette River: Stormwater Source
Control Improvements Project**

SECTION 01191 – BOLTED STEEL TANKS 170

SECTION 02050 – CURING MATERIALS 180

SECTION 02320 - GEOSYNTHETICS 181

SECTION 02415 - PLASTIC PIPE 182

SECTION 02510 – REINFORCEMENT 183

SECTION 02560 - FASTENERS 183

SECTION 02630 – BASE AGGREGATE 185

SECTION 02910 - SIGN MATERIALS 186

BID SCHEDULE

Blank Page

SPECIFICATIONS and PROVISIONS

Subject to such revision as may be made in accordance with provisions stated in the Preface hereto, the Specifications and provisions stated on the sheets inserted between printed pages [4] and [5] hereof are additional required provisions and supplements, identified by this reference as a part of the Specifications, which will be incorporated in and made a part of any Contract that may be awarded for the Work on the basis of a Bid received at the time and places stated herein under the headings "Description of Work" and "Time and Places of Receiving Bids (Bid Closing)".

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. 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, 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.

* * * * *

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.

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

Timetable	Goal (Percent)
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.

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.

**SUSPENSION OF DISADVANTAGED BUSINESS ENTERPRISE (DBE)
REQUIREMENTS EFFECTIVE 10/03/2025**

In accordance with the Interim Final Rule, effective October 3, 2025 and published at 90 Fed Reg 47,969 (2025), modifying the certification, compliance and reporting requirements of the Disadvantaged Business Enterprise program (DBE IFR), ODOT's DBE requirements that were applicable to federally funded projects prior to the 10/03/2025 effective date of the rule are no longer in effect, and the associated DBE contractual requirements have been suspended pending implementation of the DBE IFR. Contractor will cooperate in processing any contractual revisions ODOT deems necessary or appropriate to effectuate the updated DBE Program requirements that may result from the DBE IFR implementation.

APPRENTICESHIP REQUIREMENTS

For projects with a contract price that exceeds \$3 million, the Contractor is subject to the apprenticeship requirements found in ORS 279C.533 and set forth herein.

I. Apprenticeship Goal

Contractor shall employ Apprentices to perform 12 percent of the Work hours that Contractor's employees in Apprenticeable Occupations perform under this Contract.

Contractor shall also require that each subcontractor with a subcontract of an estimated value of \$750,000 or more at the time of Agency's consent to the subcontract ("Covered Subcontractors") employ Apprentices to perform 12 percent of the Work hours that its employees in Apprenticeable Occupations perform under the subcontract.

Contractor has the primary responsibility to ensure the apprenticeship requirements set forth herein are met. Contractor shall ensure that the applicable subcontracts contain the appropriate clauses, obligating Subcontractor to the Apprenticeship goal as applicable; however, this shall not relieve the Contractor of the Contractor's primary responsibility.

Contractor and Covered Subcontractors shall use apprentices that the BOLI Apprenticeship & Training Division certifies are registered with the Oregon State Apprenticeship and Training Council in a Registered Apprenticeship Training Program. Contractor shall be an Oregon Bureau of Labor and Industries (BOLI) Registered Training Agent in accordance with OAR 839-011-0162 at time of time of contract execution. Reciprocal approval for federal purposes is accorded to contractors, apprentices, apprenticeship programs and standards that are registered with the USDOL Office of Apprenticeship ("OA") or registered to other State Apprenticeship Registration Agencies duly recognized by OA for federal public works projects in Oregon that are subject to the Davis-Bacon Act, in accordance with 29 CFR 29.5(b)(13) (see OAR 839-011-0162(6)). A Covered Subcontractor must be an approved training agent at the time of consent to subcontract unless it will not be performing work in an Apprenticeable Occupation.

Contractor and Covered Subcontractors shall pay an Apprentice for Work on the Project at the hourly rate to which the Apprentice is entitled under the applicable Apprenticeship Agreement or as otherwise specified by the Apprenticeship Training Program.

Apprenticeable Occupations are those designated by BOLI as available trades with apprenticeships. The list of those trades is available at: <https://www.oregon.gov/boli/apprenticeship/Pages/trades.aspx>

II. Reporting.

A. Required Forms. Contractor shall submit weekly the BOLI Enhanced WH-38 Form to BOLI with a copy to the Agency to report the extent of Contractor's and Covered Subcontractor's compliance with these Apprenticeship Requirements. Agency may disclose the reports as provided under ORS 279C.845(6).

At any time, BOLI may change the required form or method to identify, collect, and report the information required under this Subsection II. Contractor is under a continuing obligation to use the most current form required by BOLI for this purpose.

B. Failure to Report. Failure of Contractor to provide reports as described in Subsection A above may result in withholding of payment as provided in ORS 279C.845(7).

C. Obligation to Provide Additional Information. Upon request by Agency, and in a form and schedule specified by Agency, Contractor shall provide the following information:

- i. The name of or other identification for this Contract;
- ii. The city or county in which the public improvement is located;
- iii. A detailed accounting of:
 - a. The total number of hours of work that workers performed under this Contract and each Covered Subcontract;
 - b. The total number of hours of work that workers performed in each Apprenticeable Occupation for the Contract and each Covered Subcontract on the public improvement;
 - c. The total number of hours of work that Apprentices performed under this Contract and each Covered Subcontract; and
 - d. The total number of hours of work that Apprentices in each Apprenticeable Occupation performed under this Contract and each Covered Subcontract.
- iv. The total number of workers who performed construction work and the total numbers of minority individuals, women and veterans who performed construction work under this Contract. A report under this subparagraph must separately list for each worker the worker's race, ethnicity, gender, veteran status and, as applicable, trade, craft or job category.

D. Final Report. Upon request by Agency prior to final completion, Contractor shall provide Agency with a final report regarding its employment of Apprentices, which shall contain the following information for Contractor and each subcontractor subject to the Apprenticeship requirements:

- Total amount of Work hours that workers performed in each Apprenticeable Occupation
- Total amount of Work hours performed by Apprentices
- Number of hours subject to calculation of reduction in payment as described in Subsection II(C)(iii)(b)

III. Noncompliance and Reduction in Payment.

As required by ORS 279C.533, Agency will reduce payment due to Contractor under this Contract if Contractor does not meet the Apprenticeship Goal set forth in Section I. The reduction will be the equivalent of the difference between the total number of work hours that Apprentices in Apprenticeable Occupations should have performed to meet the apprenticeship requirements less the total number of work hours that Apprentices in Apprenticeable Occupations actually performed, multiplied by \$15 per hour.

Contractor may apply reduction in the amount due to a Covered Subcontractor if that Covered Subcontractor fails to meet the Apprenticeship Goal. In such case, Contractor must notify Agency and reduce its invoices to Agency accordingly. In no event shall Contractor charge Agency for the amount reduced from the Subcontract.

OUTREACH, RECRUITMENT AND RETENTION

For projects with a contract price that exceeds \$3 million, the Contractor is subject to the outreach, recruitment and retention requirements found in ORS 279C.533 and set forth herein.

Contractor shall comply fully with the provisions of ORS 279C.533. It is a material provision of this public improvement contract that Contractor establish and implement a plan for outreach to and recruitment and retention of women, minority individuals and veterans, with an aspirational target of having individuals in one or more of these groups to compose at least 15 percent of the total number of workers who perform work under this contract ("Outreach, Recruitment and Retention Plan") that meets the Plan Requirements set forth herein. Additionally, Contractor shall require any subcontractor with which the contractor has a subcontract with a contract price of \$750,000 or more ("Covered Subcontractors") to establish and implement an Outreach, Recruitment and Retention Plan for Subcontractor's outreach to and recruitment and retention of women, minority individuals and veterans, with an aspirational target of having individuals in one or more of these groups to compose at least 15 percent of the total number of workers who perform work under that subcontract.

Outreach, Recruitment and Retention Plans must require, at a minimum, that Contractor (or Covered Subcontractor):

- (i) 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;
- (ii) Follow upon 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 described in subsection (i);
- (iii) 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;
- (iv) 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 herein; and
- (v) 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 its Outreach, Recruitment, and Retention Plan ten (10) days prior to the preconstruction conference. Contractor shall submit the Outreach, Recruitment, and Retention Plans of Covered Subcontractors with Contractor's request for Agency's consent to subcontract. Contractor shall follow the reporting requirements Section II of the Apprenticeship Requirements Special Provision to satisfy the reporting requirements of 279C.533 as it relates to the Outreach, Recruitment and Retention Plan. Upon request of Agency, Contractor shall provide any other supporting information Agency deems necessary or appropriate to determine compliance with this provision and requirements of ORS 279C.533.

Contractor shall demonstrate adequate good faith efforts to comply with this provision. While the aspirational target is not a requirement for this Contract and is not binding on the Contractor, ODOT desires to encourage the highest possible participation of women, minority individuals, and veterans in the workforce. Neither the Contractor nor its Subcontractors are under any obligation to meet or achieve the aspirational targets set forth herein.



DATE ORIGINALLY ADOPTED: 11/06/13
SUBJECT: Employment
DATES AMENDED: 10/28/15; 05/04/16;
08/03/16; 01/13/21
RESOLUTIONS: 192-13; 188-15; 076-16; 118-
16; 001-21

**THE CONFEDERATED TRIBES OF THE
GRAND RONDE COMMUNITY OF OREGON**

**CHAPTER 604
TRIBAL EMPLOYMENT RIGHTS ORDINANCE**

TABLE OF CONTENTS

PART I – GENERAL PROVISIONS	3
(a) PREAMBLE	3
(b) PURPOSE	3
(c) DEFINITIONS	3
(d) JURISDICTION	5
(e) NOTIFICATION	5
PART II – TRIBAL EMPLOYMENT RIGHTS OFFICE	6
(a) ESTABLISHMENT OF COMMISSION	6
(b) DUTIES AND POWERS OF THE COMMISSION	7
(c) RECUSAL OF COMMISSION MEMBERS	7
(d) TERO DIRECTOR	8
PART III – TERO EMPLOYMENT AND CONTRACTING OBLIGATIONS	11
(a) APPLICATION	11
(b) TRIBAL AND INDIAN PREFERENCE IN EMPLOYMENT	11
(c) INDIAN PREFERENCE IN CONTRACTING	11
(d) PROHIBITED ACTIVITIES	12
(e) SPECIFIC PROVISIONS FOR CONSTRUCTION CONTRACTORS	12
(f) SPECIFIC PROVISIONS FOR TRIBAL EMPLOYERS	15
(g) UNIONS	17
PART IV – ODOT CONTRACTORS	18
(a) APPLICATION	18
(b) ODOT CONTRACTOR OBLIGATIONS	18
(c) COMPLIANCE AGREEMENT	18

PART V – ENFORCEMENT	20
(a) INVESTIGATIONS	20
(b) COMPLAINTS	20
(c) RESOLUTION OF VIOLATIONS	21
(d) PENALTIES/SANCTIONS.....	22
(e) APPEALS TO THE COMMISSION	23
(f) COMMISSION HEARINGS.....	23
(g) APPEALS TO TRIBAL COURT	24
(h) ENFORCEMENT ORDERS	24

**THE CONFEDERATED TRIBES OF THE
GRAND RONDE COMMUNITY OF OREGON**

**Chapter 604
Tribal Employment Rights Ordinance**

PART I – GENERAL PROVISIONS

(a) PREAMBLE. The Tribe has enacted this Ordinance pursuant to its inherent sovereign powers in order to promote the interests of self-governance and to ensure that Indian people have employment, training, contracting, subcontracting, and other business opportunities on and near the Grand Ronde Reservation.

(b) PURPOSE. This Ordinance shall be liberally construed to fulfill the following purposes:

(1) To provide Tribal laws and rules governing preference in employment and contracting within the Tribe’s jurisdiction;

(2) To increase employment of Grand Ronde Tribal Members and other Indians;

(3) To establish the Tribal Employments Rights Office (“TERO”) and empower the Tribal Employment Rights Commission (“Commission”) and TERO staff to enforce the laws and rules governing employment and contracting preference; and

(4) To provide a fair, enforceable, and effective system of priorities in contracting or subcontracting where a significant part of the work will be performed on or near the Tribe’s Reservation.

(c) DEFINITIONS. Terms used in this Ordinance are hereby defined as follows:

(1) Compliance Agreement. An agreement between a Construction Contractor or ODOT Contractor and the TERO, setting forth how the contractor will meet the Tribal and/or Indian preference in hiring, and if applicable, subcontracting goals and other obligations under this Ordinance.

(2) Construction Contractor. A Covered Employer, other than an Oregon Department of Transportation (“ODOT”) Contractor or Tribal Employer, who contracts or subcontracts to perform construction work on the Tribe’s Reservation.

(3) Covered Employer. An Employer subject to this Ordinance pursuant to Part I, Section (d) below.

(4) Employer. Any person, partnership, corporation, company, government, governmental enterprise, contractor, subcontractor or other entity that employs for wages or other remuneration two (2) or more individuals. The term shall not include state or

county governments or state or county governmental agencies, but shall include contractors and subcontractors of said governments or governmental agencies.

(5) Executive Level Position. A position that reports directly to the Tribal Council or to the Spirit Mountain Gaming, Inc. Board of Directors.

(6) Grand Ronde Owned Business. A business that is at least 51% or more owned, operated, and controlled by a Grand Ronde Tribal Member or the Grand Ronde Tribe.

(7) Grand Ronde Tribe or Tribe. The Confederated Tribes of the Grand Ronde Community of Oregon.

(8) Grand Ronde Tribal Member. An enrolled member of the Grand Ronde Tribe.

(9) His/Himself. Shall refer equally to “Her/Herself.” The use of masculine pronouns throughout this Ordinance is in the interest of simplicity, uniformity, and expediency only.

(10) Human Resources Department. The individual, staff, division, or unit of a Tribal Employer responsible for finding, screening, and recruiting job applicants, as well as administering personnel policies and employee benefits.

(11) Immediate Family. A brother, sister, child, mother, father, or spouse, regardless of whether they are step, half, or adoptive relations.

(12) Indian. A member of a federally recognized Indian Tribe.

(13) Indian Owned Business (“IOB”). A business that is at least 51% owned, operated and controlled by an Indian or Indian Tribe.

(14) Indian Tribe. Any federally recognized Indian Tribe.

(15) Local Resident. A person who lives on or within a reasonable daily commuting distance of the Tribe’s Reservation.

(16) ODOT Contractor. Any contractor engaged in specified highway construction projects under contract with ODOT subject to the Tribal/ODOT MOU.

(17) Qualified. The individual meets the minimum job qualification criteria set forth in the job description and in any written personnel requirements of the Covered Employer. An individual’s work performance for a Covered Employer, including any failure to comply with workplace policies, may be considered in assessing the individual’s qualifications. In general, only individuals with a history of chronic or serious violations of workplace policy (e.g., harassment, criminal activity) or repeated involuntary separations from employment should be disqualified under this provision. An individual should not be disqualified based on activities occurring more than seven years

before the date of interview unless those activities give rise to current workplace safety concerns. In the case of Executive Level Positions or licensed health providers, qualified shall also mean that the individual's work history and references demonstrate their competency to perform the job as reasonably determined by the Covered Employer. In the case of contracting, it shall also mean a responsive and responsible bidder.

(18) Registered Workers. Enrolled Grand Ronde Tribal Members and other Indians who are Local Residents and who are registered with the TERO.

(19) Tribal Council. The nine (9) member governing body of the Grand Ronde Tribe.

(20) Tribal Employer. Includes the Tribal government and all wholly owned corporations, companies, businesses, or other entities of the Tribe.

(21) Tribal/ODOT MOU. The Agreement between the Grand Ronde Tribe and ODOT providing preference in employment for Indians on ODOT specified transportation projects and authorizing TERO to impose a compliance fee on ODOT contractors on these projects.

(22) Tribe's Reservation. Includes the Grand Ronde Reservation and all other land within the jurisdiction of the Tribe.

(d) JURISDICTION. This Ordinance shall apply to all Employers who:

(1) Are located or operating a business on the Tribe's Reservation;

(2) Contract with the Tribe to perform work on the Tribe's Reservation; or

(3) Are otherwise within the jurisdiction of the Tribe, including ODOT Contractors as authorized by applicable federal law, this Ordinance, and the Tribal/ODOT MOU.

(e) NOTIFICATION. TERO staff shall make good faith efforts to educate all Covered Employers and the public about this Ordinance. All contracting agencies shall also make good faith efforts to notify contractors/subcontractors of their obligations under this Ordinance. Notwithstanding the above, it shall not be a defense to any enforcement action for a person or entity to allege that they have failed to receive notification of the requirements of this Ordinance.

PART II – TRIBAL EMPLOYMENT RIGHTS OFFICE

(a) **ESTABLISHMENT OF COMMISSION.** The Tribal Employment Rights Commission is hereby established as the regulatory body charged with enforcement of the provisions set forth in this Ordinance. The Commission will consist of at least three (3), but no more than five (5) individuals who are appointed, and may be removed with or without cause, by the Tribal Council. Commissioners shall be Public Officials subject to the Tribal Ethical Standards Ordinance, Tribal Code Chapter 107.

(1) At least three of the Commissioners shall have education or experience in one or more of the following areas:

- (A) Human Resources;
- (B) Tribal Employment Rights;
- (C) Construction Management;
- (D) Regulatory Enforcement; or
- (E) Auditing or Investigations.

(2) Commissioners shall serve for terms of three (3) years; provided that the appointments to the Commission shall be made in such a manner that their terms shall be staggered, so that the terms of no more than two (2) Commissioners shall terminate in any year.

(3) Three (3) Commissioners shall constitute a quorum to transact business. All decisions of the Commission shall be made by a majority vote.

(4) Current Human Resources Department employees are not eligible to serve on the Commission.

(5) Commissioners may receive a stipend for their services at a rate established by the Tribal Council. Commissioners shall be reimbursed for actual expenses incurred on Commission business, including necessary travel expenses in a manner consistent with applicable Tribal policies and procedures.

(6) The Commission shall meet at least quarterly.

(7) At its first meeting, and annually thereafter, the Commission shall select a Chair, Vice-Chair, and Secretary. The Chair shall preside at all meetings of the Commission and shall be authorized to sign required documents in accordance with the powers of the Commission.

(b) DUTIES AND POWERS OF THE COMMISSION. The Commission has the power, jurisdiction, responsibility, and authority to:

- (1) Take all appropriate actions necessary to implement the provisions of this Ordinance.
- (2) In consultation with the TERO Director perform the following:
 - (A) Make recommendations to Tribal Council on amendments to this Ordinance; and
 - (B) Formulate, adopt, amend, and rescind rules and guidelines consistent with and necessary to carry out the provisions of this Ordinance.
- (3) Establish a system for certifying firms as Indian Owned Businesses or Grand Ronde Owned Businesses.
- (4) Hold public hearings on matters covered by this Ordinance.
- (5) Assist in presentations to the public on Indian employment and contracting preference requirements.
- (6) Issue notices to appear and order relief or sanctions that are necessary and appropriate to enforce this Ordinance.
- (7) Review and recommend the annual TERO budget prepared by the TERO Director for approval.
- (8) Consult with the Tribal Attorney's Office on legal questions, appeals, and rule-making.

(c) RECUSAL OF COMMISSION MEMBERS.

- (1) No member of the Commission shall participate in any action or decision by the Commission directly involving himself, a member of his Immediate Family or any person, business, or other entity of which he or a member of his Immediate Family is an employee, has a substantial ownership interest, or with which he or a member of his Immediate Family has a contractual relationship.
- (2) No member of the Commission shall have contact with a Complainant (as that term is defined in Part V, Section (b)(1)) regarding the specifics of a complaint prior to a Commission hearing or decision on the complaint. In the event of such contact, the Commissioner shall recuse himself from participating in any hearing and decision on the complaint.

(3) A Commissioner shall recuse himself and decline to participate in any action or decision when the Commissioner, in his discretion, believes that:

(A) He cannot act fairly or without bias; or

(B) There is or may be a perception that they cannot act fairly or without bias.

(4) If a Commissioner does not voluntarily recuse himself or decline to participate in an action or decision of the Commission when required by Part II, Sections (c)(1)-(3) above, and the Commission determines, after hearing any arguments for and/or against recusal, that recusal is appropriate and necessary to preserve the integrity and fairness of the process, the Commissioner may be disqualified from participating in the action or decision by a majority vote of the remaining Commissioners.

(5) Nothing in this Ordinance shall be deemed to prevent a Commissioner from entering into a contractual relationship or business relationship with the Tribe, provided that such relationship does not violate the terms of this Ordinance or any Commission policies and procedures, and that the Commissioner has disclosed the nature of the relationship to the Commission. If a Commissioner has an employment or ownership interest in a business that bids on, or contracts to perform, construction work on the Tribe's Reservation, then the following shall apply: (1) the Commissioner shall be prohibited from viewing any documents for the construction work that are not generally available to all bidders; (2) the Commissioner shall not directly or indirectly participate in the negotiation of any compliance agreement with TERO staff for the construction work; and (3) the Commissioner shall be recused from participating in any Commission review of matters arising out of or related to the construction work.

(d) TERO DIRECTOR.

(1) The Tribe shall, with input from the Commission, hire a Director of the TERO, who shall be an employee of the Tribe and, subject to the direction of the Commission, be responsible for administering the provisions of this Ordinance, including implementing and enforcing rules and regulations promulgated by the Commission. The TERO Director shall be responsible for the development and day-to-day management of the TERO Program and the Program budget. The TERO Director shall also provide direction, leadership, and management of TERO staff. The TERO Director shall be subject to administrative supervision by the Chief of Staff, or in his/her absence the General Manager, but only with regard to compliance with Tribal policies including without limitation, all personnel, finance, travel, and procurement policies. The Commission shall be responsible for review and evaluation of the TERO Director's job performance, but may seek input from the General Manager.

(2) The authority and duties of the TERO Director, or his designee, shall include, but are not limited to, the following:

- (A) Implement and enforce the provisions of this Ordinance, as well as any properly adopted rules, regulations, or policies promulgated by the Commission.
- (B) Hire and manage staff, administer the TERO budget, and expend designated funds from the approved TERO budget.
- (C) Recommend regulations, amendments, and agreements to the Commission.
- (D) Establish Construction Contractor and ODOT Contractor record keeping requirements.
- (E) Enter Compliance Agreements with Construction Contractors and ODOT Contractors.
- (F) Investigate and process complaints alleging violations of this Ordinance.
- (G) Impose penalties or recommend remedies, as applicable, for violations of this Ordinance or any regulations adopted hereunder.
- (H) Represent the TERO at Tribal Council meetings, Commission hearings, and Tribal Court proceedings.
- (I) Coordinate and provide reports for Commission meetings.
- (J) For purposes of Compliance Agreements, negotiate workforce requirements that reflect the available labor pool and the TERO fee payment schedule, if applicable, with Construction Contractors and ODOT Contractors. The TERO Director shall consult with the Tribe's Project Manager regarding workforce requirements prior to negotiating or specifying the number of Registered Workers required on Tribal construction projects.
- (K) Work cooperatively with Tribal programs, including, but not limited to, any Tribal Career Development Programs to provide education, training, and other support programs for Tribal/Indian workers to assist them in acquiring and retaining employment.
- (L) Certify Grand Ronde Owned or Indian Owned Businesses.
- (M) Maintain a list of Grand Ronde Tribal Members and Indians who are Local Residents available for employment, and assist such persons with job placement.
- (N) Ensure compliance with the quarterly reporting requirements set forth in the Tribal/ODOT MOU.

(O) Conduct Certification Workshops for ODOT Contractors bidding on Tribal/ODOT MOU projects.

PART III – TERO EMPLOYMENT AND CONTRACTING OBLIGATIONS

(a) **APPLICATION.** Unless expressly stated otherwise, the provisions of this Part III shall not apply to ODOT Contractors

(b) **TRIBAL AND INDIAN PREFERENCE IN EMPLOYMENT.**

(1) **Covered Employers.** Unless prohibited by applicable federal law, all Covered Employers shall give preference to Qualified Grand Ronde Tribal Members in hiring, promotion, retention, training and all other aspects of employment and shall comply with the terms of this Ordinance and any applicable rules or policies adopted by the Commission.

(2) **Federal Law Requirements.** Where prohibited by applicable federal law, the preference set forth in Part III, Section (b)(1) above shall not apply. In such case, and to the extent permitted by federal law, Indian preference shall be given, with the first preference given to Qualified Indians who are Local Residents.

(3) **Job Qualifications and Requirements.** All Covered Employers shall establish written job requirements for each employment position in their work force. A Covered Employer shall not create excessive and unnecessary job skill qualification criteria or personnel requirements that are not required by business necessity and which serve as barriers to the preference objectives of this Ordinance. Written job requirements shall be provided to the TERO Director at least three (3) business days prior to posting a position. The TERO Director may grant a waiver of this requirement where the Covered Employer shows that the time period would result in an undue burden to the Covered Employer's business.

(4) **Layoffs.** Unless prohibited by applicable federal law, in the event of a reduction-in-force affecting a certain class of positions, Covered Employers shall retain Qualified Grand Ronde Tribal Members, until all non-Grand Ronde Tribal Members in that class of positions are laid off.

(c) **INDIAN PREFERENCE IN CONTRACTING.**

(1) All Covered Employers advertising or soliciting responses or bids for projects or contracts, including contracts to provide materials, goods, or services, shall include IOBs in the relevant trade who are certified and registered with the TERO, in the solicitation process. Unless prohibited by federal law, preference in the selection shall be given to qualified IOBs who submit responsive bids within five percent (5%) of the low bid as follows:

Order of Preference	Business
1 st Preference	Certified Grand Ronde Owned Businesses who submit a bid where 50% or more of the bid amount is for work to

	be performed by Grand Ronde Owned Business certified by TERO.
2 nd Preference	Certified Grand Ronde Owned Businesses.
3 rd Preference	IOB certified by TERO who submits a bid where 50% or more of the bid amount is for work that will be performed by Grand Ronde Owned Businesses certified by TERO.
4 th Preference	IOBs certified by TERO.
5 th Preference	Non-IOB who submits a bid where 50% or more of the work will be performed by Grand Ronde Owned Business certified by TERO.

(2) Where federal law prohibits Tribal preference in contracting, preference in contractor selection shall be given to IOBs as authorized by federal law.

(3) The preference requirements contained in this Ordinance shall be binding on all contractors and subcontractors of Covered Employers, regardless of tier, and shall be deemed part of all contract and subcontract specifications. The Covered Employer shall have the initial and primary responsibility for insuring all contractors and subcontractors comply with these requirements.

(4) The TERO Director shall maintain a list of Grand Ronde Owned Businesses and IOBs which shall be supplied to Covered Employers for their use.

(d) PROHIBITED ACTIVITIES. The following is a non-exhaustive list of prohibited activities. Covered Employers who engage in prohibited activities or otherwise violate this Ordinance shall be subject to penalties in accordance with Part V, Section (d) of this Ordinance.

(1) Submitting false or fraudulent information to TERO;

(2) Operating as a front or pass through company; or

(3) Preventing or interfering with a Covered Employer's compliance with this Ordinance.

(e) SPECIFIC PROVISIONS FOR CONSTRUCTION CONTRACTORS. The following provisions set forth additional requirements for Construction Contractors.

(1) Workforce.

(A) The TERO may specify the number of Grand Ronde Tribal Members or, when only Indian preference is applicable, the number of Indians a Construction Contractor shall hire by craft and skill level on a specific project. The TERO shall establish a TERO workforce utilization goal percentage on a project-by-project basis on each construction project. Contractor performance in attainment

of the goal will be monitored through regular submittals of payrolls and contractors may be directed to take corrective action to meet the set goal. A violation of the Ordinance may be issued and a penalty assessed if the contractor is unresponsive to corrective action.

(B) Construction Contractors must contact the TERO at least seventy-two (72) hours prior to commencing work to negotiate the workforce requirements and to provide the TERO an opportunity to locate and refer Qualified Registered Workers available to work. If no Qualified Registered Workers are available for work, the Construction Contractor may recruit from other resources.

(C) A contractor shall not create excessive or unnecessary job skill qualifications on TERO referred workers. If qualifications for a position require further review, a contractor shall submit any requested job descriptions to TERO. Upon review, if the skill qualifications appear to be excessive or unnecessary, the contractor shall submit a justification to TERO.

(2) Core Crew. Construction Contractors may, if necessary, have a core crew on a construction project which is exempt from the Tribal/Indian preference requirements of this Ordinance. A core crew is comprised of permanent and key employees. Any Indian already employed by a Construction Contractor shall be considered part of the Core Crew, but shall not be counted for purposes of calculating the maximum percentage of key and permanent employees.

(A) Prior to commencing work on or near the Tribe's Reservation, all Construction Contractors shall provide the TERO Director with a list of all permanent and key employees.

(B) A permanent employee is one who is and has been continuously employed by the Construction Contractor for at least one (1) year in a regular position of the employer or as an owner of the firm.

(C) A key employee is one who is in a top position or performs a critical function such that the Construction Contractor would likely risk financial damage or loss if that task were assigned to a person unknown to the employer.

(D) Permanent and key employees shall not exceed fifty percent (50%) of the workforce unless the total number of employees needed for the job is less than ten (10). The TERO Director may, at his or her discretion, grant an employer a larger core crew upon satisfactory demonstration by the employer that a larger core crew is necessary due to unique or specialized positions that are essential for the operation of business or performance of the work.

(3) Construction Wage Scale. All Construction Contractors shall compensate all Tribal/Indian workers at a rate consistent with the wages paid to their non-Indian employees performing the same jobs and shall ensure that Tribal/Indian workers are

afforded an opportunity to work as many hours as those non-Indian employees for the full term of the project. If the Construction Contractor is a signatory to a Construction Trade Union, the current pay scale and benefits of that trade will be paid. If Tribally determined wage rates or Davis Bacon wage rates are required by federal law, those wages shall be paid.

(4) Compliance Agreement.

(A) All Construction Contractors shall, no less than seventy-two (72) hours prior to commencing any work, prepare a plan acceptable to the TERO Director setting out how the Construction Contractor will comply with the requirements of this Ordinance regarding Indian employment and contract preference. A compliance agreement shall be used to monitor compliance with this Ordinance. Compliance agreement requirements and goals may be tailored to the individual circumstances of the Construction Contractor in order to maximize Indian employment and IOB contracting.

(B) A compliance agreement shall constitute a binding agreement; the terms of which shall be fully enforceable by the TERO. Failure to obtain or adhere to the terms of an approved compliance agreement, or supplying false information to the TERO, shall subject the non-complying party to monetary penalties of up to \$1,000 per violation, per day. Penalties assessed may be appealed to the Commission. Construction Contractors engaged in work without an approved compliance agreement will be required to stop work until an acceptable plan for implementing their obligations has been submitted to and approved by the TERO.

(C) Nothing in this Ordinance shall be construed to prohibit a Tribal Employer from requiring a Construction Contractor to submit a proposed Compliance Agreement as part of a response to a solicitation for bids or request for proposals.

(5) Compliance Monitoring. Upon the request of the TERO, all Construction Contractors shall submit reports and other information, including but not limited to contract documents and certified payroll and personnel records, as requested. On Tribal construction projects, contractors shall be required to regularly submit payroll information of all workers on the project to the TERO to determine compliance to the set workforce utilization goal. Payroll information will be due at the time the contractor issues their payroll. Contractors shall allow for onsite monitoring by TERO staff of construction projects for compliance and to confirm workforce utilization requirements.

(6) TERO Fee.

(A) A TERO fee of 2.5% shall be assessed on projects or contracts with a total contract price of one hundred thousand dollars (\$100,000) or more.

(B) The general contractor on a project shall be responsible for paying the entire TERO fee on the project prior to commencing any work; provided

however, where good cause is shown, TERO may authorize installment payments to be paid over the course of the contract.

(C) The TERO may invoice the general contractor and payment will be due within fourteen (14) days from the date of invoice; provided, however that the fee shall be paid prior to commencement of any work and the absence of an invoice shall not relieve the general contractor of the obligation to pay the TERO fee.

(D) If for any reason the cost of a project increases or decreases, the general contractor shall notify TERO of this change, and any change in the TERO fee shall be assessed and paid or refunded as applicable.

(7) Discipline Determination. Construction Contractors shall make every effort to provide counseling and guidance to employees to correct work performance deficiencies prior to terminating an individual entitled to employment preference pursuant to this Ordinance. The TERO shall be notified prior to the termination of an assigned TERO worker.

(f) SPECIFIC PROVISIONS FOR TRIBAL EMPLOYERS. The following provisions set forth additional requirements specific to Tribal Employers.

(1) Employment Statistics Report. All Tribal Employers, through their respective Human Resources Departments, shall be required to track employees for retention purposes. Tribal Employers shall submit a quarterly report to the TERO for Commission review by the fifteenth (15th) day after the end of each calendar quarter. The report must contain the following employment statistics: number of employees by department; employment level and preference status of current employees, including contract employees; resignations; and terminations.

Months	Report Due
January-March	April 15
April-June	July 15
July-September	October 15
October-December	January 15

(2) Tribal Member Career Development.

(A) *On the Job Training.* Tribal Employers may be required by the TERO to participate in on-the job training or mentor programs (including without limitation, job shadowing) designed by the TERO (or any Tribal career development program recognized by the Tribe) to assist Grand Ronde Tribal Members to become qualified in various job classifications used by the employer.

(B) *Succession Planning.* Tribal Employers shall work cooperatively with TERO in assisting current Tribal employees who demonstrate interest in and the

potential to fill key leadership positions, in developing the necessary experience and education to fill such positions.

(3) Counseling and Support Programs. The TERO (or any Tribal career development program recognized by the Tribe) may establish counseling and other support programs to assist Grand Ronde Tribal Members in obtaining and retaining employment. Tribal Employers shall be required to cooperate with the TERO regarding such counseling and support programs.

(4) Employment Process.

(A) *Assessment of Minimum Qualifications.* The TERO Director or his/her designee shall review all minimum qualification assessments conducted for Tribal member job applicants before job interviews are scheduled. The TERO Director may require reassessment of any Tribal member that TERO believes has been incorrectly assessed as not meeting the minimum qualifications. If Human Resources and/or the hiring manager still screens out the Tribal member applicant after reassessment, they shall provide the TERO Director with a written explanation detailing the reasons the Tribal member was screened out. If within five (5) days of receiving the written explanation, the TERO Director and hiring manager are unable to reach an agreement as to whether the Tribal member meets minimum qualifications, the matter will be referred to the TERO Commission for review. The TERO Commission shall promptly review the matter and issue a determination. The Tribal Employer may not proceed with candidate screening or selection for the position pending TERO Commission review. The Commission's determination shall be final.

(B) *Conducting Interviews.* TERO shall be provided an opportunity to review proposed interview questions prior to job interviews for the purposes of confirming consistency with posted job requirements. Tribal members who are offered a job interview may request TERO staff be present for the interview. TERO's role during the interview will be solely as an observer of the process and to gather information about the Tribal member's interview performance for the purpose of providing feedback and coaching to the Tribal member. TERO shall not participate in the assessment of interviewees or in the selection of the successful candidate. However, TERO may, upon request of the interview panel, offer any additional information it may have about a candidate's qualifications.

(C) *Selection of Candidate for Hire.* Tribal Employers shall notify the TERO Director of all hiring decisions, Tribal and Non-Tribal, prior to extending an offer of employment to the selected candidate.

(D) *Retention.* Tribal Employers shall notify provide any Tribal member approaching separation of employment for attendance or performance issues with written notice of their opportunity to seek job training or other job assistance services from TERO.

(5) Promotions. A Tribal Employer may promote an employee, in good standing, to an open position within a department which is no more than two (2) salary grades higher than the employee's current position without advertising the position. Tribal Employers must consult with TERO prior to making such a promotion. A Tribal Employer shall not promote a non-Tribal member over an equally qualified Tribal member within the department.

(6) Prohibition Against Retaliation. It shall be a violation of this Ordinance for any Tribal Employer, Tribal Council member, or any appointed Board Member or Commissioner, to retaliate against a Tribal employee or Tribal job applicant as a result of their preference status under this Ordinance. Any individual who believes they have been retaliated against because of the preference afforded by this Ordinance may file a complaint with TERO. The TERO Director shall investigate the complaint and may issue a notice of violation to any employee determined to have retaliated against a Tribal member in violation of this Ordinance. The notice of violation may be appealed to the TERO Commission as provided in Section (e) below. An employee who is determined to have retaliated in violation of this Ordinance is subject to disciplinary action by their employer.

(g) UNIONS.

(1) Nothing herein shall constitute official recognition by the Tribe of any union or endorsement of any union activities. The unions will honor the Tribe's sovereign authority and recognize the Tribe's jurisdiction to regulate employment and contracting activities within the boundaries of the Reservation.

(2) Covered Employers with collective bargaining agreements with a union are responsible for informing such unions of this Ordinance. No union agreement shall supersede the requirements of this Ordinance.

(3) As stated in the Tribe's Right to Work Ordinance, no Registered Workers shall be required to become or remain a member of any union or labor organization as a condition of employment, or continuation of employment, while they are working on the Reservation.

PART IV – ODOT CONTRACTORS

(a) **APPLICATION.** Unless expressly stated otherwise, the provisions of this Part IV shall apply only to ODOT Contractors.

(b) **ODOT CONTRACTOR OBLIGATIONS.** ODOT Contractors performing work within the MOU Boundary as defined in the Tribal/ODOT MOU shall:

- (1) Give preference to Indians who are Local Residents in hiring, promotion, training, and all other aspects of employment.
- (2) Notify the TERO Director whenever a Registered Worker is not performing adequately. The contractor shall not terminate an Indian employee until the TERO Director or his/her designee has had an opportunity to provide counseling.
- (3) In all layoffs and reductions in force, no Tribal/Indian worker shall be terminated if a non-Indian worker in the same job classification is still employed.
- (4) An ODOT Contractor shall not use qualification criteria or other personnel requirements that serve as barriers to Indian employment unless the ODOT Contractor is able to demonstrate that such criteria or requirements are required by business necessity.
- (5) Attend mandatory pre-bid certification workshops conducted by the TERO. ODOT Contractors must have a certificate of completion from the TERO in order to be eligible to bid on ODOT contracts that require compliance with the Tribal/ODOT MOU requirements.
- (6) Comply with the requirements of the Compliance Agreement executed pursuant to Section (c) below.
- (7) Pay the TERO fee as specified in the Tribal/ODOT MOU prior to commencement of work.
- (8) Provide certified weekly payroll reports to the TERO Director as required.
- (9) Allow on-site inspections by TERO representatives.

(c) **COMPLIANCE AGREEMENT.**

(1) Each ODOT Contractor shall be required to meet with the TERO Director to negotiate and execute a Compliance Agreement which sets forth:

- (A) The minimum number of Indians that shall be hired for a particular project with numerical goals for each craft, skill area, or job classification used by the ODOT Contractor including, but not limited to, general labor, skilled, administrative, supervisory, and professional categories. The Indian employment

goals are for the Contractor's work force who are other than "core crew" members as that term is used in Part III, Section (e)(2). Indian employees of an ODOT Contractor shall be included in the core crew, regardless of job function, but shall not count towards the Contractor's maximum core crew.

(B) The contractor's agreement to utilize qualified and available Registered Workers referred by the TERO Director.

(C) Periodic reporting requirements to the TERO Director on the number of Indians employed, record of persons hired, fired, or promoted during the reporting period, and a statement regarding compliance with the hiring goals set forth in the Compliance Agreement.

(D) Applicable wage scale provisions, prevailing wage standards, and salary compensation terms that may be applicable to a project or contract.

(2) No ODOT Contractor shall commence work or site mobilization until a Compliance Agreement has been negotiated and executed.

(3) Any violation of an executed Compliance Agreement shall be a violation of this Ordinance.

(4) An ODOT Contractor is subject to penalties and/or sanctions as provided in Part V below for violating this Ordinance or a Compliance Agreement.

PART V – ENFORCEMENT

(a) INVESTIGATIONS.

(1) The TERO Director or his designee may, upon his own initiative or pursuant to a complaint filed in accordance with Part V, Section (b), conduct such investigations as they deem necessary to ensure compliance with this Ordinance, or to determine whether a Covered Employer has violated this Ordinance.

(2) The TERO Director or his designee may enter the place of business of a Covered Employer for the purpose of conducting investigations and, in a manner consistent with orderly operation of business activity, interview employees of the Covered Employer, review and copy documents, and carry out such other activity as the TERO Director deems necessary to the investigation; provided that any review and copying of confidential and proprietary documents shall comply with Part V, Section (a)(4) of this Ordinance. Notwithstanding the above, the TERO Director shall not have authority to review regulatory files of the Grand Ronde Gaming Commission.

(3) If a Covered Employer unreasonably refuses to permit the TERO Director to enter onto business premises during business hours, or to reasonably inspect or copy documents, sanctions may be imposed.

(4) All proprietary and confidential information obtained in connection with an investigation hereunder shall be kept confidential and used only as necessary by the TERO Director, Commission, or parties to a hearing before the Commission or appeal to the Tribal Court, in a manner that, to the maximum extent possible consistent with the requirement of fairness to the parties, protects the confidentiality of the documents.

(5) If at the conclusion of any investigation hereunder, the TERO Director determines that a violation of this Ordinance has occurred, he may take any steps to resolve the violation that he deems appropriate and which are authorized by this Ordinance.

(b) COMPLAINTS.

(1) Filing and Contents of Complaint. Subject to Part V, Section (b)(2), any individual, business, or entity that believes that a Covered Employer has violated the requirements of this Ordinance (“Complainant”), may file a written complaint with the TERO Director. A copy of the complaint shall be provided to the Covered Employer. The complaint shall include a description of all relevant facts, evidence, witnesses, and such other information as is necessary to enable the TERO Director to carry out an investigation.

(2) Timeline for Filing Complaint.

(A) *Exhaustion Requirement.* No complaint may be brought against a Covered Employer unless the Complainant has first attempted to resolve the

complaint directly with the Covered Employer. In the case of a complaint against a Tribal Employer, no complaint may be filed unless the Complainant has, within five (5) days of the alleged violation: 1) filed a complaint directly with the Human Resource Department of the Tribal Employer, and thereafter exhausted any available administrative remedies provided by that Tribal Employer; or 2) filed a complaint with the Tribal Employer and seven (7) days have passed without any action by the Tribal Employer. A complaint is subject to dismissal by the TERO Director when these exhaustion requirements have not been satisfied.

(B) *Maximum Time.* In no event may a complaint be filed more than fourteen (14) days after the date of an alleged violation of this Ordinance.

(3) Action on Complaint. Within ten (10) days of receipt of a timely filed complaint, the TERO Director or his designee shall initiate and complete an investigation of the allegations in the complaint. If the TERO Director finds insufficient evidence of a violation of this Ordinance, he shall dismiss the complaint and notify the Complainant and Covered Employer that the matter is closed. If upon investigation, the TERO Director believes a violation of this Ordinance has occurred, he shall proceed to resolve the matter in accordance with Part V, Section (c) below.

(c) RESOLUTION OF VIOLATIONS.

(1) If, after conducting an investigation either on his own initiative or in response to a complaint, the TERO Director believes that a violation of this Ordinance has occurred (including without limitation, any failure to pay required TERO fees or to comply with an investigatory request), the TERO Director shall notify the Covered Employer, and Complainant if applicable, in writing of the specific violations found and the basis for the findings.

(2) The TERO Director shall make good faith efforts to reach an informal settlement of the violations with the Covered Employer.

(3) If an informal settlement cannot be reached, the TERO Director shall:

(A) In the case of an alleged violation by a Tribal Employer, issue a written notice to the General Manager (or similarly situated head of the Tribal Employer) and Human Resource Department of the Tribal Employer advising them of the nature of the alleged violation and setting forth any recommendations for addressing the violation;

(B) The General Manager (or similarly situated head of the Tribal Employer) of a Tribal Employer who receives a notice of an alleged violation from the TERO Director shall review the notice and determine which recommendations of the TERO Director it will implement and/or propose alternate resolutions to the alleged violation. The General Manager shall notify the TERO Director of his/her determination and provide a written explanation for his/her planned resolution.

(C) In the event the TERO Director is not satisfied by the General Manager's (or similarly situated head of the Tribal Employer's) written explanation, the TERO Director may submit a written request for review by the TERO Commission. The TERO Commission shall promptly hear the matter. The hearing shall be conducted in accordance with Part V, Subsection (f).

(D) In the case of a Covered Employer other than a Tribal Employer, issue a corrective order to the Covered Employer specifying any corrective action that must be taken by the Covered Employer and the timeframe in which the corrective action must be taken to avoid penalties. The notice shall also advise the Covered Employer of its right to appeal the corrective order to the Commission. If the TERO Director believes that immediate action is necessary to prevent irreparable harm resulting from an alleged violation of this Ordinance, he may request the Commission order a temporary injunctive order pending a hearing before the Commission on the matter. In no event shall the temporary injunctive order exceed fourteen (14) days.

(4) If a Covered Employer other than a Tribal Employer fails or refuses to comply with a corrective order within the timeframe set forth in the order, and fails to request a hearing before the Commission, the TERO Director may impose additional penalties on the Covered Employer as set forth below.

(d) PENALTIES/SANCTIONS. The following corrective actions, penalties, or sanctions may be imposed on a Covered Employer, other than a Tribal Employer, who violates any provision of this Ordinance.

- (1) A civil fine in an amount not to exceed \$1,000 per violation;
- (2) An order that the employer make payment of back pay or other damages to any aggrieved party;
- (3) Deny the Covered Employer the right to commence business on the Tribe's Reservation;
- (4) Order the Covered Employer to hire, promote, or train a preference individual or IOB;
- (5) Order the Covered Employer to dismiss any employees hired in violation of this Ordinance;
- (6) Order a percentage of lost profits (contract price less estimated expenses, materials, and labor costs); or
- (7) Suspend the Covered Employer's business activity on the Tribe's Reservation.

All monetary penalties assessed under this Ordinance shall be paid within thirty (30) days from the date imposed. If the Covered Employer fails to pay any fine as required, the TERO Director may request a Commission hearing be scheduled. Any Commission hearing so requested shall be conducted in accordance with the hearing procedures set forth in Part V, Section (f).

(e) APPEALS TO THE COMMISSION. Any person or Covered Employer aggrieved by a decision or action of the TERO Director or TERO staff (including any claims that the TERO Director or staff have exceeded the authority granted under this Ordinance) may seek review of the action or decision by filing a petition for review with the Commission. The petition must be filed no later than fourteen (14) days from the date of the action or decision being appealed. The petition shall state the reasons review is being sought and shall include, if applicable, a copy of the decision or order being appealed. The person or Covered Employer filing the Petition shall have the burden of proving, by a preponderance of the evidence, that a violation of this Ordinance did not occur, that a penalty or sanction imposed or corrective action ordered by the TERO Director was improper, or that the TERO Director exceeded his authority.

(f) COMMISSION HEARINGS.

(1) Hearings before the Commission shall be governed by rules of practice and procedure that are adopted by the Commission; provided that the Commission may consider any evidence that it deems relevant to the hearing and the Commission shall establish such procedures and safeguards to ensure the due process rights of all parties are protected.

(2) The Chair of the Commission will direct the proceedings and shall take whatever action is necessary to ensure an equitable, orderly, and expeditious hearing.

(3) The TERO Director shall represent and defend any TERO action or determination challenged at the hearing; provided that the TERO Director may be represented by the Tribal Attorney's Office.

(4) Upon receiving notice of a hearing, a party may review any TERO files relevant to the issues to be addressed at the hearing; provided that TERO staff may remove proprietary or confidential information from the file, which will not be relied upon in the presentation of TERO Director's case.

(5) For good cause, the Chair of the Commission may postpone a hearing to a later date upon the written request of a party.

(6) Within fourteen (14) days of a hearing on a petition for review, the Commission shall issue a written order affirming; modifying, or reversing the TERO Director's decision.

(7) The Commission's order shall be a final order for purposes of appeal to the Tribal Court of the Confederated Tribes of the Grand Ronde Community of Oregon.

(g) APPEALS TO TRIBAL COURT.

(1) Any party adversely affected by a final order of the Commission may file an appeal with the Grand Ronde Tribal Court. A copy of the appeal must be sent to the TERO Director and any other party to the Commission proceeding no later than fourteen (14) days of the date of the Commission order.

(2) The notice of appeal shall set forth the order from which the appeal is taken and the grounds upon which reversal or modification is sought.

(3) The Commission's decision or order shall be stayed pending the determination of the Tribal Court.

(4) The Tribal Court shall uphold the decision of the Commission unless it is demonstrated that the decision of the Commission was arbitrary and capricious, in violation of the Grand Ronde Constitution, or in excess of the authority granted the Commission.

(h) ENFORCEMENT ORDERS. If a Covered Employer has failed to comply with an order of the Commission or the TERO Director, and the time for filing an appeal of such order has passed, the TERO Director may petition the Tribal Court for enforcement of the order and the Tribal Court may grant such relief as is necessary and appropriate to enforce the Commission or TERO Director order, including, without limitation, confiscation of property within the jurisdiction of the Tribe.

I certify this to be a true copy of the Confederated Tribes of the Grand Ronde Community of Oregon Tribal Employment Rights Ordinance.


Tribal Council Secretary

P:\PERSDIR\Legal\TribalCouncil\Ordinance Finals\Current\Tribal Employment Rights Ord - Amended 01-13-21.docx

SPECIAL PROVISION

INDIAN PREFERENCE IN EMPLOYMENT ON FEDERAL-AID HIGHWAY PROJECTS ON AND NEAR INDIAN RESERVATIONS

July 1, 2024

PURPOSE

The purpose of this Special Provision is to outline the Indian Employment Preference requirements and procedures to be followed by The Confederated Tribes of Grand Ronde (CTGR), the Oregon Department of Transportation (ODOT), and all Contractors or subcontractors engaged in highway construction work that is under contract with ODOT on federal-aid highway projects that are located on and near the Grand Ronde Indian Reservation.

BACKGROUND

Section 140(d) of Title 23, U.S.C., was amended by Section 1026 of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to include that, "States may implement a preference for employment of Indians on projects carried out under this title near Indian reservation."

AUTHORITY

ODOT acknowledges the inherent sovereign authority of the CTGR to promulgate and enforce the Tribal Employment Rights Ordinance ("TERO Ordinance") within the boundaries of the Grand Ronde Indian Reservation and acknowledges Title 23, Section 140(d) of the USC.

The current TERO Ordinance of the CTGR and its compliance requirements and procedures are incorporated herein and made part of this Special Provision.

ODOT and CTGR entered into a Memorandum of Understanding (MOU) to implement TERO Ordinance provisions into ODOT contracts.

APPLICABILITY

Eligible projects for Indian employment preference consideration under this Special Provision are those projects which are on or near Indian Reservation Roads or on the Grand Ronde Reservation. Roads "near" The Grand Ronde Reservation are defined by mileposts as shown on Exhibit A attached to the MOU.

ELIGIBLE EMPLOYEES

All Indians are eligible for Indian preference without regard to Tribal affiliation or place of enrollment. However, recruiting efforts will be targeted toward those living on or near the Grand Ronde Indian Reservation.

Employers with collective bargaining agreements with a union are responsible for informing such unions of this requirement.

INDIAN EMPLOYMENT PREFERENCE GOAL

The Indian Employment Preference goal is indicated in the project Special Provisions.

Classifications for Indian Employment Preference goal consideration are:

- Carpenter
- Laborer
- Equipment Operator
- Cement Masons
- Truck Drivers
- Electricians
- Ironworkers

Classification shall be according to requirements for certified payrolls.

Indian Employment Preference goals will apply to total project work hours and will not be applied individually to the Contractor and subcontractors. Indian Employment Preference goals do not apply to number of persons employed at any given period of time.

Indian Employment Preference goals are for the Contractor's work force who are other than core crew members. A Contractor's core crew is composed of full-time employed individuals necessary to satisfy his/her reasonable needs for supervisory or special experienced personnel to assure an efficient execution of the contract work. Indian employees of the Contractor shall be included in the core crew, regardless of job function, to avoid the unintended results of having a Contractor lay-off or terminate an Indian employee to hire another under this provision.

In setting the Indian Employment Preference goals, consideration has been given to the availability of skilled and unskilled Indian workers, the type of work to be performed, the Contractor's employment requirements, the need for new hires, and unemployment rates prevailing among non-Indians. Consideration has also been given to the employment goals for minorities and women established for the area by the U.S. Department of Labor's Office of Federal Contract Compliance Programs pursuant to Chapter 41, Code of Federal Regulations, Part 60-4.

The Indian Employment Preference goals may only be changed by ODOT after consultation with the CTGR and the Contractor, and after consideration of the good faith efforts of the Contractor together with the ability of the CTGR to refer workers in

numbers and in time for the Contractor to meet the Indian Employment Preference goals and to perform the work.

If the CTGR is unable to provide sufficient qualified or qualifiable applicants to meet the Indian Employment Preference goal within 48 hours of the placement of a job order by the Contractor, the Contractor, ensuring nondiscrimination and providing equal employment opportunity, may recruit from other sources off the Grand Ronde Indian Reservation. The Contractor shall give full consideration to all qualified job applicants referred by the CTGR. The Contractor is not required to employ any applicant who, in the Contractor's opinion, is not qualified to perform the classification of work required.

FRINGE BENEFITS

All fringe benefits for Indian workers referred by the Tribal Employment Rights Office of the CTGR shall be paid in cash. Indian workers who are union members will have the option of fringe benefits in cash or paid into a bonafide plan or program. However, this does not change any agreements between Indian union members and their respective unions.

PRECONSTRUCTION CONFERENCE

The preconstruction conference will be the forum for finalizing all compliance agreements and requirements between the CTGR and the Contractor and subcontractor(s) and to answer any questions regarding the Indian Employment Preference goal and applicable Special Provisions.

MANDATORY TERO WORKSHOP

The Tribal Employment Rights Office of the CTGR agrees to conduct mandatory prebid quarterly TERO/MOU workshops, and shall issue certificates of completion to those Contractors who sign in, attend, and participate. Contractors must have a certificate in order to be eligible to bid on ODOT Contracts that require compliance with these TERO/MOU requirements. The certificate will be good for 3 years.

COMPLIANCE

The State will follow normal contract compliance procedures to effect compliance. The State may elect to invite the CTGR to assist their monitoring efforts in all or any part of its compliance process. The State will review the Contractor's employment practices and take appropriate enforcement actions when the goal is not reached after consideration of good faith efforts. See attached "ON-SITE WORKFORCE AFFIRMATIVE ACTION REQUIREMENTS FOR WOMEN AND MINORITIES ON FEDERAL AID CONTRACTS" or contact the Tribal Employment Rights Office for sanctions that may be imposed for failure to meet these goals.

COMPLIANCE FEE

The Contractor shall pay the compliance fee directly to the TERO before beginning work subject to this Special Provision. Use the Contract Amount to calculate the compliance fee. See Section 4 of the MOU for percentages.

MEMORANDUM OF UNDERSTANDING BETWEEN
STATE OF OREGON DEPARTMENT OF TRANSPORTATION
And
THE CONFEDERATED TRIBES OF THE GRAND RONDE COMMUNITY OF
OREGON

THIS AGREEMENT, hereinafter “Agreement” or “MOU,” is made and entered into by and between the STATE OF OREGON, acting by and through the Oregon Department of Transportation (ODOT or State); and the CONFEDERATED TRIBES OF THE GRAND RONDE COMMUNITY OF OREGON (CTGR or Tribe), acting by and through its elected officials and the Tribal Employment Rights Office (TERO), hereinafter individually referred to as “Party” and collectively referred to as the “Parties.” The Agreement pertains to cooperation between the Parties to apply the Indian Employment Preference to Federal-Aid highway projects (“Federal-Aid Highway Projects”) taking place on or near the Grand Ronde Reservation.

RECITALS

Oregon Revised Statutes (ORS) 190.110 et seq. grants authority to state agencies to enter into agreements with an American Indian tribe or an agency of an American Indian tribe for the performance of any or all functions and activities that a party to the agreement, its officers, or agents have the authority to perform.

CTGR has the inherent sovereign authority to promulgate and enforce the Tribal Employment Rights Office Ordinance (“TERO Ordinance” or “Ordinance”) within the boundaries of the Grand Ronde Reservation (“Reservation”).

Section 140(d) of the United States Code, Title 23 provides, “States may implement a preference for employment of Indians on projects carried out under this title near Indian reservations.”

USDOT Notice 4720.7 states,

In off reservation situations, [Tribal Employment Rights Offices] can bill Contractors at an agreed upon rate for services rendered, i.e., recruitment, employee referral and related supportive services. The proceeds are used by the tribes to develop and maintain skills banks, to fund job referral, counseling, liaison, and other services and activities related to the employment and training of Indians.

ODOT recognizes that jobs in the private employment sector on and near the Reservation are an important resource for Indians residing on or near the reservation.

ODOT considers the availability of a pool of skilled and trained workers in heavy highway construction trades to be beneficial to Federal-Aid highway projects on or near the Reservation.

The purpose of this Agreement is to establish procedures to be followed by both Parties to aid in ensuring that when Contractors are performing work on Federal-Aid Highway Projects under an ODOT MOU Contract within the CTGR MOU TERO Boundary, the Contractors comply with the Ordinance.

Parties enter into this Agreement in the spirit of partnership, transparency, and communication. In the event problems arise with Contractors under this MOU, both Parties agree that it is in the best interest of their ongoing partnership to proactively consult and confer with each other on proposed solutions for the mutual benefit of their separate and combined goals.

This MOU amends and replaces a prior MOU between the Parties which took effect on January 3, 2019, and was amended on December 28, 2023, to extend the term until June 30, 2024.

NOW THEREFORE in consideration of the mutual understandings and agreements herein set forth, CTGR and ODOT enter into the following Agreement:

1. EFFECTIVE DATE AND DURATION.

Once the Agreement has been fully executed, the term of this Agreement shall begin on the July 1, 2024, and shall remain in effect for five (5) years, unless earlier terminated per Section 8.

2. DEFINITIONS.

- 2.1. Compliance Agreement or MOU Compliance Agreement** – An agreement between a Contractor or Subcontractor and TERO, setting forth how the Contractor will meet the Indian preference in hiring and other obligations under the Ordinance. The Compliance Agreement is attached as Exhibit B.
- 2.2. Contractor** – Any Contractor engaged to perform services on a highway construction project that is subject to this MOU.
- 2.3. CTGR/CTWS TERO Boundary Overlap** – Region that is within both the CTGR MOU TERO Boundary and CTWS MOU TERO Boundary, as identified in Exhibit C.
- 2.4. Federal-Aid Highway Project** – Projects that occur on Federal-Aid highway that are funded under USC Title 23, and which may be eligible for Indian Preference in Employment if they are on or near the Reservation, per USDOT Notice 4207.7.
- 2.5. Indian** – Any person enrolled in a federally recognized tribe.
- 2.6. Indian Preference in Employment** – Preference for Indians in all aspects of employment, including but not limited to, hiring, training, promotions, layoffs, contracting and subcontracting for work in whole or in part within MOU TERO Boundary.
- 2.7. MOU TERO Boundary** – Region of land near and including the Reservation, as identified on map attached as Exhibit A.

- 2.8. ODOT MOU Contract** – Contract for work on a Federal-Aid highway between ODOT and a Contractor for work in whole or in part within MOU TERO Boundary that by agreement of the Parties, is subject to this MOU and the Indian Preference in Employment. ODOT requires Contractors for these projects to sign the Compliance Agreement and comply with the TERO Ordinance, adopted on November 6, 2013 and amended on January 13, 2021.
- 2.9. On-Reservation Contract** – Contract for work on a Federal-Aid Highway Project between ODOT and a Contractor for work on the Grand Ronde Reservation. ODOT requires Contractors for these projects to comply with the TERO Ordinance and sign the Compliance Agreement.
- 2.10. Reservation** – the Grand Ronde Reservation.
- 2.11. TERO Ordinance or Ordinance** – Tribal Employment Rights Ordinance, adopted November 6, 2013, and last amended January 13, 2021.

3. ODOT MOU CONTRACTS.

3.1. Selection

ODOT and TERO will work together to identify projects eligible under this MOU to promote and support Indian employment Federal-Aid Highway Projects. ODOT will share the State Transportation Improvement Program (STIP) with the TERO and identify those projects that are Federal-Aid Highway Projects that are within the MOU TERO Boundary (TERO eligible projects).

ODOT and TERO will meet annually each spring to mutually decide which TERO eligible projects will be subject to this MOU and the Indian Preference in Employment as well as any specific project workforce training and needs, project schedule, bid documents (applicable deadlines, Compliance Agreement template and applicable Ordinance amendments), scope, and duration. ODOT will provide TERO a list of TERO eligible projects subject to the MOU and the Indian Preference in Employment on a monthly basis.

Parties may also discuss fee-supported training activities, goal setting process, reporting summaries, and challenges or successes in Contractor compliance, such as participation and performance of Contractors under respective compliance agreements.

ODOT shall notify TERO of any TERO eligible projects that come up after the Parties' annual meeting. At CTGR's election, such projects shall become subject to this MOU and Contractor will be required to enter into a compliance agreement with TERO, to the extent it does not interfere with ODOT procurement or contract administration. To the extent a TERO eligible project lies within the CTGR/CTWS TERO Boundary Overlap, the selection process outlined in 4.2 shall apply; provided, however, that the Tribe which selected first during a given year shall have the second selection of any TERO eligible projects within the Boundary Overlap that come up later that year.

3.2. Projects in the MOU TERO Boundary Overlap

The Confederated Tribes of the Grand Ronde (CTGR) MOU TERO Boundary and the Confederated Tribes of Warm Springs (CTWS) MOU TERO Boundary overlap as indicated in Exhibit C hereto (CTGR/CTWS TERO Overlap). Each MOU TERO boundary is established to define “near reservation” and is based solely on a reasonable commuting distance from a tribe’s reservation (approximately 60 miles). The boundary is established with no relation to tribal historic or ceded lands. For this reason, MOU TERO boundaries among Oregon tribes may overlap.

In order to provide for the efficient and equitable distribution of the opportunity to participate in Federal-Aid Highway Projects within the CTGR/CTWS TERO Overlap, should it exist beyond 2024, the following project identification and selection process will be used:

1. ODOT shall provide a list of the planned Federal-Aid Highway Projects, if any, that fall within the CTGR/CTWS TERO Overlap to the CTGR and CTWS TERO Programs on a yearly basis;
2. ODOT, CTGR TERO and CTWS TERO shall meet annually in or around March of each year to determine which TERO Program shall administer and set the Indian preference goals for which eligible projects within the CTGR/CTWS TERO Overlap;
3. During the annual meeting, CTGR TERO and CTWS TERO shall take turns selecting TERO eligible projects within the CTGR/CTWS TERO Overlap to administer, with CTWS selecting first in odd numbered years and CTGR selecting first in even numbered years;
4. The selection process will continue until all eligible projects within the CTGR/CTWS TERO overlap have been selected or both TEROs indicate they are unable to administer additional projects.
5. CTGR and CTWS will jointly provide notes of the results of this selection to ODOT.

In the event CTWS TERO selects, but is subsequently unable or unwilling to administer, an eligible project within the MOU TERO Boundary Overlap, CTGR shall have the option to administer the project as provided in this MOU, to the extent it does not interfere with ODOT procurement or contract administration.

3.3. Goal Setting

TERO shall analyze each project selected to become an ODOT MOU Contract to establish an accomplishable hiring goal. The established goal shall be based on an assessment of workforce availability and worker skill needs for the project.

Eligible employees for goals include all Indians without regard to tribal affiliation or place of enrollment. However, TERO recruiting efforts shall be targeted towards those living on or near the CTGR.

Hiring goals apply to employees in job classifications for heavy highway construction trades.

3.4. MOU Compliance Agreement

TERO agrees to meet with each Contractor engaged under an ODOT MOU Contract to develop a numerical hiring goal for each eligible job craft which shall be used on the contract. TERO will formalize the hiring goals using the MOU Compliance Agreement form, attached as Exhibit B, or a form substantially similar to it. This includes numerical hiring goals and timetables for each craft, skill area, job classification, etc., as a percentage of total hours worked on the project, used by the Contractor. This Compliance Agreement form may be revised from time to time by mutual consent of the parties, without formal amendment to this MOU.

ODOT agrees it will require a Contractor for an ODOT Contract to execute the MOU Compliance Agreement form.

3.5. Mandatory MOU Workshop

TERO agrees to conduct mandatory pre-bid quarterly TERO/MOU workshops and shall issue certificates of completion to those Contractors who sign in, attend, and participate. ODOT agrees to make a good faith effort to participate in such workshops. TERO agrees that the certificate shall be valid for three (3) years from the date of the workshop.

ODOT will require Contractors to obtain a valid certificate of completion issued by TERO in order to be eligible to bid for an ODOT MOU Contract.

3.6. Pre-Construction Conference

Pre-construction conferences for Contractors of projects that are subject to this MOU shall be held on or at a location near the Reservation. At the pre-construction conference TERO and ODOT shall be available to provide a detailed explanation of, and answer questions about, the provisions of the Ordinance, if applicable, and Indian Preference goals. The pre-construction conference shall be the forum for finalizing all compliance agreements and requirements between TERO and the Contractor and Subcontractor and answering any questions on Indian Preference and applicable special contract provisions.

3.7. Specialty and Service Provider Contractor Exclusion

All specialty and service provider Contractors who are not required by ODOT to have a full subcontract will be exempt from entering into a compliance agreement with TERO.

3.8. On-Reservation Contracts

The State acknowledges the inherent sovereign authority of CTGR to assess and collect the Compliance Fees set forth in the Ordinance, Part III (e)(6) for On-Reservation Contracts.

ODOT will require that Contractors located on or engaged in work on the Reservation shall give preference to Indian owned businesses in the award of subcontracts. The TERO program manager shall maintain a list of Indian owned business directory which shall be supplied to Contractors upon request.

Nothing in this subsection changes that On-Reservation Contracts are also ODOT MOU Contracts.

4. MOU COMPLIANCE FEE.

4.1. Compliance Fee Calculation

Parties agree that TERO may assess a Compliance Fee on ODOT MOU Contracts. The MOU Compliance Fee for an ODOT MOU Contract is the percentage of the total cost of the project, as set forth below:

Contract Value	Fee % allowed
\$1 to \$500,000	1.00%
\$500,001 to \$999,999	0.75%
\$1,000,000 to \$1,999,999	0.50%
\$2,000,000 to full contract value	0.25%

When a Federal-Aid Highway Project results in a contract that occurs both on the Reservation and within the MOU TERO Boundary, the portion of work on the Reservation is subject to the fee percentage established in the Ordinance and the portion of the work that is within the MOU TERO Boundary is subject to the MOU Compliance Fee.

4.2. Reporting

Parties agree that the Compliance Fees paid under this Agreement are to be used by the TERO to develop and maintain a TERO Program including a Tribal Hiring Hall, to fund job referral, conduct screening, career counseling, liaison representation, training, and apprenticeship.

TERO will provide a Tribal Hiring Hall referral report (Referral Report) on a monthly basis to ODOT. Each Referral Report will provide the following data:

- month and year of report submitted,
- names of TERO employee referrals,
- dates referred,
- contractors referred to,
- trades,
- last four digits of employees' social security number,
- notation if registered apprentice, and
- active or terminated dates.

TERO will provide to ODOT quarterly reports summarizing Compliance Fee-supported activities (Quarterly Fee Report) within thirty (30) days after the completion of each quarter of CTGR's fiscal year. Reports will provide the following data:

- total Compliance Fees collected,
- number of Tribal Hiring Hall referrals,
- trade breakout of referrals,
- gender breakout of referrals,
- support activities such as screening, orientations, counseling, trainings, and
- other activities supported with Compliance Fees collected under this Agreement.

The Parties agree to consult within thirty (30) days of any failure to deliver the Quarterly Fee Report in a timely manner.

ODOT shall provide TERO with, at a minimum, a copy of the “TERO Project Employment” report, or its future equivalent, on a monthly basis.

5. NOTICES; ADMINISTRATORS.

5.1. Notice.

Except as otherwise expressly provided in this Agreement, any communications between the Parties hereto or notices to be given hereunder shall be given in writing by email, personal delivery, or mailing the same, postage prepaid, to ODOT or CTGR at the address, number or email address set forth in this Agreement. Any communication or notice so addressed and mailed shall be effective five (5) days after mailing. Any communication or notice given by personal delivery shall be effective when actually delivered. Any communication or notice given by email shall be effective upon the sender’s receipt of confirmation generated by the recipient’s email system that the notice has been received by the recipient’s email system.

5.2. Service.

All notices required or authorized to be served on either Party shall be served by first class mail to Party’s Administrator in Section 6.3.

5.3. Administrators for this Agreement are:

ODOT	CTGR
ODOT IGA #	CTGR #
Administrator: Angela M. Crain Title: Manager, Office of Equity & Civil Rights Address: 800 Airport Rd SE Salem, OR 97301 Phone: 503-931-2575 Email: angela.m.crain@odot.oregon.gov	Administrator: Harris Reibach Title: Director, Tribal Employment Rights Office Address: 9615 Grand Ronde Rd Grand Ronde, OR 97347 Phone: Office 503-879-1455 Cell: 503-871-4816 Email: harris.reibach@grandronde.org

ODOT may make changes to ODOT’s Administrator specified in this section, and such changes shall constitute contract administration for purposes of this Agreement. ODOT shall provide the CTGR notification of any such change in writing, which shall be effective without the necessity of a formal amendment to this Agreement.

6. CHOICE OF LAWS.

This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon. In no event shall anything be construed as a waiver by either Party of any form of defense or immunity, whether sovereign immunity, governmental immunity, Tribal immunity, immunity based on the eleventh amendment to the Constitution of the United States or otherwise, from any Claim or from the jurisdiction of any court.

7. AMENDMENTS.

This Agreement may be amended by mutual agreement of both Parties, but only to the extent permitted by applicable statutes and administrative rules. No amendment to this Agreement shall be effective unless it is in writing signed by the Parties and all approvals required by applicable law have been obtained.

In the event CTGR amends its Ordinance before the expiration of this Agreement, the Parties agree to confer regarding any necessary amendments to this Agreement.

In the event there is a change in federal law, regulation, or guidance applicable to this MOU, or that the Federal Highway Administration changes its interpretations of these laws and regulations, such change will automatically apply to the MOU from the date of the adoption or publication.

8. TERMINATION.

8.1. This Agreement shall remain in effect for five (5) years, unless one (1) of the following events occurs:

8.1.1. This Agreement is terminated by written agreement of both Parties.

8.1.2. Either Party serves the other with notice of termination at least 30 days prior to proposed termination.

8.1.3. If federal or state laws, regulations, or guidelines are modified or interpreted in such a way that either the work under this Agreement is prohibited from paying for such work from the planned funding source.

8.2. In the event the Parties terminate this Agreement and there is on-going work on a project within the MOU TERO Boundary or Reservation, the Parties agree that ODOT may enter the project site and finish work by whatever method ODOT deems expedient.

8.3. Any termination of this Agreement shall not prejudice any rights or obligations accrued to the Parties prior to termination.

9. REPRESENTATIONS AND WARRANTIES OF THE PARTIES.

9.1. The CTGR represents and warrants to ODOT that (1) the CTGR has the power and authority to enter into and perform this Agreement, (2) this Agreement, when executed and delivered, shall be a valid and binding obligation of the CTGR enforceable in accordance with its terms, (3) the person executing this Agreement on behalf of the CTGR has the necessary authority to execute this Agreement for and on behalf of the CTGR.

9.2. ODOT represents and warrants that (1) ODOT has the power and authority to enter into and perform this Agreement, and that (2) this Agreement, when executed and delivered, shall be a valid and binding obligation of the State of Oregon enforceable in accordance with its terms.

10. COUNTERPARTS.

This Agreement may be executed in two or more counterparts, electronically or otherwise, each of which is an original, and all of which together are deemed one and the same instrument, notwithstanding that all Parties are not signatories to the same counterpart.

11. NONAPPROPRIATION.

Nothing in this Agreement is to be construed as permitting any violation of Article XI, section 7 of the Oregon Constitution or any other law regulating liabilities or monetary obligations of the State of Oregon.

**CONFEDERATED TRIBES OF THE
GRAND RONDE COMMUNITY OF
OREGON**

By Harris Reibach
Name: Harris Reibach
Title: TERO Director

Date _____

APPROVED AS TO LEGAL FORM

By _____
Name:
Title:

Date _____

**STATE OF OREGON, by and through
its DEPARTMENT OF TRANSPORTATION**

By Angela Crain
Name: Angela M. Crain
Title: Manager, Office of Equity & Civil Rights

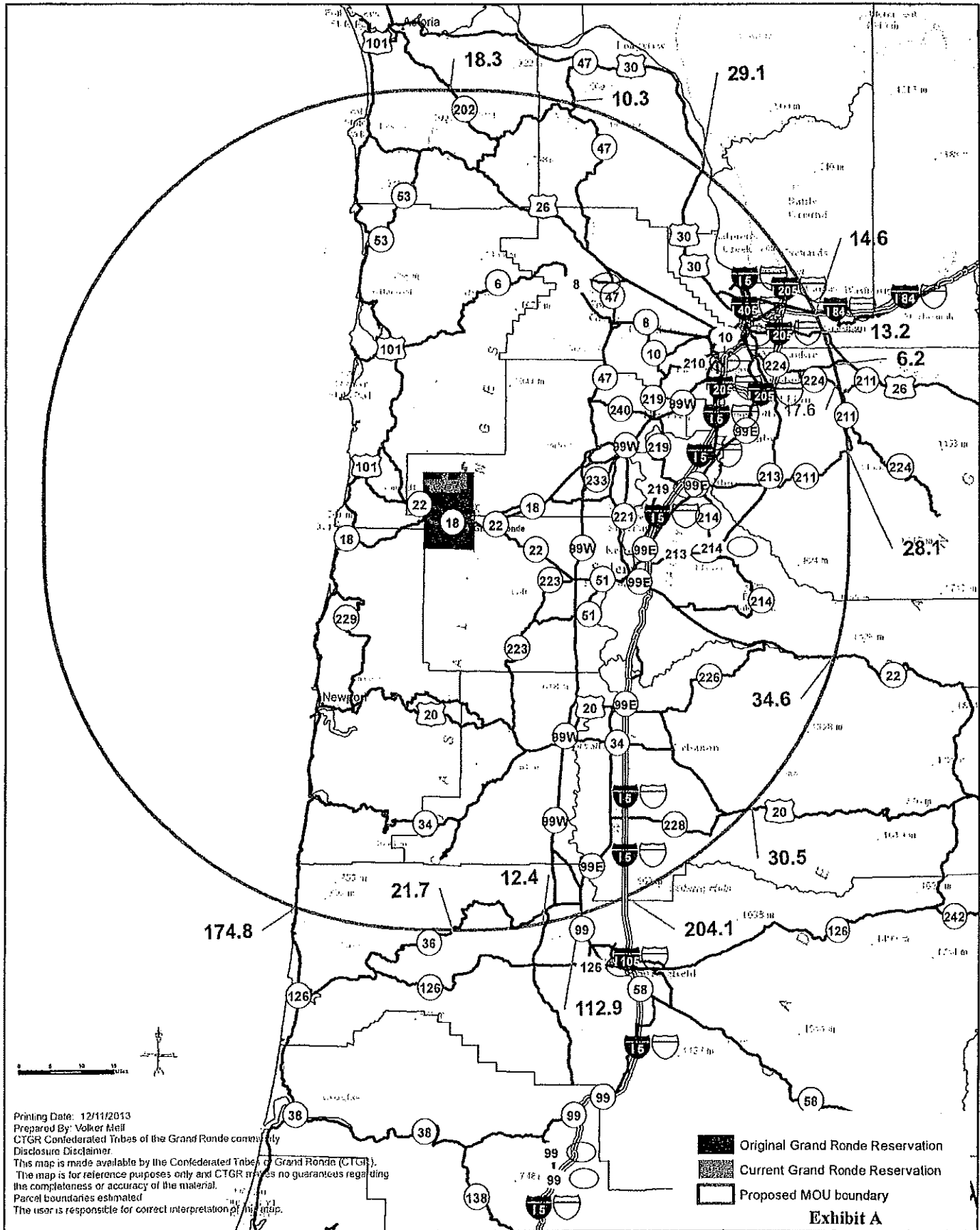
Date 06/27/2024

APPROVED AS TO LEGAL SUFFICIENCY

By /s/ Karen E. Clevering
Karen E. Clevering
Assistant Attorney General

Date June 27, 2024 (approved via email)

Reservation MOU Boundary





TRIBAL EMPLOYMENT RIGHTS OFFICE

Confederated Tribes of the Grand Ronde

MOU COMPLIANCE AGREEMENT

Project Name: _____

Contractor: _____

Address: _____

Contract # _____

Approximate Start Date: _____ Duration _____

The Confederated Tribes of the Grand Ronde, through the Tribal Employment Rights Office (TERO) program, and the State of Oregon Department of Transportation (ODOT) have executed a **Memorandum of Understanding** which applies Indian preference for employment and subcontracting opportunities within 60 miles of the Grand Ronde Reservation boundary. The prime contractor (Contractor) and its subcontractors involved in any project within the MOU boundary will negotiate with the TERO program representative to meet the goals prescribed on this project.

The CTGR TERO program and _____ (contractor),

through its representative (name and title) _____,

Contact Person: _____, Phone Number: _____, E-mail: _____,

have entered into an agreement as a result of their company being awarded a contract (or subcontract)

for the _____ project and hereby agree to the following:

ARTICLE I – CONTRACTOR – agrees to comply with the TERO provisions for the selection of American Indian employees and subcontractors. The Contractor will be responsible for relating these provisions to each of its subcontractors who are all subject to these hiring provisions; the Contractor will ensure that each subcontractor enter into a CTGR TERO Compliance Agreement prior to commencing work on the project.

ARTICLE II – EMPLOYMENT PRIORITY – The Contractor agrees to utilize to the greatest extent, TERO workers that are qualified, in the hiring of its employees for the duration of the project. Wages will be paid according to applicable laws. Monthly payroll reports will be submitted to the TERO program as required. Whenever the Contractor determines an Indian employee referred by TERO is not performing adequately the Employer shall notify TERO immediately about the problem. Contractor agrees not to terminate any Indian employee until a TERO representative has had an opportunity to provide counseling. If the situation is not remedied after counseling, TERO will refer another qualified worker.

Though the Contractor is not required to employ applicants who, in the Contractor’s opinion, are not qualified to perform the work required, the Contractor will make good faith effort to give those that are hired every opportunity to retain employment. Use of adverse employment practices or failure to meet hiring goals, shall cause the Contractor to be subject to sanction(s). Such sanction(s) include: 1) immediate replacement with Indian workers, 2) back pay and/or reinstatement where applicable, 3) if flagrant violations in hiring and/or employment practices by an employer occur, a monetary fine, not to exceed \$1,000 per violation, can be assessed.

Any form of harassment or discrimination directed towards TERO referrals by company employees on the project will not be tolerated. The TERO program will work with ODOT Civil Rights staff to investigate, frame charges, establish prima facie evidence, mediate and settle complaints associated with all forms of discrimination and/or harassment.

ARTICLE III – EMPLOYMENT GOALS – Employment goals for each project will be set by the TERO program and ODOT representatives. The Contractor shall give full consideration to all qualified Indians referred by the TERO program and meet the prescribed number of TERO referrals according to the “Hiring Goals” established in **ATTACHMENT 1** (below). The Contractor must make every effort to place a job order with the TERO program 48 hours prior to needing a TERO referral. If after placing a job order with TERO, no qualified Indian workers are available, a waiver will be provided to the Contractor allowing them to hire from their own sources.

Core crew employees must have been on the company payroll for at least six months to qualify as core crew. Any training opportunities on this project must be extended to Indians.

ARTICLE IV – COMPLIANCE FEE- The Federal Highway Administration allows for payment of this fee from the Prime Contractor to the TERO program, which must be paid prior to commencement of work on this project. The fee on each project is determined and published in the pre-bid document “Special Provisions” issued by ODOT and based on the MOU between the Tribe and State of Oregon.

_____ Contractor Representative	_____ Title	_____ Date
_____ TERO Representative	_____ Title	_____ Date

TRIBAL EMPLOYMENT RIGHTS OFFICE

Confederated Tribes of the Grand Ronde

MOU COMPLIANCE AGREEMENT

ATTACHMENT 1

HIRING GOALS

Project Name: _____ Contractor: _____

Goal: _____%

TERO Representative Approval: _____ Date: _____

Contractor Approval: _____ Date: _____

Positions by trades skill on project	Estimate of each skill	TERO utilization	% of TERO workers	Wage
TOTALS				

Duration of work on project: _____

TERO reserves the right to negotiate for any positions listed above in order to meet the prescribed employment goals. This attachment supplements the TERO Compliance Agreement in which the Employer agrees to meet their obligation pursuant to the CTGR Tribal Employment Rights Ordinance.

TRIBAL EMPLOYMENT RIGHTS OFFICE

Confederated Tribes of the Grand Ronde

CONTRACTOR'S SPECIFIC OBLIGATIONS

As a contractor/subcontractor conducting business on or near the Grand Ronde Reservation, your specific obligations under the Tribal Employment Rights Code and this contract include the following:

1. Provide TERO with a precise listing of positions you will use on this project from the superintendent on down, and the number of each craft. These positions will be negotiated for as well as any Core Crew requested:
2. Core Crew requests must be in writing with rationale for each. The listing of positions and the Core Crew requested must be submitted to TERO at least three (3) days prior to a required pre-construction meeting with TERO staff or start up of the project. Core Crew must have been on the Company payroll for at least six (6) months in order to qualify as Core Crew.
3. Inform TERO of all signatory trade unions to be involved in the project. TERO obligations have priority over union obligations by a contractor signatory to any trade unions. However, TERO will consider Indian workers of the trade unions in order for contractors to meet their hiring goals.
4. Notify TERO of all job vacancies. All available Indian applicants shall be considered first before any non-Indians are considered for employment and training. If no qualified Indians are available, TERO will provide a consent form to waive this obligation;
5. Employees referred by the TERO program will have preference in retention of employment from the beginning to the end of the project. Inform TERO of any lay-offs.
6. Before any TERO referral is terminated from the project you must inform TERO immediately to allow for informal counseling;
7. Allow on-site inspections by TERO representatives;
8. Provide copies of Monthly Employment Utilization Report to the TERO program as specified in the TERO Compliance Agreement;
9. No work on the scheduled program will begin until all applicable agreements are signed. Failure to sign the required agreements shall serve as just cause for the contractor/subcontractor to be subject to sanction(s) as prescribed in the TERO Compliance Agreement and CTGR TERO Ordinance.

Respectfully submitted by me as evidenced by my signature found below, and under my authority vested in me as a duly-appointed representative for TERO:

TERO Representative

Date

CERTIFICATION OF SERVICE:

I, _____, duly swear that I have been provided the specific obligations of Indian preference as a contractor conducting business on or near the Grand Ronde Reservation. I attest to the fact that the TERO representative whose signature is found above did in fact read these specific obligations and allowed for an opportunity to present questions, comment or discussion on these requirements related to this contract.

Employer Representative

Date

Company

Exhibit C – CTGR/CTWS TERO Boundary Overlap

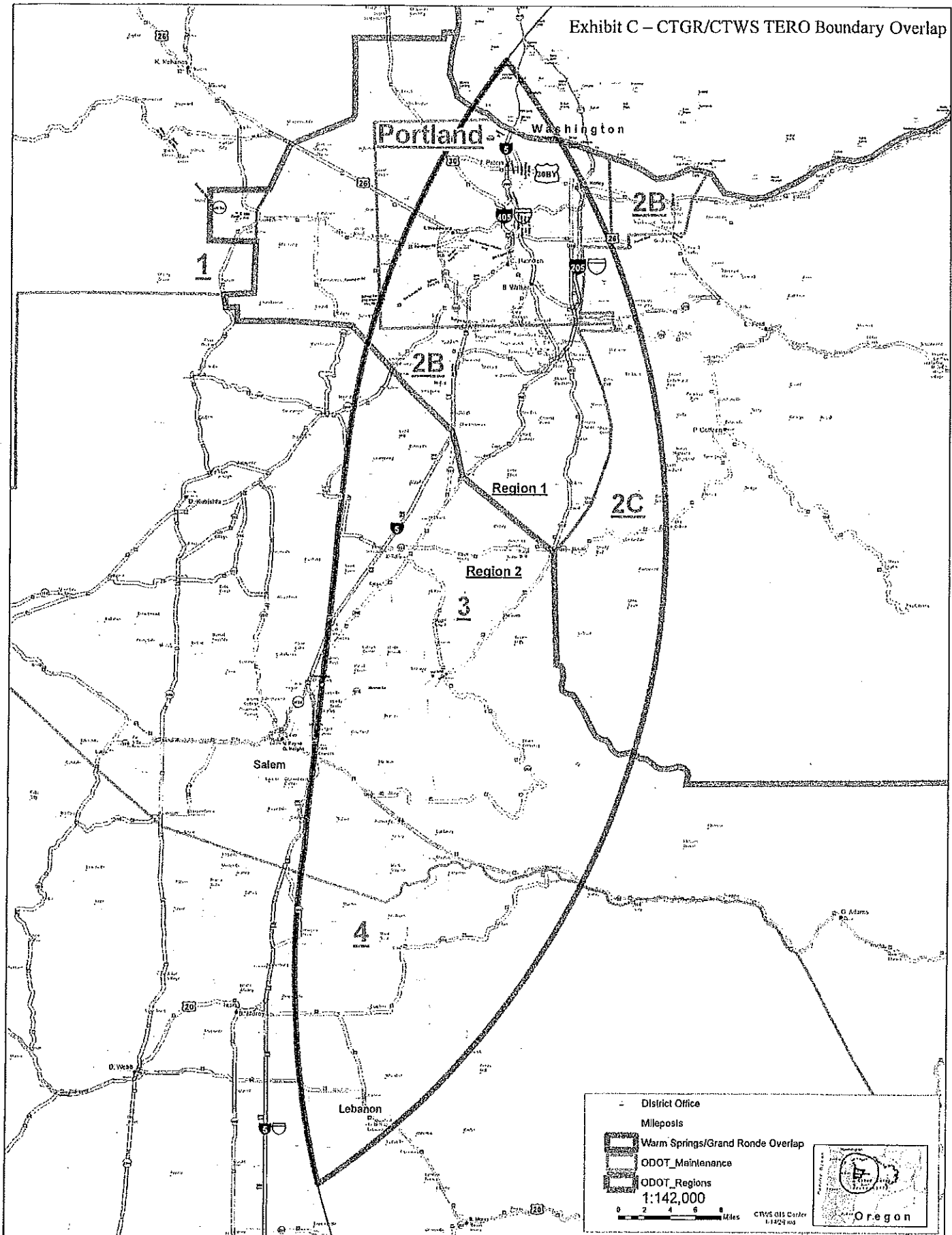


Exhibit C – CTGR/CTWS TERO Boundary Overlap

INDIAN EMPLOYMENT GOALS AND COMPLIANCE FEE

Indian Employment Preference Goal

The assigned Indian Employment Preference goal for this Project is 10 %

Compliance Fee

As established in separate Memorandum of Understanding (MOU) with the Confederated Tribes of the Grand Ronde Community of Oregon (CTGR) a project in which any work takes place within reservation boundary or within the TERO boundary may be subject to a TERO compliance fee. The TERO boundary is described in Exhibit A to the MOU.

The Contractor is required to determine the compliance fee for this Project. Use the following calculations to determine the fee. The Compliance Fee for this Project is the summation of the following four calculations:

\$1 to \$500,000 of Contract Amount × 1.00%	=	_____
\$500,001 to \$999,999 of Contract Amount × 0.75%	=	_____
\$1,000,000 to \$1,999,999 of Contract Amount × 0.50% ..	=	_____
\$2,000,000 up to the full Contract Amount × 0.25%	=	_____
Total COMPLIANCE FEE for this Project is:	=	_____

PROJECT WAGE RATES

Minimum Wage Requirements - This Project is subject to both federal and State prevailing wage rate requirements. Not less than the higher of the applicable federal or existing State prevailing wage rates shall be paid to workers according to 00170.65(b) and 00170.65(e).

Applicable Wages - Prevailing wage rates published in the following wage determinations and any applicable modifications or amendments apply to this Project and are incorporated by reference:

- (1) U.S. Department of Labor (USDOL), "General Wage Determinations Issued under the Davis-Bacon and Related Acts: Oregon Highway Construction Projects", and
- (2) Oregon Bureau of Labor and Industries (BOLI), "Prevailing Wage Rates For Public Works Contracts".

The applicable federal prevailing wage rates and the existing State prevailing wage rates last published prior to the time of Bid Opening, which is stated on the Description of Work page, apply to this Project.

Wage Rates are Internet-Accessible - ODOT provides the applicable Davis-Bacon and BOLI wage rates, referenced by Bid Opening date, on the Project Wages web page at:

<https://www.oregon.gov/ODOT/Business/Pages/Project-Wages.aspx>

Wage Rates are Subject to Change - Modifications or amendments to the Davis-Bacon and BOLI wage rates applicable to this Project may occur any time before Bid Opening. Bidders are responsible to monitor the USDOL website, BOLI website, and the ODOT web page for modifications and amendments up until Bid Opening.

Blank Page

SPECIAL PROVISIONS

Subject to such revision as may be made in accordance with provisions stated in the Preface hereto, the provisions stated on the sheets inserted between pages [6] and [7] hereof are the Special Provisions which will be incorporated in and made a part of any Contract that may be awarded for the Work on the basis of a Bid received at the time and places stated herein under the headings "Description of Work" and "Time and Places of Receiving Bids (Bid Closing)".

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  RENEWS: 06-30-2026	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for <u>grading, drainage, and utilities</u> . Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>00280, 00294, 00305, 00310, 00320, 00350, 00440, 00495, 00641, 00730, 00745, 00748, 00754, 00759, 00760, 00765, 00820, 01040, 01050, 01069, 02050, 02320, 02510, 02560, 02630</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w /signature  EXPIRES: DEC. 31, 2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for traffic control. Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>00220, 00221, 00222, 00223, 00224, 00225, 00226, 00228, 00270</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  RENEWS: 12-31-2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for <u>grading, drainage, and utilities</u>. Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>00241, 00330, 00405, 00415, 00440, 00445, 00470, 00490, 00842, 01030, 01040, 01140, 01180, 02415</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  RENEWS: 12-31-2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for structural elements, steel structures, bridge drainage systems, and bolted steel tanks. Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>00510, 00520, 00530, 00535, 00540, 00581, 00563, 01191</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  RENEWS: 06-30-2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for electrical design. Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>00960</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  RENEWS: 12-31-2026	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for pavement markings, signing, and illumination. Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>00850, 00855, 00857, 00865, 00867, 00868, 00902, 00905, 00920, 00930, 00940, 00950, 00970, 02910</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvements Project
Lower Columbia River, Northeast Portland, Stadium Freeway
Multnomah County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  Digitally Signed 2025.11.26 13:26:01-08'00'	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for <u>drainage and utilities</u>. Modified Special Provisions were prepared by me or under my supervision. Section(s) <u>01010</u>

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

Willamette River: Stormwater Source Control Improvements Project

SPECIAL PROVISIONS

WORK TO BE DONE

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

1. Install Source Control Measures (SCM) and associated appurtenances .
2. Construct Pavement Repair .
3. Install Pavement Markings and Signing
4. Perform Landscaping and tree planting
5. 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
- BidExpress
www.bidx.com
- EquipmentWatch
www.equipmentwatch.com
- ODOT Construction Section
www.oregon.gov/odot/construction/pages/index.aspx
- ODOT Construction Section - Qualified Products List (QPL)
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
- ODOT Electronic Bidding Information Distribution System (eBids)
(Also referred to as ODOT eBids website)
<https://ecmnet.odot.state.or.us/ebidse>
- ODOT Environmental Product Declaration
<https://www.oregon.gov/odot/Construction/Pages/Environmental-Product-Declarations.aspx>
- ODOT Estimating
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/
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms
www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx

Willamette River: Stormwater Source Control Improvements Project

- ODOT Procurement Office - Construction Contracts Unit Notice of Intent
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
- ODOT Traffic Control Plans Unit
www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx
- ODOT Traffic Standards
www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx
- Oregon Legislative Counsel
www.oregonlegislature.gov/lc
- Oregon Secretary of State: State Archives
sos.oregon.gov/archives/Pages/default.aspx

00110.10 Abbreviations – Add the following paragraph to the end of this subsection:

EPD – Environmental Product Declaration

PCD - Pedestrian Channelizing Device

Delete the following paragraph:

DBE – Disadvantaged Business Enterprise

00110.20 Definitions – Add the following paragraphs to the end of this subsection:

Environmental Product Declaration - An environmental declaration providing environmental data using predetermined parameters and, where relevant, additional environmental information. *ISO 14025* refers to these as Type III Environmental Declarations.

Materially Unbalanced Bid - A Bid which generates a reasonable doubt that Award to the Bidder submitting a Mathematically Unbalanced Bid will result in the lowest ultimate cost to the Agency.

Mathematically Unbalanced Bid - A Bid containing lump sum or unit Pay Items (bid items) which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs and other indirect costs.

Pedestrian Accessible Route - An area for the use of pedestrians to navigate along sidewalks, driveways, curb ramps, crossings, and pedestrian facilities.

Pedestrian Channelizing Device - Devices used for channelizing pedestrians along a Temporary Pedestrian Accessible Route.

SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES

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

00120.00 Prequalification of Bidders – Add the following bullet to the end of the bullet list:

- If delivered by electronic mail, the application shall be sent to:

ODOTProcurementOfficeConstruction@odot.oregon.gov

Replace the bullet that begins “If delivered by mail...” with the following bullet:

- If delivered by mail or parcel delivery service, the application shall be sent to:

Oregon Department of Transportation
Procurement Construction Contracts, MS #33
355 Capitol Street NE
Salem, OR 97301

00120.01 General Bidding Requirements - Replace the paragraph that begins “If the Bidder submits the Bid...” with the following paragraph:

If the Bidder submits the Bid electronically through BidExpress® as a joint venture, in addition to the joint venture signing with the digital signature and unique ID for the joint venture, the Bidder must also submit the signature pages from the Bid Booklet signed by each member of the joint venture, together with a statement the Bidder adds above or with the signatures as follows: “The following joint venture member signatures are for the Bid for the [Insert Project Name] Project submitted by the joint venture through BidExpress®. The signatures are on behalf of each joint venture member and the joint venture and also confirm that the signatory in BidExpress® was authorized to submit the Bid on behalf of the joint venture.” The Bidder must also email .pdf copies of the signature pages showing the signatures of the joint venture members with the required statement which must be received by BJ McCartney, Construction Contracts Manager, at the ODOT Procurement Office at: ODOTProcurementOfficeConstruction@odot.oregon.gov before the Closing date and time for the Bid. The signature pages with the original signatures must also be mailed or delivered to and received by BJ McCartney, Construction Contracts Manager, at the address given in the Bid Book as a condition of Award.

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, Paving, Signing, Illumination, and Roadside Development
Willamette River: Stormwater Source Control Improvement Project
Lower Columbia River, Northeast Portland, Stadium Freeway

Willamette River: Stormwater Source Control Improvements Project

Multnomah County
April 2026"

00120.10 Bid Booklet – Replace the bullet that begins “Appendix, which includes...” with the following bullet:

- Appendix, which includes required time-sensitive forms, sample forms, and other informational pages

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
00241.30	Personnel Qualifications
00294.30	Personnel Qualifications
00350.30	Personnel Qualifications
00535.30	Personnel Qualifications
00759.30	Personnel Qualifications
00765.30	Personnel Qualifications
01030.30	Personnel Qualifications
01191.31	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

00120.40(f) Disclosure of First-Tier Subcontractors – Replace the paragraph beginning “If no subcontracts subject to the above...” with the following paragraph:

If no subcontracts subject to the above disclosure requirements are anticipated, a Bidder shall so indicate by entering "NONE" or by filling in the appropriate check box. For each Subcontractor listed, Bidders shall provide all requested information. Failure to submit a form or submission of a form that does not include the information required by ORS 279C.370 for each Subcontractor listed, specifically the name of each Subcontractor, the dollar amount of each subcontract and the category of Work that each Subcontractor will perform, will result in the rejection of the Bid. The Agency is not required to determine the accuracy or the completeness of the Subcontractor disclosure. See ORS 279C.370 and OAR 731-005-0420.

Replace both of the bullets that begin “Using the form provided on the Agency’s website...” with the following bullet:

- Using the fillable form provided on the Agency's website, identified in the Bid Booklet on the ODOT eBIDS website, filling the form out and submitting the completed form via email to the email address given in the paper Bid Booklet.

Willamette River: Stormwater Source Control Improvements Project

00120.70 Rejection of Nonresponsive Bids - Delete the bullet that begins “The Bidder has not complied with the DBE...”.

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

- The Bid is found to be Mathematically Unbalanced and Materially Unbalanced.

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the Standard Specifications modified as follows:

00130.00 Consideration of Bids - Replace the paragraph that begins “The Agency reserves...” with the following paragraph:

The Agency reserves the right to waive minor informalities and irregularities, seek clarification of any Bid or response that, in its sole discretion, it deems necessary or advisable, and to reject any Bids for irregularities under 00120.70 or all bids for good cause after finding that it is in the public interest to do so (ORS 279C.395). The Agency may correct obvious clerical errors, when the correct information can be determined from the face of the documents, if it finds that the best interest of the Agency and the public will be served thereby.

00130.40 Contract Submittals - Add the following paragraph to the end of this subsection:

The Agency, in its sole discretion, may require execution of documents identified in subsections (a), (b) and (c) with a form of electronic signature (including but not limited to sealing and signing) acceptable to the Agency.

00130.40(c) Workers' Compensation – Replace this subsection, except for the subsection number and title, with the following:

To certify compliance with the workers' compensation insurance coverage required by 00170.61(a) and 00170.70(e), the successful Bidder shall complete and sign the "Certification of Workers' Compensation Coverage" form bound in the Contract booklet.

00130.50 Execution of Contract and Bonds - Add the following paragraph to the end of this subsection:

The Agency, in its sole discretion, may require execution of documents identified in subsection (a) with a form of electronic signature (including but not limited to sealing and signing) acceptable to the Agency.

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 – Replace the bullet that begins “In addition to the notification required...” with the following bullet:

- In addition to the notification required in OAR 952-001-0090(7), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown Utility issues; and

Add the following bullet to the end of the bullet 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

Utility	Contact Person's Name, Address, Email, and Phone Number
Port of Portland	Robert Potter 7200 NE Airport Way Portland, OR 97218 Robert.Potter@PortofPortland.com

Willamette River: Stormwater Source Control Improvements Project

	503-913-1479
PacifiCorp	Rebecca Chin 825 NE Multnomah St. Portland, OR 97232 Rebecca.Chin@pacificorp.com 503-280-2715
BP/Olympic Pipeline	Timothy Fehr 600 Southwest 39th Street Suite 275 Renton, WA 98057 Timothy.Fehr@bp.com (360) 812-4162 BP File No. TPR14433
Kinder Morgan	Kevin Wallace 6565 NW St. Helens Rd. Portland, OR 97210 Kevin_Wallace@kindermorgan.com kmencroachmentspacific@kindermorgan.com 503-224-3390
Shell Oil	Eric Ostlund 20945 S. Wilmington Ave. Carson, CA 90810 Eric.ostlund@shell.com (562) 476-8978
Portland Bureau of Environmental Services	Daniel Jenkins 1120 SW 5th Avenue, Suite 613 Portland, Oregon 97204 Daniel.Jenkins@portlandoregon.gov 503-823-8736
Portland Water Bureau	Jamie Wilde 644 N Tillamook St. Portland, OR 97227 Jamie.wilde@portlandoregon.gov 503-823-6446
Portland Bureau of Technology Services	Rob Durkin 3732 SE 99th Avenue Portland, OR 97266 Rob.durkin@portlandoregon.gov 503-823-6243

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. Utilities may require an on-site observer or representative, at no cost to the Contractor.

BP/Olympic Pipeline, Kinder Morgan, and Shell Oil - Gas Utilities –

BP/Olympic operates a high pressure gas pipeline within the Project limits and may require an onsite safety watcher, at no cost to the Contractor. BP/Olympic Pipeline's high pressure

Willamette River: Stormwater Source Control Improvements Project

gas pipeline is located at site WR510 St. Johns Bridge – West End US30 Bypass – M.P. 0.61 and is oriented parallel to the Railroad.

The Contractor shall notify, in writing, BP/Olympic, with a copy to the Engineer, the proposed equipment ground pressure loading. Provided a minimum of 10 working Days for review.

Olympic Pipe Line Company, LLC provided a letter dated April 25, 2025 detailing their conditions of approval. A letter must be onsite at all the times and all construction workers and equipment operators must be made aware of the requirements therein.

When operating Equipment directly above the high pressure gas pipelines, the Contractor shall keep Equipment on the paved surfaces only.

In the immediate area of the high pressure gas lines, when moving any Equipment, excavating, driving piles, pounding guardrail posts, boring, or other road construction activities, the Contractor shall increase the tolerance zone from 24 inches, as defined in OAR 952-001-010, to 25 feet. Exceptions require written approval from the BP/Olympic. The Contractor shall provide the Engineer a copy of the written approval of the exception before beginning Work.

Kinder Morgan operates a high pressure gas pipeline within the Project limits and may require an onsite safety watcher, at no cost to the Contractor. Kinder Morgan's high pressure gas pipeline is located at site OF19-2 – US30 M.P. 3.88 and is oriented parallel to US30: Lower Columbia River Highway. Prior to work within the immediate vicinity of any Kinder Morgan utilities, the Contractor and Engineer shall coordinate with Kinder Morgan for review and approval of the proposed equipment ground pressure loading. Kinder Morgan shall be provided a minimum of 10 working Days of notice to review provided documentation.

When operating Equipment directly above the high pressure gas pipelines, the Contractor shall keep Equipment on the paved surfaces only. Excavation within 2ft of the line will be restricted to digging by hand or using Vac equipment only and require a Kinder Morgan Representative on site during work within 10ft.

In the immediate area of the high pressure gas lines, when moving any Equipment, excavating, driving piles, pounding guardrail posts, boring, or other road construction activities, the Contractor shall increase the tolerance zone from 24 inches, as defined in OAR 952-001-010, to 25 feet. Exceptions require written approval from Kinder Morgan. The Contractor shall provide the Engineer a copy of the written approval of the exception before beginning Work.

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

- Kinder-Morgan Energy 503-224-3390; or
- Northwest Natural Gas 1-800-882-3377; or
- Olympic Pipe Line Company LLC 1-888-271-8880; or
- Shell Oil 1-800-922-3459

PacifiCorp - Power Suppliers -

Willamette River: Stormwater Source Control Improvements Project

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 onsite 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.

Astound - Telecommunication Utilities - The Contractor shall obtain written approval from Telecommunication Utilities that have fiber optic communication cable facilities, for excavating within 10 feet of a buried fiber optic communications cable. Telecommunication Utilities may require an onsite safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning Work.

Portland Bureau of Technology Services Utilities - The Contractor shall notify, in writing, Portland Bureau of Technology Services with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Portland BTS line(s) at storm facility OF22C - US30 M.P. 6.41.

Portland Bureau of Environmental Services (Sanitary Sewer/Storm Drainage) - The Contractor shall notify, in writing, Portland Bureau of Environmental Services, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project. Portland Bureau of Environmental Services may require an on-site observer, at no cost to the Contractor.

Portland Water Bureau (Water) - The Contractor shall notify, in writing, Portland Water Bureau, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project. Portland Water Bureau may require an on-site observer, at no cost to the Contractor.

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

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
00150.50(g)(1)	<u>NW Natural</u>	<u>Steve Monier</u> <u>220 NW 2nd Ave.</u> Portland, OR 97210 217-741-4403	<u>6/15/2026</u>
00150.50(g)(2)	<u>Portland General Electric</u>	<u>Daniel Sapp</u> <u>PO Box 3340</u> Portland, OR 97208 <u>Daniel.sapp@pgn.com</u> <u>503-736-5624</u>	During Construction

Willamette River: Stormwater Source Control Improvements Project

00150.50(g)(3)	<u>City of Portland Bureau of Transportatio n</u>	<u>Charles Radosta</u> 1120 SW 5th Avenue, Suite 1331 Portland, OR 97204 Charles.radosta@portlandoregon.gov 503-823-8133	6/15/2026
<u>00150.50(g)(4)</u>	Comcast	Rick Robinson 11308 SW 68th Parkway Tigard, OR 97223 503-894-0618	During Construction
<u>00150.50(g)(5)</u>	Verizon	<u>Ian Lambie</u> 2550 NE Alcock Dr. Hillsboro, OR 97214 ian.lambie@verizon.com 503-867-2758	6/15/2026
<u>00150.50(g)(6)</u>	Cogent	<u>Ross Buell</u> 417 SE Miller Ave, Unit #2 Bend, OR 97002 Rbuell@cogentco.com 541-588-4613	6/15/2026
<u>00150.50(g)(7)</u>	<u>Lumen Local</u>	<u>Johathan Myrick</u> 8021 SW Capitol Hill Rd., Rm 110 Portland, OR 97219 Jonathan.myrick@lumen.com (360) 946-2894	6/15/2026
<u>00150.50(g)(8)</u>	<u>Lumen National</u>	<u>Anglina Wilson</u> 214 E 24th St. Vancouver, WA 98663 Anglina.wilson@lumen.com 503-310-4762	During Construction
<u>00150.50(g)(9)</u>	<u>AT&T</u>	<u>Steven Duppenthaler</u> 819 SW Oak St. Portland, OR 97205 SD1891@att.com (425) 286-3822	During Construction
<u>00150.50(g)(10)</u>	Zayo	<u>Nick Kompaniet</u> 350 N Mitchell St. Boise, ID 83704 Nick.kompaniet@zayo.com 541-450-2454	During Construction
<u>00150.50(g)(11)</u>	<u>Portland General Electric</u>	<u>Daniel Sapp</u> PO Box 3340 Portland, OR 97208 Daniel.sapp@pgn.com 503-736-5624	6/15/2026

(1) NW Natural - "Gas Utility":

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

Willamette River: Stormwater Source Control Improvements Project

The Gas Utility operates a high pressure gas pipeline within the Project limits and may require an onsite safety watcher, at no cost to the Contractor. The high pressure gas pipeline is located at site WR208/WR211 at US30 M.P. 7.03 and is oriented parallel to the highway.

The Gas Utility operates a high pressure gas pipeline within the Project limits and may require an on-site safety watcher, at no cost to the Contractor. The high pressure gas pipeline is located at site OF16-2 at US30 M.P. 2.33 and is oriented perpendicular to the highway.

When operating Equipment directly above the high pressure gas pipeline, the Contractor shall keep Equipment on the paved surfaces only.

In the immediate area of the high pressure gas lines, when moving any Equipment, excavating, driving piles, pounding guardrail posts, boring, or other road construction activities, the Contractor shall increase the tolerance zone from 24 inches, as defined in OAR 952-001-010, to 10 feet. Exceptions require written approval from the Gas Utility. The Contractor shall provide the Engineer a copy of the written approval of the exception before beginning Work.

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

- Kinder-Morgan Energy 503-224-3390; or
- Northwest Natural Gas 1-800-882-3377; or
- Olympic Pipe Line Company LLC 1-888-271-8880; or
- Shell Oil 1-800-922-3459

(2) Portland General Electric - "Power Supplier":

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

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 31 Calendar Days before the Contractor is scheduled to begin performing installation of shoring and storm facilities at site WR79 – US30 M.P. 9.06. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 31 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing installation of shoring at site WR79 – US30 M.P. 9.06.

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 45 Calendar Days before the Contractor is scheduled to begin installation of shoring and storm facilities at site OF16-2 – US30 M.P. 2.33. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 45 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing installation of shoring and storm facilities at site OF16-2 – US30 M.P. 2.33.

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 15 Calendar Days before the Contractor is scheduled to begin installation of temporary shoring or removal of surfacing, whichever occurs first, at site Fremont Bridge – West End – US30 M.P. 3.20. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 15 Calendar Days to schedule and complete the relocation and removal

Willamette River: Stormwater Source Control Improvements Project

work before the Contractor begins performing installation of temporary shoring or removal of surfacing, whichever occurs first, at site Freemont Bridge – West End – US30 M.P. 3.20.

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor's estimated completion of all Work at site Fremont Bridge – West End US30 M.P. 3.20. After the Contractor has completed this Work or 14 Calendar Days after the Power Supplier receives the notification, whichever occurs later, the Contractor shall then allow the Power Supplier 30 Calendar Days to schedule and complete the remaining relocation and reinstallation work.

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 onsite 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.

(3) City of Portland Bureau of Transportation (PBoT) :

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

City of Portland Bureau of Transportation relocation work for this project is scheduled to be completed by 6/15/2026:

Site OF16-3 – US30 M.P. 2.21 Site OF19-2 – US30 M.P. 3.88

City of Portland Bureau of Transportation relocation work to be completed during the ODOT contract Period:

Site OF 22D:

The Contractor shall notify City of Portland Bureau of Transportation in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin work impacting traffic loops at site OF22D. After City of Portland Bureau of Transportation receives the notification, the Contractor shall then allow City of Portland Bureau of Transportation 14 Calendar Days to schedule and complete any remaining relocation and adjustment work before the Contractor begins Work on storm facilities at site OF22D.

City resources will install permanent traffic radar detection systems during the ODOT contract period and in coordination with ODOT Contract Work to perform pavement work and remove existing traffic loops.

City of Portland Bureau of Transportation to perform installation of new detection system in coordination with ODOT Contractor schedule.

Site OF 19-2:

The Contractor shall notify City of Portland Bureau of Transportation in writing, with a copy to the Engineer, 14 Calendar Days before the Contractor is scheduled to begin work impacting traffic loops at site OF19-2. After City of Portland Bureau of Transportation receives the notification, the Contractor shall then allow City of Portland Bureau of Transportation 14 Calendar Days to schedule and complete any remaining relocation and adjustment work before the Contractor begins work on storm facilities at site OF19-2.

City resources will install permanent traffic radar detection systems during the ODOT contract period and in coordination with ODOT contract work to perform pavement work and remove existing traffic loops.

Willamette River: Stormwater Source Control Improvements Project

City of Portland Bureau of Transportation to perform installation of new detection system in coordination with ODOT Contractor schedule.

(4) Comcast - "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 installation of shoring and storm facilities at site OF22C - US30 M.P. 6.41. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF22C - US30 M.P. 6.41. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 installation of shoring and storm facilities at site OF16-3 – US30 M.P. 2.21. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF16-3 – US30 M.P. 2.21. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

The estimated completion date for the Telecommunication Utility to perform all other adjustments and relocation work is 06/15/2026.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(5) Verizon - "Telecommunication Utility":

Willamette River: Stormwater Source Control Improvements Project

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 obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(6) Cogent - "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 obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(7) Lumen Local - "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 obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(8) Lumen National - "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 installation of shoring and storm facilities at site OF22C - US30 M.P. 6.41. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal

Willamette River: Stormwater Source Control Improvements Project

of shoring at site OF22C - US30 M.P. 6.41. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 installation of shoring and storm facilities at site OF19-2 – US30 M.P. 3.88. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 38 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF19-2 – US30 M.P. 3.88. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 38 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 installation of shoring and storm facilities at site OF16-3 – US30 M.P. 2.21. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF16-3 – US30 M.P. 2.21. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

The estimated completion date for the Telecommunication Utility to perform all other adjustments and relocation work is 06/15/2026.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(9) AT&T - "Telecommunication Utility":

Willamette River: Stormwater Source Control Improvements Project

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 installation of shoring and storm facilities at site OF22C - US30 M.P. 6.41. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF22C - US30 M.P. 6.41. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 installation of shoring and storm facilities at site OF19-2 – US30 M.P. 3.88. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 38 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF19-2 – US30 M.P. 3.88. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 38 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

The estimated completion date for the Telecommunication Utility to perform all other adjustments and relocation work is 06/15/2026.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(10) Zayo - "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.

Willamette River: Stormwater Source Control Improvements Project

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 installation of shoring and storm facilities at site OF16-3 – US30 M.P. 2.21. Telecommunication Utility has agreed to hold their aerial lines during applicable Contractor operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

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 removal of shoring at site OF16-3 – US30 M.P. 2.21. Telecommunication Utility has agreed to hold their aerial lines during shoring removal operations, allowing the lowest aerial line a clearance of 22 feet above existing ground. Allow the Telecommunication Utility's contractor, Oregon Aerial Construction, to have personnel and equipment on site during Contractor operations that require such clearance.

The estimated completion date for the Telecommunication Utility to perform all other adjustments and relocation work is 06/15/2026.

The Contractor shall obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

(11) Portland General Electric - "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 obtain written approval from the Telecommunication Utility for excavating within 10 feet of a buried fiber optic communications cable. The Telecommunication Utility may require an on-site safety watcher at no cost to the Contractor for monitoring purposes. The Contractor shall provide the Engineer a copy of the written approval before beginning work.

The Contractor shall coordinate Fiber Optic relocation work with the Telecommunication Utility due to potential restricted work dates.

00150.55 Cooperation with Other Contractors - Add the following to the end of this subsection:

The following contract work will be ongoing within the Project Site during the following times:

Contract Name (Contractor's Name)	Estimated Times (From - To)
K21704 US30BYPASS: Bridge Over Private Driveway. Contractor TBD	Nov 2025 to Jul 31, 2026

Willamette River: Stormwater Source Control Improvements Project

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:

00160.01(a) All Materials - Replace the paragraph that begins "The Contractor shall identify..." with the following paragraph:

When the estimated value is over \$10,000, the Contractor shall submit a copy of the materials purchase order or supply agreement.

Delete the paragraph that begins "For this purpose..."

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.

Willamette River: Stormwater Source Control Improvements Project

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 and manufactured products permanently incorporated in the Project. All construction materials and manufactured products 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.

Willamette River: Stormwater Source Control Improvements Project

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.

FHWA issued a final rule on January 14, 2025 amending FHWA's Buy America regulation to terminate FHWA's general waiver for manufactured products and establish Buy America requirements for manufactured products with respect to Federal-aid highway projects. <https://www.federalregister.gov/documents/2025/01/14/2024-31350/buy-america-requirements-for-manufactured-products>

Manufactured products assembled outside the Project Site are also 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.

For manufactured products, the final assembly of the product shall occur within the United States for projects obligated on or after October 1, 2025. For projects obligated after October 1, 2026, the cost of the components of the product that are mined, produced or manufactured in the United States shall be more than 55 percent of the total cost of all components of the product.

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 and manufactured products 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 and manufactured products in excess of this amount into the Project. All foreign origin construction materials and manufactured products incorporated

Willamette River: Stormwater Source Control Improvements Project

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 and manufactured products 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 and manufactured products 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>.

Add the following subsection:

00160.65 Environmental Product Declaration – Pursuant to ORS 184.879 and OAR 731-005-0910, provide an Environmental Product Declaration for the following materials:

- Concrete, including ready mix concrete, shotcrete, precast concrete and concrete masonry units;
- Asphalt paving mixtures;
- Steel, including rebar, reinforcing steel and structural steel, hot-rolled sections, hollow sections, plate steel and cold-formed steel.

Submit an EPD according to the *ODOT Environmental Product Declaration Manual* (see 00110.05(e)).

The most current published PDF version of the *ODOT Environmental Product Declaration Manual* on the date of Advertisement is the version in effect for the Project.

The EPD must be accepted by the Engineer before the product is incorporated into the Project unless the product is procured under a listed exemption in ODOT's *Environmental Product Declaration Manual*.

SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications modified as follows:

00165.10(b) Nonfield-Tested Materials – Replace this subsection, except for the subsection number and title, with the following:

Nonfield-tested Materials will be accepted according to the ODOT Nonfield Tested Materials Acceptance Guide (NTMAG), unless otherwise specified in the Contract. The NTMAG is available on the ODOT Construction Section website (see 00110.05(e)). The most current version of the NTMAG on the date of Advertisement is the version in effect for the Project.

(1) Rejections – The inspection at the mill, shop, or precaster of any Material, Work or finished members will not prevent subsequent rejection, if later found damaged or defective, nor relieve the Contractor of the responsibility to correct or replace the Work at no additional cost to the Agency.

(2) Transport – Do not ship members or piece of fabricated steel or precast member, that requires a fabrication inspection report, without the Inspector's label or marking.

00165.35(d) Certificate of Origin of Steel Materials – Replace this subsection, except for the subsection number and title, with the following:

When a certificate of material origin for steel or iron Materials is specified, complete the form furnished by the Engineer as required by 00160.20(a) for Federal-aid projects.

00165.35(e) Certificate of Origin of Construction Materials – Replace this subsection, except for the subsection number and title, with the following:

When a certificate of material origin for construction materials is specified, complete the form furnished by the Engineer as required by 00160.20(d) for Federal-aid projects.

00165.91 Fabrication Inspection Expenses – Replace the table with the following table:

TABLE 00165-3		
Zone	Place of Fabrication	Reduction in Payment
1	All of State of Oregon, and the portion of the State of Washington within 50 airline miles of Portland International Airport (PDX)	\$0
2	Outside of Zone 1, and up to 250 airline miles of Portland International Airport (PDX)	\$300 per Calendar Day
3	Outside of Zone 2, up to 1,000 airline miles of Portland International Airport (PDX).	Round trip coach airfare from Portland, Oregon plus \$300 per Calendar Day

Willamette River: Stormwater Source Control Improvements Project

4	Outside of Zone 3, or outside of the continental United States.	Round trip coach airfare from Portland, Oregon plus \$500 per Calendar Day

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.

00170.07 Record Requirements - Replace the paragraph that begins "For purposes of this Subsection, the term ..." with the following paragraph:

For purposes of this Subsection, the term "Contractor" includes the Contractor, all Subcontractors, Material Suppliers, and providers of rented operated Equipment (except truck drivers), at all tiers, for all subcontracts with first-tier Subcontractors, all subcontracts between the first-tier Subcontractors and their Subcontractors and any other lower-tier subcontracts, and "Related Entities" as that term is defined in OAR 734-010-0400. The Material Suppliers included in this definition are those for Aggregates, asphalt cement concrete, Portland cement concrete and the supply and fabrication of structural steel items, and Material Suppliers that provide quotes.

00170.07(a) Records Required - Replace the paragraph that begins "The Contractor shall include in its subcontracts ..." with the following paragraph:

The Contractor shall include in its subcontracts, purchase orders, and all other written agreements, a provision requiring all Subcontractors, Material Suppliers and providers of rented operated Equipment (except truck drivers), at all tiers, to comply with 00170.07. The Contractor shall also require all Subcontractors, Material Suppliers, and providers of rented operated Equipment (except truck drivers), at all tiers, and Related Entities to include in their contracts, purchase orders, and all other written agreements, a provision requiring all lower-tier Subcontractors, Material Suppliers and providers of rented operated Equipment (except truck drivers) to comply with 00170.07. The Material Suppliers to which this applies are those for Aggregates, asphalt cement concrete, portland cement concrete and the supply and fabrication of structural steel items and Material suppliers that provide Material quotes and Related Entities as defined in OAR 734-010-0400.

00170.10(g) Paid Summary Report – Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall submit a *Paid Summary Report* to the Engineer certifying payments made to all of its Subcontractors.

Willamette River: Stormwater Source Control Improvements Project

The *Paid Summary Report* shall be completed on the form provided by the Engineer and submitted to the Engineer within 20 Calendar Days of receipt of payment from the Agency for each month in which payments were made to each Subcontractor.

At the completion of the Project, submit a final *Paid Summary Report* form that provides the total amounts paid to each Subcontractor.

The Contractor shall require each Subcontractor at every tier to comply with the requirement to submit a *Paid Summary Report* within 20 Calendar Days of receipt of payment for Work on the Project and submit a final *Paid Summary Report* that provides the total amounts paid to the Subcontractor for its Work under the subcontract at the completion of the Project or completion of its Work.

00170.61(a) Workers' Compensation - Replace this subsection with the following subsection:

00170.61(a) Workers' Compensation and Employer's Liability - The Contractor shall provide workers' compensation and employer's liability coverage for on-the-job injuries as required by 00170.70(e).

00170.65(b)(1) Minimum Wage Rates – Replace the paragraph that begins "The Bureau of Labor and Industries (BOLI) ..." with the following paragraph:

The Bureau of Labor and Industries (BOLI) determines and publishes the existing State prevailing wage rates in the publication *Prevailing Wage Rates for Public Works Contracts*. The Contractor shall pay workers not less than the specified minimum hourly wage rate according to ORS 279C.838 and ORS 279C.840, and shall include this requirement in all subcontracts.

00170.70(a) Insurance Coverages - Replace the paragraph that begins "**Contractor** – The Contractor shall..." with the following paragraph:

Contractor - The Contractor shall obtain the insurance specified below prior to the execution of the Contract. The Contractor shall maintain the insurance in full force at the Contractor's expense throughout the duration of the Contract and as required by an extended reporting period or tail coverage requirements, and all warranty periods that apply.

Replace the paragraph that begins "**Insurance Provisions** - The Contractor and Subcontractor(s), if..." with the following paragraph:

Insurance Provisions - The Contractor and Subcontractor(s), if any, shall obtain insurance from insurance companies or entities that are authorized to transact the business of insurance and issue coverage in the State and that are acceptable to the Agency. Insurance coverage shall be primary and noncontributory with any other insurance and self-insurance, with the exception of Workers' Compensation/Employer's Liability. The Contractor, or appropriate Subcontractor, but not the Agency, shall pay for all deductibles, self-insurance retentions and self-insurance, if any.

Replace the paragraph that begins "**Commercial General Liability** - The Contractor shall provide Commercial..." with the following paragraph:

Willamette River: Stormwater Source Control Improvements Project

Commercial General Liability - The Contractor shall provide Commercial General Liability Insurance written on an occurrence basis and covering the Contractor's liability for bodily injury, property damage, personal and advertising injury, products and completed operations, and contractual liability. Coverage may be written in combination with Commercial Automobile Liability Insurance with separate limits for Commercial General Liability and Commercial Automobile Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Special Provisions. The annual aggregate limit shall not be less than the dollar amount specified in the Special Provisions. The policy shall be endorsed to state that the annual aggregate limit of liability shall apply separately to the Contract.

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	\$2,000,000	\$5,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)

00170.70(b) Extended Reporting - Replace the paragraph that begins "The Contractor or Subcontractor shall..." with the following paragraph:

The Contractor or Subcontractor shall furnish certification of this extended reporting requirement as a condition to receive Third Notification under 00150.90(b) and 00180.50(g).

00170.70(c) Excess/Umbrella Liability - Replace this subsection, except for the subsection number and title, with the following:

A combination of primary and Excess/Umbrella Liability Insurance may be used to meet the required minimum limits of insurance. If any Excess/Umbrella Liability policies are in place, they must be on a true "following form" or broader coverage basis, with coverage at least as broad as provided on the underlying insurance. In addition, the limits of the underlying insurance must be sufficient to prevent any gap between such minimum limits and the attachment point of the coverage provided by the Excess/Umbrella Liability policy.

00170.70(d) Additional Insured - Replace the paragraph that begins "The liability insurance coverages of 00170.70(a)..." with the following paragraph:

The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement endorsing the "State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents, and employees" as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

Willamette River: Stormwater Source Control Improvements Project

00170.70(e) Workers' Compensation - Replace the title of this subsection with **"Workers' Compensation and Employer's Liability"**

00170.70(g) Certificate(s) of Insurance - Replace the bullet that begins "List the "State of Oregon..." with the following bullet:

- List the "State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents and employees" as a Certificate holder and endorse as an Additional Insured;

Replace the bullet that begins "Specify that all liability insurance ..." with the following bullet:

- Specify that all liability insurance coverages shall be primary and noncontributory with any other insurance and self-insurance, with exception of Workers' Compensation/Employer's Liability;

Replace the bullet that begins "Include a list of all policies..." with the following bullet:

- Include a list of all policies that fall under the Excess/Umbrella Liability Insurance if Excess or Umbrella Liability Insurance is used to meet the minimum insurance requirements .

00170.70(i) Insurance Requirement Review - Replace this subsection, except for the subsection number and title, with the following:

The Contractor agrees to periodic review of insurance requirements by Agency. Agency reserves the right to periodically assess risks and the adequacy of insurance coverage and in its discretion to require additional insurance coverage or increased coverage limits on existing coverages, or both.

SECTION 00180 - PROSECUTION AND PROGRESS

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

00180.20(d) Disadvantaged Business Enterprise (DBE) – Delete this subsection.

00180.20(e) Trucking - Replace the paragraph that begins "This Section does not apply to..." with the following paragraph:

This Section does not apply to delivery of Materials by or for or from a Supplier. This Subsection applies to all truck hauling of materials not performed with trucks owned (or rented) and operated by the Contractor.

00180.20(e)(1) Trucking - Delete the bullet that begins "Statement specifying whether the services will be provided by a DBE..."

00180.20(e)(2) Limitations - Replace the paragraph that begins "The approved trucking services agreements..." with the following paragraph:

Willamette River: Stormwater Source Control Improvements Project

The approved trucking services agreements shall be used for all trucking services for hauling materials not provided by trucks owned (or rented) and operated by the Contractor. The Contractor shall execute a trucking services agreement with every trucking services provider for hauling materials prior to the trucking services provider doing any Work on the Project Site.

00180.21(a) General – Replace the bullet that begins "If the Subcontractor is providing any..." with the following bullet:

- If the Subcontractor is providing any of the insurance coverages as permitted under 00170.70(a), the Agency will respond within 35 Calendar Days after the Engineer's receipt of the request. (28 Calendar Days for the Agency to review and approve the Certificates of Insurance required by 00170.70(g) plus 7 Calendar Days to review and approve the subcontract request.)

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
Cooperation with Other Contractors	00150.55
Contract Time	00180.50(h)
Closed Lanes	00220.40(e)(1)
Special Events	00220.40(e)(2)(b)
Other Short Term Closures	00220.40(f)
Other Long Term Closures	00220.40(g)
Noise Control	00290.32
Opening Sections to Traffic	00745.51

The Contractor shall not begin Work at sites OF22C, WR206, and OF22D before Jan 1, 2027, or the end of the K21704 Project, whichever is later, unless approved by the Engineer.

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 "One of the following Type..." add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type B 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:

Before beginning On-Site Work and before the preconstruction conference, the Contractor shall conduct a Utility scheduling meeting with representatives from the Utilities involved with

Willamette River: Stormwater Source Control Improvements Project

this Project and with the Engineer. The Contractor shall incorporate the time needs of the Utilities into the Contractor's schedule submitted at the preconstruction conference.

The Contractor shall submit a written Utility Coordination Report to the Engineer not later than seven Calendar Days after the Utility scheduling meeting. The Utility Coordination Report shall:

- Identify each specific Utility;
- Identify Utility contact names and numbers;
- Identify dates for Utility scheduling for the entire Project;
- Contain documents showing that the Contractor has accomplished Utility locates; and
- Contain documents showing that Utility locates, along with applicable construction activities, have been reviewed and discussed on-site with Utility representatives.

The Contractor shall hold monthly Utility coordination meetings with Utilities and the Engineer to coordinate Project activities with Utilities and on-going Utility relocation work. The Contractor shall hold monthly Utility coordination meetings in the office or in the field, as appropriate. The Utility coordination meetings shall include, but not be limited to:

- Detailed discussions of existing and abandoned Utilities,
- Detailed discussions of de-energizing and re-energizing service lines,
- Detailed discussions of critical locations for potholing of Utilities,
- Detailed discussions of Project activities, and
- Detailed discussions of on-going Utility relocations in upcoming Project activity areas.

During the monthly Utility coordination meetings, the Utilities will provide Utility drawings and discuss the scope, extent, locations, and significance of all Utility facilities before the Contractor begins work in a new activity area. The Contractor shall incorporate this information into the Project schedules and furnish the Utilities copies of the updated Project schedules.

The Contractor shall plan and schedule all Utility adjustment operations well in advance of On-Site Work. When the Contractor becomes aware of Utility conflicts not previously identified, the Contractor shall notify the applicable Utilities in writing the same Calendar Day. The Contractor shall allow Utilities at least 14 Calendar Days to relocate (adjust) the Utility conflicts not previously identified.

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 May 17, 2028.

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.

Willamette River: Stormwater Source Control Improvements Project

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). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$1,500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e).

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).

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

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

00190.20(a) General – Replace the paragraph that begins "Unless otherwise provided in the Contract,..." with the following paragraph:

Unless otherwise provided in the Contract, Pay Items to be measured by weight shall include all Contractor costs for providing, maintaining, inspecting, and testing scales; for furnishing appropriate weigh tickets; for self-printing scales; for non-Agency sponsored electronic weigh memo system(s); establishing and maintaining a connection to the Agency's e-ticket portal; and for transporting Materials to the scales or to check weighing.

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(f)(3) Duties of Weigh Technician – Replace the bullet that begins "Furnish a legible, serially numbered..." with the following paragraph:

- Furnish a legible, serially numbered weigh memo for each load of Materials to the Agency's Materials receiver at the point of delivery, through the Agency's e-ticket portal, or as directed by the Engineer. The memo shall identify the Project, the Materials, the date, net weight (gross and tare as appropriate), and identification of the vehicle and

Willamette River: Stormwater Source Control Improvements Project

weigh technician. If approved by the Engineer an electronic weigh memo system may be used. Requests to use an electronic weigh memo system shall be submitted to the Engineer according to 00150.37, providing sufficient detail for the Engineer to perform an evaluation. If approved, the Contractor shall provide training, technical support, reports, and weigh memo information to the Engineer at no additional cost to the Agency. The electronic weigh memo system shall be:

Add the following bullets after the bullet that begins “Capable of providing all the weigh...”:

- Use an electronic weigh memo system for weighing ACP mixture quantities specified in 00745.90, unless waived by the Engineer. Establish a live connection with the Agency’s e-ticket portal according to 00190.20(f)(4). When utilizing an electronic weigh memo system:
 - Ensure the identifying vehicle numbers displayed on the weigh memo correspond to those on the delivery vehicle. Ensure the numbers on the delivery vehicles are visible such that at least one can be safely read from within the work area. Delivery vehicles without identifying vehicle numbers shall be rejected.
 - Provide an alternate means of reporting weigh memo data to the Agency at point of delivery in the event there is no cellular data coverage at the point of ACP mixture delivery. The absence of cellular data coverage does not relieve the Contractor of the requirements in 00190.20(f)(3).

Add the following subsection:

00190.20(f)(4) Scale with Agency’s e-ticket Portal Live Connection - The use of the Agency’s e-ticket portal live connection is required for measurement of all ACP mixture quantities specified in 00745.90 unless otherwise directed. The Contractor shall establish a live connection to the Agency’s e-ticket portal with the assistance of HaulHub®. The Engineer may allow the use of the e-ticket portal for other Pay Items measured on the weight basis. The following is required for weigh memos provided through the Supplier’s e-ticket system:

- Conduct a test of each ACP mixture quantities specified in 00745.90 and any other proposed e-ticket material, with the Agency’s e-ticket portal at least 14 Calendar Days prior to transporting material. Perform at least four weigh memo tests for each Supplier approved for use on the Project. After the Engineer confirms the test weigh memos have been entered into the Agency’s e-ticket portal, void the e-tickets with the reason, “Calibration Testing”.
- Uptime reliability of the material Supplier’s e-ticket system must be 99.5% over any 30-Day rolling period. Uptime is defined as the ability to deliver electronic weigh memo data to the Agency’s e-ticket portal within 10 minutes of the electronic weigh memo creation.

The Supplier’s e-ticket system shall be:

- Capable of automatically recording and securely transmitting the same required “weigh memo” information identified in 00190.20(f)(3) to the Agency’s e-ticket portal.
- Fully integrated with the provided weigh scale system and the Agency’s e-ticket portal.
- Designed in such a way that the data electronically read from scales and transferred to the Agency’s e-ticket portal cannot be altered by the Contractor, Subcontractor, Supplier, Engineer, or other system users.

Willamette River: Stormwater Source Control Improvements Project

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.

00190.30 Plant Scales - Replace the paragraph that begins "If approved by the Engineer, an electronic..." with the following paragraph:

If approved by the Engineer, an electronic weigh memo system may be used in place of a printer system. See 00190.20(f)(3). This electronic weigh memo system is required for all ACP mixture quantities specified in 00745.90.

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 Districts 1 through 10 the MACMP will be based on the prices for the Portland, Oregon area. For Projects entirely in ODOT Maintenance District 13 or 14, the MACMP will be based on the prices for the Boise, Idaho area. For Projects entirely in ODOT Maintenance District 11 or 12 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

Willamette River: Stormwater Source Control Improvements Project

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:
Adjustment Factor = (MACMP) - (1.05 x 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>

Willamette River: Stormwater Source Control Improvements Project

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
Trench Foundation	0.33 Gal/Cuyd
General Excavation	0.33 Gal/Cuyd
Rock Excavation	0.33 Gal/Cuyd
Boulder Excavation	0.33 Gal/Cuyd
10 Inch Storm Sewer Pipe, 5 ft Depth	5.00 Gal/Foot
12 Inch Storm Sewer Pipe, 5 ft Depth	5.00 Gal/Foot
12 Inch Storm Sewer Pipe, 10 ft Depth	10.00 Gal/Foot
12 Inch Storm Sewer Pipe, 20 ft Depth	20.00 Gal/Foot
18 Inch Storm Sewer Pipe, 5 ft Depth	5.00 Gal/Foot
18 Inch Storm Sewer Pipe, 10 ft Depth	10.00 Gal/Foot
18 Inch Storm Sewer Pipe, 20 ft Depth	20.00 Gal/Foot
18 Inch Storm Sewer Pipe, Over 20 ft Depth	20.00 Gal/Foot
24 Inch Storm Sewer Pipe, 10 ft Depth	10.00 Gal/Foot
48 Inch Storm Sewer Pipe, Over 20 ft Depth	40.00 Gal/Foot
12 Inch Slotted Drain Pipe, 5 ft Depth	5.00 Gal/Foot
12 Inch Ductile Iron Pipe, 5 ft Depth	10.00 Gal/Foot
16 Inch Ductile Iron Pipe, 10 ft Depth	20.00 Gal/Foot

Willamette River: Stormwater Source Control Improvements Project

18 Inch Ductile Iron Pipe, 5 ft Depth	20.00 Gal/Foot
18 Inch Ductile Iron Pipe, 10 ft Depth	20.00 Gal/Foot
Concrete Storm Sewer Manholes	30.00 Gal/Each
Concrete Manholes, Large Precast	30.00 Gal/Each
Concrete Inlets, Type CG-2	30.00 Gal/Each
Concrete Inlets, Type G-1	30.00 Gal/Each
Concrete Inlets, Type G-2	30.00 Gal/Each
Connection to Existing Structures	30.00 Gal/Each
Filling Abandoned Structures	30.00 Gal/Each
Major Adjustment of Manholes	30.00 Gal/Each
Extra for Manholes over Existing Sewers	30.00 Gal/Each
Trench Resurfacing	0.33 Gal/SQYD
Aggregate Base	0.69 Gal/Ton
Level 3, ½ Inch ACP	2.93 Gal/Ton
Level 4, ½ Inch ACP	2.93 Gal/Ton
2 Inch Asphalt Concrete Pavement Repair	1.00 Gal/Sqyd
5 Inch Asphalt Concrete Pavement Repair	1.00 Gal/Sqyd
17 Inch Asphalt Concrete Pavement Repair	1.00 Gal/Sqyd
19 Inch Asphalt Concrete Pavement Repair	1.00 Gal/Sqyd
20 Inch Asphalt Concrete Pavement Repair	1.00 Gal/Sqyd
23 Inch Asphalt Concrete Pavement Repair	1.00 Gal/Sqyd
Concrete Curbs	0.12 Gal/Foot
Concrete Islands	0.11 Gal/Sqft
Monolithic Curb and Sidewalks	0.11 Gal/Sqft

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

Bridge No. 02529 and 09268 19 Gal/\$1000

Item
Shoring, Cribbing, and Cofferdams
Granular Structure Backfill
Furnish Pile Driving Equipment
Furnish PP 18 X 0.625 Steel Piles
Drive PP 18 X 0.625 Steel Piles
Drive Test Piles
Reinforcement, Grade 60
Foundation Concrete, Class 4000
Bridge Drains
Stairs, Walkway, & Railing For Drainage Structure Access

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.

Willamette River: Stormwater Source Control Improvements Project

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.

PARTICIPATE	PAY ITEM DESCRIPTION	COST BASIS (CB)
☐	12 Inch Ductile Iron Pipe, 5 FT Depth	6.40%
☐	16 Inch Ductile Iron Pipe, 10 FT Depth	6.65%
☐	18 Inch Ductile Iron Pipe, 5 FT Depth	6.72%
☐	18 Inch Ductile Iron Pipe, 10 FT Depth	6.72%
☐	Furnish PP 18 x 0.625 Steel Piles	90.00%
☐	Reinforcement, Grade 60	40.00%
☐	Pipe Sign Support	20.00%
☐	Lighting Poles and Arms	35.00%

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(c)(1) Cash, Alternate A – Replace this subsection, except for the subsection number and title, with the following:

Retainage will be deducted from progress payments and held by the Agency until final payment is made according to 00195.90, unless otherwise specified in the Contract.

Except as otherwise provided, the Agency will deposit the cash retainage withheld in an interest bearing account, established through the State Treasurer for the benefit of the Agency, as required by ORS 279C.560(5). Interest earned on the account shall accrue to the

Willamette River: Stormwater Source Control Improvements Project

Contractor. Amounts retained and interest earned will be included in the final payment made according to 00195.90, unless otherwise specified in the Contract.

Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

00195.50(c)(2) Cash, Alternate B (Retainage Surety Bond) - Replace this subsection, except for the subsection number and title, with the following:

The Contractor may submit a Surety bond in lieu of all or a portion of the retainage required under the Contract. The Agency will accept this Surety bond unless the Agency first finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560(1)(c).

The Surety bond must be in substantially the form specified in ORS 701.435 (4) (Oregon House Bill 4006, 2024), and executed by a Surety bonding company that is authorized to transact Surety business in the State of Oregon and may not be a Surety obligation of an individual. The Surety bond and any proceeds of the Surety bond must be made subject to all claims and liens and in the same manner and priority specified for retainage under ORS 279C.550 to 279C.570 and ORS 279C.600 to 279C.625. Agency will reduce the cash retainage held by an amount equal to the value of the Surety bond and pay the amount of the reduction to Contractor according to ORS 279C.570. Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

When the Agency accepts a Surety bond in lieu of retainage from the Contractor, the Contractor shall accept Surety bonds from Subcontractors or Suppliers from which the Contractor has withheld retainage. At any time before final payment a Subcontractor may submit a Surety bond to the Contractor and request that the Contractor submit a Surety bond as described above for the portion of the Contractor's retainage that pertains to the Subcontractor. The Surety bond the Subcontractor provides to the Contractor must meet the Agency requirements specified in the paragraph above. When a Contractor at a Subcontractor's request obtains and submits a Surety bond under this subsection, the Contractor may withhold from payments to the Subcontractor an amount equivalent to the portion of the Contractor's Surety bond premium for which the Subcontractor is responsible in accordance with ORS 279C.560 (Oregon House Bill 4006, 2024).

Within 30 Days after a Subcontractor's request the Contractor shall provide a Surety bond as described above, and the Agency will accept the Surety bond unless:

- the Agency finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560;
- a Surety bond is not commercially available;
- the Subcontractor refuses to pay to the Contractor the Subcontractor's portion of the Surety bond premium; or
- the Subcontractor refuses to provide the Contractor with a Surety bond that meets the requirements of ORS 279C.560(1)(b).

Notwithstanding 00195.50(d), within 30 Days of receiving a Surety bond from Contractor at a Subcontractor's or Supplier's request, Agency will release to the Contractor the amount

Willamette River: Stormwater Source Control Improvements Project

held as retainage that is equivalent to the amount the Contractor submitted as a Surety bond. Contractor shall, within 30 Days after receiving a Surety bond from a Subcontractor or Supplier, release to the Subcontractor or Supplier the amount the Contractor holds as retainage that is equivalent to the amount of the Surety bond submitted, in accordance with ORS 279C.560(8).

00195.50(c)(3) Bonds, Securities, and Other Instruments - Replace this subsection, except for the subsection number and title, with the following:

Contractor may deposit bonds, securities or other instruments with the Agency or in a bank or other financial institution, to be held by Agency instead of cash retainage for the benefit of the Agency, which the Agency will accept unless the Agency first finds in writing good cause for rejection based on unique project circumstances, in accordance with ORS 279C.560(1)(c).

If the Contractor deposits bonds, securities or other instruments, and Agency does not reject the bonds, securities or other instruments as permitted by ORS 279C.560(1)(c), the Agency will reduce the cash retainage by an amount equal to the value of the bonds, securities and other instruments. Interest or earnings on the bonds, securities and other instruments accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be of a character approved by the Director of the Oregon Department of Administrative Services, including, but not limited to:

- Bills, certificates, notes or bonds of the United States;
- Other obligations of the United States or agencies of the United States;
- Obligations of a corporation wholly owned by the federal government;
- Indebtedness of the Federal National Mortgage Association;
- General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon;
- Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

00195.50(f) Prompt Payment Policy - Replace this subsection, except for the subsection number and title, with the following:

Payments shall be made promptly according to ORS 279C.560, ORS 279C.570, ORS 279C.580 and other applicable legal requirements.

SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications.

SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Willamette River: Stormwater Source Control Improvements Project

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:

Subsection	Percent
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:

00220.01(b) Abbreviations - Delete this subsection.

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.
- 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.
- When paving operations create an abrupt edge, protect traffic by installing a "DO NOT PASS" (R4-1) sign before the Work Area at sign spacing "A" from the TCD Spacing Table" shown on the Standard Drawings. Alternate "ABRUPT EDGE" (CW21-7) signs with appropriate (CW21-8) rider and "DO NOT PASS" (R4-1) signs at 1/2 mile spacings. Install a "BUMP" (W8-1) sign 100 feet prior to the transverse paving edge.

00220.03(b) Closures - Add the following bullets to the end of the bullet list:

- **Residential Driveway** – A minimum of 24 hours before a residential driveway closure begins.

00220.02(b) Temporary Pedestrian Accessible Route Plan - Add the following bullet(s) to the end of the bullet list:

- Maintain access to bus stops and Pedestrian Accessible Routes.

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

Willamette River: Stormwater Source Control Improvements Project

Traffic Lanes may be closed on the Lower Columbia River Highway (US30, NW St. Helens Road), Northeast Portland Highway (US30 Bypass/Bridge Avenue) and other Roadways when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

(a) Lower Columbia River Highway (US30)

(1) Between NW Marina Way and 2500 feet west of NW Bridge Avenue East Intersection

Single Lane Closures – One Traffic Lane in each direction on the Lower Columbia River Highway (US30) may be closed during the following times:

US30 Westbound

- Daily, Monday through Friday, between 8:30 a.m. and 2:30 p.m.
- Nightly, Monday night through Friday morning, between 6:00 p.m. and 5:30 a.m.
- Friday night through Saturday morning, between 6:00 p.m. and 11:00 a.m.
- Saturday night through Sunday morning, between 5:00 p.m. and 11:00 a.m.
- Sunday night through Monday morning, between 5:00 p.m. and 6:00 a.m.

US30 Eastbound

- Daily, Monday through Friday, between 9:30 a.m. and 2:30 p.m.
- Nightly, Monday night through Friday morning, between 6:00 p.m. and 5:30 a.m.
- Friday night through Saturday morning, between 6:00 p.m. and 11:00 a.m.
- Saturday night through Sunday morning, between 5:00 p.m. and 11:00 a.m.
- Sunday night through Monday morning, between 5:00 p.m. and 5:30 a.m.

(2) Between 2500 feet west of NW Bridge Avenue East Intersection and NW Nicolai Street

Single Lane Closures – One Traffic Lane in each direction on the Lower Columbia River Highway (US30) may be closed during the following times:

- Nightly, Monday night through Friday morning, between 6:30 p.m. and 5:30 a.m.
- Friday night through Saturday morning, between 6:30 p.m. and 11:00 a.m.
- Saturday night through Sunday morning between 5:00 p.m. and 11:00 a.m.
- Sunday night through Monday morning between 5:00 p.m. and 5:30 a.m.

Multiple Lane Closures – One Traffic Lane in each direction plus a two-way left turn lane or a left turn only lane on the Lower Columbia River Highway (US30) may be closed during the following times:

- Nightly, Monday night through Friday morning, between 7:30 p.m. and 5:00 a.m.
- Friday night through Saturday morning, between 7:30 p.m. and 11:00 a.m.

Willamette River: Stormwater Source Control Improvements Project

- Saturday night through Sunday morning between 5:00 p.m. and 11:00 a.m.
- Sunday night through Monday morning between 5:00 p.m. and 5:00 a.m.

(b) Northeast Portland Highway (US30 Bypass, St. Johns Bridge, Bridge Avenue)

(1) St. Johns Bridge (US30 Bypass) – Four-lane Section

Single Lane Closures – One Traffic Lane in each direction on the Northeast Portland Highway (US30 Bypass) may be closed during the following times:

- Daily, Monday through Friday, between 9:00 a.m. and 2:00 p.m.
- Nightly, Monday night through Friday morning, between 7:00 p.m. and 5:30 a.m.
- Friday night through Saturday morning, between 7:00 p.m. and 8:00 a.m.
- Saturday night through Sunday morning, between 6:00 p.m. and 9:00 a.m.
- Sunday night through Monday morning, between 6:00 p.m. and 5:30 a.m.

(2) NW Bridge Avenue West Ramp (US30 Bypass) – Two-lane Section

Single Lane Closures – One Traffic Lane on the NW Bridge Avenue West Ramp may be closed while maintaining one-lane, two-way traffic, during the following times:

- Nightly, Sunday night through Friday morning, between 10:00 p.m. and 5:00 a.m.
- Friday night through Saturday morning, between 10:00 p.m. and 6:00 a.m.
- Saturday night through Sunday morning, between 10:00 p.m. and 7:00 a.m.

(3) NW Bridge Avenue East Ramp (US30 Bypass) – Two-lane to Three-lane Section

Single Lane Closures – One Traffic Lane on the NW Bridge Avenue East Ramp may be closed while maintaining one lane of traffic in each direction, during the following times:

- Daily, Monday through Friday, between 8:00 a.m. and 3:00 p.m.
- Nightly, Sunday night through Friday morning, between 7:00 p.m. and 5:30 a.m.
- Friday night through Saturday morning, between 6:00 p.m. and 10:00 a.m.
- Saturday night through Sunday morning, between 6:00 p.m. and 11:00 a.m.

Multiple Lane Closures - Lane closures on the NW Bridge Avenue East Ramp may be closed while maintaining one-lane, two-way traffic, during the following times:

- Nightly, Sunday night through Friday morning, between 10:00 p.m. and 5:00 a.m.
- Friday night through Saturday morning, between 10:00 p.m. and 6:00 a.m.
- Saturday night through Sunday morning, between 10:00 p.m. and 7:00 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):

Willamette River: Stormwater Source Control Improvements Project

- Daily, Monday through Thursday, between 9:00 a.m. and 4:00 p.m.
- Friday, between 9:00 a.m. and 3:00 p.m.
- Nightly, Sunday night through Friday morning, between 6:00 p.m. and 7:00 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:

- Hood to Coast: August 28-29, 2026 and August 2027. The event impacts sites along US30 west of NW Kittridge Avenue and NW Kittridge Avenue.
- Seattle-to-Portland (STP) Bicycle Classic: July 11-12, 2026 and July 2027. The event impacts sites along US30 west of the NW Bridge Avenue West Ramp and the NW Bridge Avenue West Ramp.

Contractor to verify 2027 event dates.

Add the following subsection:

00220.40(f) Other Short Term Closures –

NW Bridge Avenue East Ramp Directional Closures - The Contractor will be permitted to close the eastbound direction on NW Bridge Avenue East Ramp, between St. Johns Bridge and US30 east connection, during excavation and construction of the water quality facility for OF-22D. The road closure will be permitted nightly between the hours of 10:00 p.m. and 5:00 a.m. on any day of the week except as specified in 00220.40(e)(2).

- Do not close the road or lane 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 road or trail closure.
- The road and lane 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.

Add the following subsection:

00220.40(g) Other Long-Term Closures –

(1) Two-way Left Turn Lane or Left Turn Lane or Median Closures on US30 – The Contractor will be permitted to close the two-way left turn lane or left turn only lane or median on the Lower Columbia River Highway (US30) for shifting traffic and maintaining two lanes of traffic in each direction on US30 during excavation and construction of the water quality facilities. The lane closure will be permitted once, for a maximum duration of 30 Consecutive Calendar Days at each of the following sites: OF18-1, OF19-2, WR204, WR208, WR126 and WR79. Start the lane closure from the times listed on 00220.40(e)(1)(b) except as specified in 00220.40(e)(2).

(2) NW Bridge Avenue East Ramp Extended Single Lane Closures - The Contractor will be permitted to close one Traffic Lane on the NW Bridge Avenue East Ramp for shifting traffic and maintaining one lane of traffic in each direction during excavation and

Willamette River: Stormwater Source Control Improvements Project

construction of water quality facility. The lane closure will be permitted once, for a maximum of 30 Consecutive Calendar Days at site WR206 and site OF22C. Start the lane closure from the times listed on 00220.40(e)(1)(2)(c) except as specified in 00220.40(e)(2).

(3) NW Yeon Avenue Frontage Road Southbound (700 feet south of NW 35th Avenue) – The Contractor will be permitted to close NW Yeon Avenue Frontage Road during excavation and construction of the water quality facility. The lane closure will be permitted once, for a maximum duration of 30 Consecutive Calendar Days.

(4) N Philadelphia Avenue Northbound (between N Edison Street and N Willamette Boulevard) – The Contractor will be permitted to close N Philadelphia Avenue northbound between N Edison Street and N Willamette Boulevard during excavation and construction of the water quality facility. The lane closure will be permitted once, for a maximum duration of 30 Consecutive Calendar Days.

(5) NW 1st Street (East) – The Contractor will be permitted to close NW 1st Street (East) at US30 during excavation and construction of the water quality facilities. The closure will be permitted once, for a maximum duration of 14 Consecutive Calendar Days.

(6) Residential Driveway at Site WR-208 – The Contractor will be permitted to close the residential access at Site WR-208 to place the water pipe across the access. The closure will be permitted once, for a maximum duration of 12 consecutive hours.

(7) NW 15th Avenue (between NW Savier Street and NW Raleigh Street) – The Contractor will be permitted to close the parking lane along the west side of NW 15th Avenue between NW Savier Street and NW Raleigh Street during tie in of the water quality system. The parking lane closure will be permitted once, for a maximum duration of 14 Consecutive Calendar Days.

Do not close the road or lane 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 road or trail closure.

The road and lane 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.

00220.60(a)(1) Contractor Responsibility - Replace this subsection, except for the subsection number and title, with the following:

If this Work is not completed and in place, the Agency may do the Work according to 00220.60(d).

(a) Do the following at no additional cost to the Agency:

- Keep surfaces being used by Public Traffic free of all dirt, mud, gravel, materials, and debris.
- Repair damage to surfaces caused by the Contractor's operations.
- Maintain all detour and stage construction Surfacing as specified or directed.

Willamette River: Stormwater Source Control Improvements Project

(b) Before periods of no active Work that last longer than seven consecutive Days, unless otherwise directed, do the following:

- Provide temporary pedestrian surfaces meeting the requirements of the MUTCD and Section 00228.
- Provide traversable bicycle and pedestrian routes with surfaces free of dirt, mud, gravel, and debris.

(c) Before periods of no active Work that is anticipated to last or lasts longer than 30 consecutive Days, unless otherwise directed, do the following:

- Provide paved Traffic Lanes at least 12 feet wide, with 2-foot wide paved Shoulders for each direction of traffic.
- Do not leave abrupt edges.
- Remove or cover temporary construction signs unless otherwise directed.
- Clean, install, and reinstall all necessary pedestrian, motor vehicle, and bicycle channelization and pavement markings, unless otherwise directed.

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

Willamette River: Stormwater Source Control Improvements Project

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.

00221.60 Temporary Traffic Control Devices – Replace the paragraph that begins “TCD delivered to the Project Site found...” with the following paragraph:

Willamette River: Stormwater Source Control Improvements Project

Repair or replace TCD delivered to the Project Site found to be in “marginal” or “unacceptable” condition, at no additional cost to the Agency.

00221.90(b) Temporary Protection and Direction of Traffic – Replace the bullet that begins “Providing, Surfacing, maintain...” with the following bullet:

- Providing, surfacing, maintaining, removing, and restoring the TPAR.

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:

- Place a “WAIT FOR FLAGGER” (CR4-23) sign approximately 50 feet in advance of each flagger station, facing incoming pedestrian traffic when a flagger is required to coordinate pedestrian movements. Install the sign on a conical marker or other temporary sign support, as shown or as directed. Do not allow the sign installation height or location to block the visibility of the flagger for incoming Public Traffic.
- At least ten Calendar Days before closing a pedestrian pathway *or* the sidewalk continuously lasting longer than 24 hours, 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, when the TPAR is open through the work area, place a “SIDEWALK OPEN” (CW11-3) sign in advance of each end of the Work Area as shown in the TCP or as directed. 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. Maintain “SIDEWALK OPEN” (CW11-3) signs while work is affecting the pedestrian pathway.
- Place a “PEDESTRIANS ON ROADWAY” (CW11-2) sign, when the TPAR is located on a Roadway or paved Shoulder, at the beginning of each end of the Work Area, facing incoming traffic as shown, or as directed.

Willamette River: Stormwater Source Control Improvements Project

- Install "ROAD WORK AHEAD" (W20-1--48) signs with a 36 by 24-inch "FINES DOUBLE" (R2---6aP) rider on the Lower Columbia River, NE Portland 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 an "EROSION CONCERNS" sign on the Lower Columbia River, NE Portland, at each end of the Project. Place the sign according to sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings, or as shown in the Plans. Install the sign so that the sign face is rotated 90 degrees to approaching traffic and faces the Roadway centerline. Replace "(XXX) XXX-XXXX" shown on the sign design detail with "(503) 823-0900".
- Install an 18 by 24-inch "NO PARKING" (R8--3a) sign in every block where on-street parking is prohibited, facing incoming traffic.
- 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 two 60 by 36-inch "INTERMITTENT ROAD WORK NEXT 6___ MILES" (CG20--13) sign(s) on the Lower Columbia River Highway, in advance of the "ROAD WORK AHEAD" (W20-1) sign on each end of the Project according to sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings.
- When construction requires bicycles to use the Traffic Lanes, install a "Bicycle ON ROADWAY" (CW11-1) symbol sign on 1/2 mile spacing through the affected area. Keep the signs in place until completion of the Shoulder or bikeway final surface.
- 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.

Willamette River: Stormwater Source Control Improvements Project

00222.45(b) Portable Changeable Message Signs - Add the following bullets to the end of this subsection:

- At least seven Calendar Days before the US30 BY EB Ramp (NE Portland Highway and NW 1st Street closure, place one or more PCMS displaying the following message as shown, or as directed:

Panel 1	Panel 2
(Name/# of highway)	CLOSURE
(Location)	(Time Frame)
CLOSURE	(Time Frame)

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.

00222.90 Payment -

Add the following to the end of this subsection:

Payment will be made for not more than 3 sets of Work Area signs. All additional sets of Work Area signs will be at no additional cost to the Agency.

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:

00223.40 Flaggers - Add the following paragraph to the end of this subsection:

During shoulder work associated with site WR211 and when sidewalk is impacted during Stage 1, 2, of site OF22D provide a dedicated flagger station and flagger to escort bicycle and pedestrian traffic through the affected Work Area.

00223.80 Measurement - Replace the bullet that begins "The replacement of TCD and TCM..." with the following bullet:

- The replacement of flagger station lighting damaged by Public Traffic and replaced by the Contractor.

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

Willamette River: Stormwater Source Control Improvements Project

No additional measurement will be made for automated flagger assistance devices damaged by Public Traffic and replaced or repaired by the Contractor.

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 modified as follows:

00225.90 Payment –

Replace the paragraph that begins “Item (a).” with the following paragraph:

Item (a) includes installation and removal of temporary pavement markers having either one or two reflective faces.

Replace the paragraph that begins “Item (b).” with the following paragraph:

Item (b) includes installation of flexible temporary pavement markers and removal of flexible temporary pavement markers and temporary flexible pavement marker covers.

Add the following paragraph after the paragraph that begins “Item (b).”:

Items (c) and (e) include removal of the temporary tape.

SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS

Comply with Section 00226 of the Standard Specifications modified as follows:

00226.23 Truck Mounted Attenuator – Replace the title of this subsection with “**Temporary Impact Attenuator, Truck Mounted**”

00226.43 Truck Mounted Attenuator – Replace the title of this subsection with “**Temporary Impact Attenuator, Truck Mounted**”

Replace the paragraph that begins “When workers or construction Equipment...” with the following paragraphs:

Use a temporary truck mounted impact attenuator (TMA), when workers or construction Equipment are exposed to Public Traffic on a Freeway or Multi-Lane Highway and are not located behind a rigid barrier system, as follows unless otherwise shown or directed:

Willamette River: Stormwater Source Control Improvements Project

- Each Shoulder or each lane closure where the preconstruction posted speed is 45 mph or more.

Place the TMA in advance of the exposed workers or Equipment, located as shown in the TMA Support Vehicle Placement tables, or as directed. If the TMA is not available when the Work requires its use, postpone the Work until the TMA is available.

00226.63 Truck Mounted Attenuators – Replace the title of this subsection with “Temporary Impact Attenuator, Truck Mounted”

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)
OF16-2	590+43 to 593+29	0	288
OF16-3	596+93 to 598+02	0	108
OF18-1	529+52 to 531+56	0	204
OF19-2	508+25 to 510+24	0	204
OF22D Stage 3	598+13 to 598+94	0	84
WR79	505+89 to 503+22	0	276
WR126	546+83 to 550+19	0	336
WR204	523+95 to 528+75	0	480
WR206	Alignment not available	0	204
WR208	609+51 to 612+85	0	288
Total Quantity		0	2,472

00226.90 Payment -

Add the following paragraphs after the paragraph that begins "In items (g) and (h)...":

Payment for items (g) 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.

Add the following paragraph:

No separate or additional payment will be made for TMA's when the Contractor elects to use them where they otherwise are not required.

SECTION 00228 - TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING

Comply with Section 00228 of the Standard Specifications modified as follows:

00228.13 Temporary Curb Ramps – Replace this subsection, except for the subsection number and title, with the following:

Furnish temporary curb ramps from the QPL or the Conditional Use List; or construct temporary curb ramps on site according to the Standard Drawings. Use ACP, PCC, or other approved Materials for on-site constructed temporary curb ramps. Furnish truncated dome detectable warning surface for temporary curb ramps from the QPL according to Section 00765.

SECTION 00241 - TEMPORARY DEWATERING

Section 00241, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00241.00 Scope - This Work consists of designing, furnishing, permitting installing, operating, maintaining, and removing temporary dewatering facilities to lower the groundwater to construct all pipe and stormwater Structures in a dry condition. This section also includes the protection of adjacent Structures and facilities from damage caused by dewatering operations. This section also covers abandonment of the pumping wells and monitoring wells after the completion of the Project.

00241.01 Abbreviations and Definitions:

TDF	Temporary Dewatering Facilities
TDP	Temporary Dewatering Plan

00241.02 Temporary Dewatering Facilities - TDFs include all materials necessary to perform temporary dewatering including pumps, piping, valving, power and standby power, dewatering treatment measures such as tanks and machinery needed to install and remove dewatering facilities. See 00241.10 for more information.

00241.03 Temporary Dewatering Plan – Submit a stamped temporary dewatering plan to the Engineer for review at least 28 Days prior to beginning Work and according to 00150.35. The temporary dewatering plan is to be prepared by a professional engineer or hydrogeologist who is licensed to practice in the State of Oregon, and who has experience in the design of dewatering systems for similar projects. Design the temporary dewatering plan in conjunction with and be fully compatible with the Contractor's shoring plan and include the following:

- A narrative of the Contractor's proposed dewatering system methodology (e.g., dewatering wells and well points or other methods),

Willamette River: Stormwater Source Control Improvements Project

- Provide noise mitigation plan as needed according to 00290.32.
- Working drawings showing system layout and components for each site where dewatering is anticipated,
- Design calculations demonstrating system and Equipment adequacy,
- Design calculations to avoid pipe flotation and structural uplift,
- Specifications of proposed materials and Equipment, including pump curves,
- Models of pumps and design of sumps for removal of incidental seepage, perched groundwater, etc.
- Methods for treatment of water prior to discharge,
- Methods for removal of sediments prior to discharge,
- The collection and removal of water, incidental seepage and accumulation within or entering the excavation, including incident rainfall and any surface runoff, which would be prevented by appropriate means
- Monitoring information to be collected and submitted during dewatering,
- Assessment of off-site groundwater drawdown and settlement risk to adjacent Structures and design of settlement mitigation measures
- Plan for discharge, and proposed plans of operation, including a contingency or back-up plan for power, pump, system failure.
- Provide the name of the temporary dewatering Subcontractor 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 TDF 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. Changes in the temporary dewatering Subcontractor or Contractor's superintendent must meet the minimum personnel qualifications described herein.
- The temporary dewatering plan is to demonstrate how dewatering design recommendations and all other requirements of this specification will be implemented.
- The dewatering system is to be designed using accepted and professional methods of hydrogeologic analysis and groundwater engineering design to include consideration of:
 - Anticipated groundwater inflow to the excavation, based on expected aquifer properties (transmissivity, specific yield, thickness, degree of penetration, etc.).

Willamette River: Stormwater Source Control Improvements Project

- Expected aquifer boundary conditions, including appropriate groundwater elevations indicated in the geotechnical Report, and as affected by possible storm events.
- Well performance, including the estimation of hydraulic well losses in and around the dewatering wells caused by laminar and turbulent flow in the aquifer, within the gravel pack, through the well screen slots and within the well screen.
- Mutual well interference, including loss of saturated aquifer thickness and development of seepage faces at each well resulting from cumulative drawdown of the water table.
- If partially or completely watertight shoring is to be used by the Contractor, the temporary dewatering plan must demonstrate that the sufficient groundwater control (if any) required to ensure stability of the water-tight shoring at all stages of excavation, construction and backfilling is provided under all reasonably anticipated hydrostatic conditions (including contingencies). Submit any subsequent changes to the proposed dewatering system as described in the temporary dewatering plan to the Engineer for review prior to implementation.
- The Engineer's review of the temporary dewatering plan will not constitute approval nor relieve the Contractor from full responsibility for errors therein nor from the entire responsibility for complete and adequate water level control in the excavated areas to the extent specified. The Contractor is solely responsible for control of the groundwater levels and hydrostatic pressures to the depths herein specified and for avoiding pipe/Structure flotation and for avoiding settlement outside the excavation as herein specified. The Contractor bears sole responsibility for proper design, installation, operation, maintenance and any failure of any component of the temporary dewatering system for the duration of the Contract.
- Design the dewatering plan according to the following ASTM as applicable:
 - ASTM F480 Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR), SCH 40 and SCH 80
 - ASTM D5092 Standard Practice for Design and Installation of Ground Water Monitoring Wells in Aquifers.

00241.04 Risk of Settlement of Adjacent Structures/Improvements

- Design all dewatering system components such that water table drawdown outside the immediate excavation area does not result in settlement of existing Structures, including utilities, transformers, curbs, walkways, etc. For those sites where groundwater is expected to be above planned excavation depths, the specialist dewatering system designer is to include in the temporary dewatering plan a technical assessment evaluating the potential for settlement of existing Structures. Design the dewatering system to prevent damage to Structures, including sufficient settlement mitigation measures designed to reduce water table drawdown outside of the excavations.

Willamette River: Stormwater Source Control Improvements Project

- Immediately prior to the time of dewatering, conduct an elevation survey of the foundations of all significant Structures (i.e., buildings) and surface Structures (sidewalks, floor slabs, etc.) within 100 feet of any planned dewatering wells or sumps. Include documentation (including photographs) identifying all cracks, fractures or settlements existing prior to beginning any dewatering activities. The Contractor bears the sole responsibility for any and all costs to adjacent Structures associated with settlement resulting from operation of the temporary dewatering systems.
- The Engineer may conduct similar pre-project survey or video including internal building Structures. This information may be a second source of data for assessing settlement.
- The responsibility for conducting the dewatering operation in a manner which protects adjacent Structures and facilities rests solely with the Contractor. The cost of repairing any damage to adjacent Structures and restoration of facilities is the responsibility of the Contractor.

00241.05 Permits - Obtain all necessary permits and provide all copies of the permits to the Engineer, including those required by the Department of Environmental Quality for discharge of groundwater to stormwater facilities, and those required by the City of Portland for discharge to sewer systems.

- Provide copy of all approved permits to the Engineer.
- Obtain a batch discharge permit from the City of Portland Bureau of Environmental Services for discharge into the sewer system. Contractor's application for the permit is to include the proposed rate of discharge to the sewer system and proposed discharge points.
- Contractor pays for, apply and follow all requirements, including maximum allowable discharge rate and water quality limits, testing and reporting, pursuant to the Batch Discharge Permit approval.

00241.07 Existing Conditions

Subsurface data is contained in the six RhinoOne geotechnical engineering reports and available for request from the Engineer. The Contractor may obtain additional geotechnical information at no additional cost to the Agency.

The Contractor is to make its own interpretations, deductions, and conclusions as to the nature of the materials to be dewatered, the difficulties of making and maintaining the required dewatering systems, and the difficulties of doing any other Work affected by geotechnical conditions, and accept full responsibility for proper design, installation, operation, maintenance and any failure of any component of the temporary dewatering system for the duration of the Contract.

Materials

Willamette River: Stormwater Source Control Improvements Project

00241.10 Materials - Furnish Materials meeting the following requirements:

(a) Pumps and Piping - Provide and size appropriately all pumps and piping necessary to convey and remove groundwater from the dewatering wells to the designated point of discharge, including water treatment facilities.

- Piping is to be rigid PVC, HDPE or equivalent. Flexible hose is not permitted, unless otherwise approved in writing by the Engineer.
- Design the piping to minimize head loss, and be protected from all vehicular traffic or other potential damage as appropriate.

(b) Settling Tank - Provide a baffled settling tank or tanks of sufficient volume to ensure that discharge water is free of sediment and settleable solids.

(c) Standby Equipment- Maintain on-site, at a minimum level of 20 percent, additional dewatering system components, including valves, pumps and piping, and other system hardware to ensure that immediate repair or modification of any part of the system can be made.

(d) Primary and Standby Power- Provide primary power system and standby power services for the temporary dewatering system independent from power sources used or required for the remainder of the Project. In addition to the following requirements:

- Have on-site 100 percent standby electrical generating capacity or other source of power, in case the primary power source is lost.
- Use electrical generators or obtain electrical service from the utility company and pay application fees. Contractor to pay for power usage fees throughout the contract period.
- Secondary containment is required for gas- or diesel-powered generators.
- Provide descriptions and specifications of all proposed equipment and materials in the Temporary Dewatering Plan.

Labor

00241.30 Personnel Qualifications – Personnel qualifications are established for the TDFs designer and TDF subcontractor and superintendent as described below. Submit personnel qualifications to the Engineer for review at least 28 Days prior to beginning Work according to 00150.37.

- TDP designer is to have a minimum of ten years' experience in the design of dewatering systems and be currently licensed in the state of Oregon as a professional geotechnical engineer who specialize in the design of groundwater control, construction/excavation dewatering, well design, including wellpoints, deep wells, depressurization wells, be fully experienced and properly qualified to design these types of systems. Submit project references and describe at least five similar dewatering projects designed, installed, and operated in the last three years.
- TDFs subcontractor is to be a groundwater control, construction/ excavation dewatering specialist, with well installation as its primary business and be fully experienced and properly qualified, licensed, equipped, organized and financed to

Willamette River: Stormwater Source Control Improvements Project

perform the dewatering Work. Provide project references for at least five similar dewater projects completed in the last three years. For each project, provide project name, location and a description of project components satisfying the above criteria, contract value, name of owner/contact information or general contractor and a description of the company's responsibilities on that project.

- TDF subcontractor superintendent is to have a minimum of five years' experience in the supervising installation of dewatering systems of similar size and scope and be experienced in groundwater control, construction/excavation dewatering, and well installation/operation, including wellpoints, deep wells, and depressurization wells, and be fully experienced and properly qualified to install and manage these types of systems. Submit project references and describe at least five similar dewatering projects installed and operated in the last three years.

Construction

00241.40 Installation – Install dewatering measures according to applicable following OAR requirements and as described below.

- OAR 690-200 Well Construction and Maintenance
- OAR 690-220 Abandonment of Wells
- OAR 690-240 Construction, Maintenance, Alteration, Conversion, and Abandonment of Monitoring Wells, Geotechnical Holes and Other Holes In Oregon
- OAR 340-044 Construction and Use of Waste Disposal Wells or Other Underground Injection Activities
- OAR 340-041 Water Quality Standards: Beneficial Uses, Policies, and Criteria for Oregon
- OAR 340-040 Groundwater Quality Protection
- Install dewatering measures to lower groundwater table to a minimum of 2 feet below anticipated excavation depths for pipe, Structures, or other improvements.
- Schedule dewatering measures are to be scheduled around the planned excavation schedule. Dewatering wells are to be installed sufficiently in advance of the planned excavation to allow for initial test-pumping for all wells prior to system startup.
- Design, install, and operate the dewatering system in a manner so that the Soil below the proposed utilities/Structures is not disturbed and softened. If, in the opinion of the Engineer, the Contractor fails to meet these conditions, the Contractor is to pay for all costs associated with the over-excavation, re-excavation, and placement or replacement of materials to meet the criteria of this section.
- Coordinate the dewatering system with requirements of Section 00405 and Section 00510.

Willamette River: Stormwater Source Control Improvements Project

- Promptly notify the Engineer of any groundwater that the Contractor believes may be chemically contaminated and cease pumping and protect any excavated or exposed surfaces from rainfall and surface water until provisions have been made for water treatment. Contaminated groundwater could potentially be encountered at the Fremont Bridge West location, and contaminants of concern include Polycyclic Aromatic Hydrocarbons (PAHs). See section 00294 – Contaminated Media for more details.
- The Contractor bears the full responsibility for acquiring a water supply with which to install any dewatering system components necessary to achieve proper completion of all Work performed under this Contract (i.e., drilling and jetting). Mud-rotary drilling is not permitted as a method for well installation. No additives other than clean water are allowed during well drilling.
- Remove fines and drilling debris from newly installed dewatering wells and develop them to enhance the hydraulic connection between the screened interval and the surrounding formation. Develop wells by appropriate means that do not cause damage until the sand content is minimized and turbidity is below 25 nephelometric turbidity units (NTU).
- Test-pump each well after installation and development to determine its yield and drawdown characteristics (specific capacity).

00241.41 Operation - Operate temporary dewatering as follows:

- Lower groundwater table to a minimum of 2 feet below anticipated excavation depths for pipe, Structures, or other improvements.
- Control surface runoff so as to prevent entry or collection of water in excavations or in other isolated areas of the site.
- Run dewatering system continuously and do not shut down between shifts, at night, on holidays, weekends, or Work stoppages of any kind without written permission from the Engineer. Operate dewatering system continuously for as long as they are needed in a given area.
- Operate pumping rate low enough to minimize the loss of fines from subsurface formations during dewatering.
- Clean, maintain, and repair water intake screening to ensure adequate flows.

00241.42 Dewatering System Protection - Take all reasonable precautions necessary to ensure continuous, successful operation of the temporary dewatering system, including protections against public interference. This includes establishing and maintaining adequate marking of all well, pump, and pipeline locations. Wherever dewatering wells or discharge lines require crossing for access into, out of, or around the excavations or areas of Work, use steel ramps to protect the system from vehicular traffic or bury lines. Where dewatering wells and lines cross pedestrian pathways, use similar ramps, which must be ADA compliant, but need not be steel in material. In public travel ways the Engineer may require the lines to be buried. Where ramps are used, provide ramps that have the strength to support the heaviest

Willamette River: Stormwater Source Control Improvements Project

equipment on-site and have at least 6 inches of clearance between the dewatering system element and the underside of the ramp.

00241.43 Operational Monitoring - Provide continuous 24-hour operational monitoring of the dewatering system by qualified personnel present on site, or, with Engineer approval, use of continuous monitoring system with alarm directly to qualified personnel on 24-hour standby/on-call.

- Measure and record sediment content of pumped water at least once per Day using an Imhoff cone.
- Contractor has full responsibility for all damages to Work in the excavation area and for damages to any other area or Structures caused by the Contractor's failure to maintain and operate the system properly.
- Provide adequate backup power, pumps and equipment so that dewatering can be maintained in the event of a power or equipment failure.
- Monitor, including survey of, the foundations of all significant Structures (i.e., buildings) and surface Structures (sidewalks, floor slabs, etc.) within 100 feet of dewatering wells or sumps and check for settlement or any damage to existing improvements. Notify Engineer immediately if observed.

Maintenance

00241.60 Maintenance - Contractor bears sole responsibility for maintenance and any failure of any component of the temporary dewatering system for the duration of the Contract.

Finishing and Cleaning Up

00241.70 Removal – Remove all dewatering system elements from the site upon written authorization of the Engineer. The Contractor assumes ownership and responsibility for the disposal of all dewatering pumps, pipes and other assorted system hardware and materials. Employ the services of a licensed water well driller according to applicable OAR requirements for well decommissioning and removal. Submit a well decommissioning plan to the Engineer for approval. The Contractor is responsible for meeting all permit requirements.

Measurement

00241.80 Measurement - No measurement of quantities will be made for temporary dewatering.

Payment

00241.90 Payment – Temporary dewatering will be paid for at the Contract lump sum amount for the item "Temporary Dewatering".

Willamette River: Stormwater Source Control Improvements Project

Payment will be payment in full for developing dewatering plan, submittals, furnishing and placing all Materials, and for furnishing all Equipment, labor, monitoring, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for TDP, maintaining, operating, monitoring, moving, or removing the temporary dewatering system.

SECTION 00270 - TEMPORARY FENCES

Comply with Section 00270 of the Standard Specifications as modified:

00270.10 Material – Replace the sentence that begins “Provide new Material...” with the following paragraph:

Provide new Material meeting the requirements of 01050.10. Used Materials in like new condition may be provided if approved. See 00270.70.

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 paragraphs and bullets:

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 NPDES 1200-CA, 1200-CN, OR 1200-C permit if applicable.

Conditions requiring NPDES 1200 permits are as follows:

- Projects with one acre of ground disturbance or more on Agency owned land are regulated under the Agency's 1200-CA permit.
- When Project Work on Agency owned land disturbs less than one acre, but ground disturbances on non-Agency owned lands combined with Project ground disturbances on Agency owned land total one acre or more the Agency Project Work will be regulated by the Agency's 1200-CA permit. The Contractor is responsible for acquiring the 1200-C permit for all areas of disturbance on non-Agency owned land.

When the combined areas of disturbance of all Project related activities is less than one acre, no NPDES 1200 permit coverage is required.

Willamette River: Stormwater Source Control Improvements Project

The area of ground disturbance on Agency owned land is 4.71 acres.

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.

Add the following subsection:

00280.01 Submittals – Submit documentation that the compost material meets the requirements of Section 03020 for its intended use and is available for use according to the Project schedule in 00180.41 according to 00150.37, within 30 Calendar Days of Award of the Contract,.

00280.02 Definitions - Delete the definition **Wet Season Work**

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 Sheeting - Replace the bullet that begins “**Plastic Sheeting** - Minimum 6-mil thick...” with the following bullet:

- **Plastic Sheeting** - Minimum 6-mil thick polyethylene plastic sheeting or plastic sheeting that meets or exceeds the performance properties outlined in ASTM D4397.

00280.15(f)(1) Filter Sock Material - Add the following sentence to the end of this subsection:

Furnish filter sock Material with a diameter of 8 to 12 inches.

00280.16(a) Construction Entrances - Replace the bullet that begins “**Geotextile...**” with the following bullet:

Willamette River: Stormwater Source Control Improvements Project

- **Geotextile** - Riprap geotextile meeting the requirements of 02320.20 Table 02320-2. Provide documentation according to 02320.10(c).

00280.16(c) Sediment Fence - Replace the bullet that begins “**Geotextile...**” with the following bullet:

- **Geotextile** - Geotextile meeting requirements of 02320.20 Table 02320-3. Provide documentation according to 02320.10(c).

00280.16(d) Inlet Protection - Replace the bullet that begins “**Geotextile...**” with the following bullet:

- **Geotextile** - Type 1 geotextile meeting the requirements of 02320.20 Table 02320-1. Provide documentation according to 02320.10(c).

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.

Willamette River: Stormwater Source Control Improvements Project

00280.41(c) Wet Season Work and Temporary Work Suspension - Replace this subsection with the following subsection:

00280.41(c) Temporary Work Interruption - Update the ESCP and schedule for Work proposed between October 1 and May 31 to ensure that all appropriate controls, including ESC during Work interruption, are implemented and maintained. Submit the updated ESCP and schedule to the Agency and receive approval before beginning any Work between October 1 and May 31.

Between October 1 and May 31, limit excavation and bare ground activities to only those required for immediate operations. Stabilize stockpiles at the end of each workday by diverting flows, placing covers, or installing Sediment barriers.

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.

00280.48 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
Plastic Sheetting	50 SQYD
Sediment Fence	100 FOOT
Straw Bales	3 EACH

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:

Willamette River: Stormwater Source Control Improvements Project

<https://forecast.weather.gov/MapClick.php?lon=-122.76900887489316&lat=45.58317548120942>

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 bullet 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.

00280.91 Payment – Replace the paragraph that begins “Emergency Materials that are incorporated...” with the following paragraph:

Materials listed in 00280.48 that are incorporated into the Project will be paid for under the appropriate items listed in the Contract Schedule of Items.

SECTION 00290 - ENVIRONMENTAL PROTECTION

Comply with Section 00290 of the Standard Specifications modified as follows:

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.

00290.30 Pollution Control – Replace the paragraph that begins "Prevent, control, and abate..." with the following paragraph:

Prevent, control, and abate pollution of the environment.

00290.30(a)(1) General - Replace this subsection, except for the subsection number and title, with the following:

- Do not allow any foreign substances or objects to enter waters of the State and U.S. that exceed regulated or permit limits.
- Do not cause turbidity in waters of the State and U.S. that exceeds regulated or permit limits.

Willamette River: Stormwater Source Control Improvements Project

Add the following subsection:

00290.30(a)(7) Water Quality:

- Do not discharge water contaminated by pollutants including sediment, drilling fluids and waste, concrete, grout, or water contained within a work area isolation, into any waters of the State or U.S. or conveyances draining thereto until it has been treated using Materials such as those listed in 00280.15 or 00280.16 or by pumping to a vegetated upland location. Do not allow Project discharges to increase the concentration of any pollutant in the receiving water to a level that exceeds the limits prescribed by OAR 340-041.
- 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.
- Implement containment measures adequate to prevent pollutants from entering waters of the State or U.S. Such pollutants include but are not limited to construction and demolition materials, waste spoils, fuel or petroleum products, detergents, silt, welding slag and grindings, concrete sawcutting by-products and sandblasting abrasives.
- Do not allow curing concrete or grout to be submerged within waters of the State or U.S. less than 24 hours after placement, except within work area isolation. Do not end-dump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.
- Monitor weather and streamflow forecasts and conditions to anticipate high flows that may unintentionally inundate any portion of the Project Site.
- If high flow conditions occur or are anticipated to occur that may unintentionally inundate any portion of the Project Site, remove all potentially affected Equipment, Materials, and debris from the potential inundation area. Cease Work in the area until water recedes and the risk of further high water events passes. The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.
- If Work in or around waters of the State or U.S. violate permit conditions or any requirement of this subsection, stop such Work and notify the Engineer.

00290.30(b) Pollution Control Plan - Add the following to the end of this subsection:

Comply with the following, and, as applicable, with OAR 731-005-0800 for contracts subject to OAR chapter 731, division 5 or 7 or with OAR 731-149-0020 for contracts subject to OAR chapter 731, division 149.

Prior to beginning On-Site Work, submit a listing of proposed non-road diesel equipment and on-road trucks to the Engineer as required in (1) and (2) below that demonstrates how compliance with OAR 731-005-800 or OAR 731-149-0020 will be achieved. Update the listing of non-road diesel equipment and on-road trucks specified in (1) and (2) below when

Willamette River: Stormwater Source Control Improvements Project

additional pieces of non-road diesel equipment or on-road trucks, not previously accounted for, are brought onto the Project Site. Provide the updated list to the Engineer upon request.

On a monthly basis certify compliance with OAR 731-005-800 or OAR 731-149-0020 and submit the certification with a list of non-road diesel equipment and on-road trucks specified in (1) and (2) below utilized to date on the Project Site to the Engineer and include calculations demonstrating compliance according to OAR 731-005-800 or OAR 731-149-0020.

Failure to submit the monthly listings, certifications and calculations may result in withholding payments according to 00195.50(e).

Immediately remove from the Project Site, according to 00180.30, non-road diesel equipment and on-road trucks used on the Project Site in violation of OAR 731-005-800 or OAR 731-149-0020, or 00290.30. Update the listing of non-road diesel equipment and on-road trucks with a notation for any that were removed.

(1) Non-Road Diesel Equipment - Demonstrate compliance with OAR 731-005-800 or OAR 731-149-0020 by listing all non-road diesel equipment (as defined in OAR 731-005-0430) that is 25 horsepower or greater utilized to date on the Project Site and including the following:

- Equipment owner and whether the piece of equipment is owned and operated by a COBID certified firm
- Equipment type
- Manufacturer
- Model number
- Vehicle identification number or serial number
- Engine certification (Tier rating)
- If not equipped with a Tier 4 compression ignition diesel engine, specify whether the engine has been retrofitted with a Verified Diesel Oxidation Catalyst or Verified Diesel Particulate Filter
- Specify whether the equipment qualifies for an exemption provided in OAR 731-005-0800(5) or OAR 731-149-0020(4) and which exemption applies
- The above required certifications and calculations

(2) On-Road Concrete Mixer Trucks and Dump Trucks - Demonstrate compliance with OAR 731-005-800 or OAR 731-149-0020, by listing all diesel powered on-road concrete mixer trucks and on-road dump trucks utilized to date on the Project Site that are owned or operated by the Contractor, Subcontractors and those operated under trucking services agreements, including:

- Equipment owner and whether the piece of equipment is owned and operated by a COBID certified firm
- Vehicle identification number or serial number
- Engine model year
- Motor vehicle license plate number
- The above required certifications and calculations

Willamette River: Stormwater Source Control Improvements Project

00290.30(c)(1) Vehicle and Equipment Idling - Replace this subsection, except for the subsection number and title, with the following:

Establish truck staging areas for diesel-powered vehicles located where truck emissions have a minimum impact on sensitive populations, such as residences, schools, hospitals and nursing homes.

Ensure that all diesel powered Equipment has a decal visible to the operator, reminding them to limit idling to a maximum of 5 minutes. Post at least 1 notice in a location frequented by employees or workers stating diesel equipment idling is limited to 5 minutes.

Limit idling of trucks and other diesel powered Equipment to 5 minutes, when the Equipment is not in use or in motion, except as follows:

- When safety of contractors, Subcontractors or Suppliers or their employees may be compromised.
- Frequent shutdowns may be detrimental to the exhaust control system.
- When traffic conditions or mechanical difficulties, over which the operator has no control, force the Equipment to remain motionless.
- When operating the Equipment's heating, cooling or auxiliary systems is necessary to accomplish the Equipment's intended use.
- To bring the Equipment to the manufacturer's recommended operating temperature.
- When the outdoor temperature is below 20 °F.
- When needed to repair Equipment.
- Under other circumstances specifically authorized by the Engineer.

00290.32 Noise Control - Add the following paragraph to the end of this subsection:

Review City of Portland Title 18 which describes noise control regulations. Comply with the applicable noise control requirements of the permit for Project Work.

Copies of the noise variance permit for this Project are available from the Engineer.

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:

Willamette River: Stormwater Source Control Improvements Project

- 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.
- 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.

(2) Surface Water Diversions - Surface water may be diverted to meet construction needs other than work area isolation, consistent with Oregon law, only if water from sources that are already developed, such as municipal supplies, small ponds, reservoirs, or tank trucks, is unavailable or inadequate, and meeting the following conditions:

- When alternative surface sources are available, divert from the stream with the greatest flow.
- Install, operate, and maintain a temporary fish screen.
- Do not exceed a pumping rate and volume of 10 percent of the available flow. For streams with less than 5 cubic feet per second, do not exceed drafting of 18,000 gallons per Day. Do not use more than one pump for each site.

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.

00290.50 Protection of Cultural Resources – Replace the paragraph that begins “Comply with all Laws...” with the following paragraph:

Comply with all Laws governing preservation of cultural resources. Cultural resources include, but are not limited to:

- Historic buildings (i.e. typically 50 years of age and older)

Willamette River: Stormwater Source Control Improvements Project

- Historic structures (i.e. bridges)
- Sites (i.e. sites with artifacts)
- Objects (i.e. monuments)
- Districts (i.e. historic districts, or linear historic districts like historic roads).

Replace the paragraph that begins “If cultural resources are...” with the following paragraph:

If cultural resources not previously identified in preconstruction are encountered on the Project area or in material sources, and their disposition is not addressed in the Special Provisions, do the following:

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, __13__ sites were identified.

The Region Environmental Coordinator for this Project is Paul Langdale.

The Agency Archaeology Representative for this Project is _Dustin Kennedy.

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.

00290.90 Payment - Add the following paragraphs to the end of this subsection:

No separate or additional payment will be made for work zone fencing.

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

Willamette River: Stormwater Source Control Improvements Project

From Location/Station to Location/Station	Depth below grade (feet)	Approximate Quantity (cy)	Known Contaminants
OF16-2, OF16-3 (geotechnical borings B-12 and B-13 as documented in the Hazardous Materials Corridor Study)	0-20	110	Heavy metals
FB-W (geotechnical boring B-8 as documented in 2024 Minimal Assessment Memorandum for Fremont Bridge West Location)	0-20	609	Heavy metals, PAHs
FB-E (geotechnical borings B-9 and B-10 as documented in 2024 Minimal Assessment Memorandum for Fremont Bridge East Location)	0-15	68	Heavy metals, PAHs, Residual range organics (RRO)
WR-307 (geotechnical borings B-4, B-5, and B-6 as documented in 2024 Level 1 Hazardous Materials Corridor Study for WR-307)	0-20	5,196	Heavy metals

Approximate Total Quantity	5,983 cy
Quantity to be reused on Project	0 cy
Quantity to be disposed at landfill	10,180 Tons

- In areas where excavation is not required, leave contaminated Material and clearing and grubbing Material in place.
- Pump, test, treat, and dispose of contaminated groundwater from the following locations in Table 00294-2:

Contaminated Groundwater Location Table 00294-2

Location/Station	Depth below grade (feet)	Suspected Contaminants
Fremont Bridge West	18	PAHs

Willamette River: Stormwater Source Control Improvements Project

- Prepare a Health and Safety Plan (HASP) for work within the contaminated areas of the Project.

The 2024 Hazardous Materials Corridor Studies, titled Hazardous Materials Corridor Study, Willamette River Stormwater Source Control Improvements (Project Corridor Segments 1 through 4), and Minimal Assessment Memos (Fremont East, Fremont West, St. Johns East and St. Johns West) 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 , Shoulder 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, Shoulder Soil, and groundwater sampling must be conducted by an Oregon Registered Geologist or Professional Engineer who has experience characterizing contaminated media.

- Collect composite Soil samples as required for disposal and submit for the following required testing: The following volatile organic compounds (VOCs) by EPA Method 8260.
- 1,1,2,2-Tetrachloroethane
- Polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270SIM.
- Total metals (antimony, copper, lead and zinc) by EPA 6000 series.
- One TCLP lead by using EPA Method 1311.

00294.03 Submittals - Submit the following documents:

- A site specific HASP at least 10 Calendar Days before the pre-construction conference.

Willamette River: Stormwater Source Control Improvements Project

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 and groundwater 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:

- For removal of Contaminated Soil and Shoulder Soil, provide employees trained in:
 - Lead awareness according to 29 CFR 1926.62(l).
 - Chromium according to 29 CFR 1926.1126(j)(2).
 - Cadmium according to 29 CFR 1926.1127(m)(4).

Construction

00294.40 Contaminated Soil Excavation and Shoulder Soil - Excavate and handle Contaminated Soil or Shoulder Soil from Project excavations according to the following:

- Notify the Engineer 3 Calendar Days before beginning excavation activities within contaminated areas.

Willamette River: Stormwater Source Control Improvements Project

- Allow the Agency to collect Soil and groundwater samples during excavation activities.
- Load Contaminated Soil or Shoulder 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 or Shoulder Soil on-site.
- 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 and Shoulder Soil Management - Reuse, recycle, or dispose of Contaminated Soil and Shoulder 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 (or Shoulder Soil) to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal. Dispose of temporarily stored Contaminated Soils (or Shoulder Soil) 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 (and Shoulder Soil).
- Pay all filing and permit fees.

00294.43 Contaminated Groundwater Pumping - Remove and handle contaminated groundwater as follows:

- Allow the Agency to collect groundwater samples during pumping activities and subsequent storage.
- Remove contaminated groundwater from the Project Site or, when approved temporarily store contaminated groundwater on-site in water tight containers compatible with the contaminants. Label each container with the contents and dates of accumulation.
- Dispose of stored contaminated groundwater within 30 Days from the date of beginning generation of it or before Second Notification, whichever occurs first, according to 00294.44.

00294.44 Contaminated Groundwater Management - Recycle or dispose of contaminated groundwater according to any of the following:

• Discharge to a Permitted Sanitary Sewer Facility:

- Submit all groundwater analytical data and proposed treatment information to the local sewer authority, and obtain written permission or a permit to discharge the contaminated groundwater to the sanitary sewer system.

Willamette River: Stormwater Source Control Improvements Project

- Complete and sign the sewer permit application as the applicant and pay all associated fees.
- Comply with all permit requirements and all other local sewer authority requirements.
- **Transport to an Off-Site Recycling or Disposal Facility:**
 - Submit all groundwater analytical data to the receiving facility and obtain written acceptance from that Entity.
 - Complete and sign bill-of-lading forms and all other documentation required by the receiving facility.
 - Pay all permit fees.

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.
- Contaminated groundwater mobilization.

The quantities of Contaminated Soil or Shoulder Soil disposed will be measured on the weight basis, based on weigh tickets from the recycling or disposal facility.

The quantities of contaminated groundwater removed and disposed will be measured on the volume basis, per gallon, based on the receiving facility approved meter tickets or approved on-site meters.

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
(e) Contaminated Soil Disposal	Ton
(f) Contaminated Groundwater Mobilization	Lump Sum
(g) Contaminated Groundwater Removal	Gallon

Item (e) includes all costs involved with the disposal of Contaminated Soil or Shoulder Soil at a recycling or disposal facility.

Willamette River: Stormwater Source Control Improvements Project

Item (f) includes all mobilization costs for groundwater removal work.

Item (g) includes obtaining all permits and furnishing all Equipment and labor necessary to treat and store contaminated groundwater.

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 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications.

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:

Add the following subsection:

00320.40(b)(5) Tree Protection Fencing – Install protection fence according to 00320.40(b)(3) as shown.

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 on the excavation basis.

00330.43(d) Small, Irregular Fill Areas – Replace the paragraph that begins “The density requirements of 00330.43 do not apply...” with the following paragraph:

The density requirements of 00330.43 do not apply to irregular fill areas outside of the travel lanes that have a total volume of no more than 150 cubic yards at each location. Construct these areas according to the following:

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Willamette River: Stormwater Source Control Improvements Project

Comply with Section 00350 of the Standard Specifications.

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications modified as follows.

00405.00 Scope - Add the following sentence to the end of the paragraph:

This Work also includes the installation of pipe caps.

Add the following subsection:

00405.49 Pipe Cap – Pipe cap, where shown, is for installation of CLSM to provide a pipe cradle when installing new pipe under existing pipe. Backfill proposed pipe at existing pipe crossing with CLSM as shown.

00405.80 Measurement – Add the following to the end of this subsection:

The quantities of pipe caps will be measured on the unit basis.

00405.90 Payment – Add the following Pay Item to the end of the Pay Items list:

(d) Pipe Cap Each

SECTION 00415 - VIDEO PIPE INSPECTION

Comply with Section 00415 of the Standard Specifications modified as follows:

Add the following subsection:

00415.02 Definitions:

Flexible Pipe - Pipes constructed of corrugated metal are considered Flexible Pipes.

Rigid Pipe - Pipes constructed of concrete and ductile iron are considered Rigid Pipes.

Thermoplastic Pipe - Pipes constructed of polyvinyl chloride, polyethylene, and polypropylene are considered Thermoplastic Pipe.

00415.20(b) Transporter - Replace the paragraph that begins “Use an all-wheel...” with the following paragraph:

Use an all-wheel drive or track mounted transporter capable of inspecting pipes ranging in size from 12 to 60 inches in diameter. Provide a transporter with an adjustable operating speed while recording not to exceed 30 feet per minute.

00415.41 Pre-Installation Video Inspection - Replace the paragraph that begins “Perform a pre-installation video inspection...” with the following paragraph:

Perform a pre-installation video inspection at least 5 Calendar Days before beginning Work. Begin Inspection at one end of the pipe and proceed through the entire pipe length at a speed

Willamette River: Stormwater Source Control Improvements Project

not greater than 30 feet per minute. Move the camera through the pipe, along the approximate center of the pipe, and provide a continuous 360 degree pan of each pipe joint. Stop and record all cracks, deformities, and defects to document the pipe condition, including the location of all lateral connections to the mainline.

00415.42 Post Installation Video Inspection - Replace the paragraph that begins “Perform post construction video inspection...” with the following paragraph:

Perform post construction video inspection according to 00415.40 and 00415.41. Video inspect the pipe interior no sooner than 30 Days after the trench backfill and compaction have been completed, and before any paving is performed. If the Contract duration does not permit a 30-Day waiting period, the Engineer may allow the inspection when the compacted backfill reaches a minimum of 2 feet above the pipe crown.

00415.42(a) Deflection Testing for Flexible Pipe - Replace this subsection with the following subsection:

00415.42(a) Post Installation Deflection Testing - Perform post construction deflection testing for all Flexible Pipe and Thermoplastic Pipe as described.

- Flexible Pipe for new pipe installations and extensions greater than 15 feet in length.
- Thermoplastic Pipe for new pipe installations and extensions greater than 10 feet in length.

If any portion of the new pipe interior is not accessible for a visual inspection, then perform deflection testing for the entire installation of new pipe or extension regardless of pipe length.

Use one of the approved following methods:

00415.42(a)(1) Remote Video Inspection with Laser Profiler – Replace the paragraph that begins “Calibrate and perform...” with the following paragraph:

For pipe 48 inches or less in diameter, calibrate, and perform deflection inspection according to ASTM F3080. Use video inspection equipment meeting the requirements of 00415.22.

00415.42(a)(2) Manual Deflection Test - Replace the paragraph that begins “Use equipment meeting...” with the following paragraph:

For pipes larger than 48 inches and when the entire length of the pipe is accessible, use equipment meeting the requirements of 00415.23.

00415.71 Corrections to Deficiencies in Work - Replace the paragraph that begins “Where the pipe deflection...” with the following paragraph:

Where the pipe deflection is greater than 5 percent and less than 7.5 percent of the nominal diameter, submit a remediation plan to the Engineer. The remediation plan must be a stamped Working Drawing according to 00150.35. Replace pipe where the deflection exceeds 7.5 percent of the nominal diameter at no additional cost to Agency.

Willamette River: Stormwater Source Control Improvements Project

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications modified as follows:

00440.40(e) Curing - Replace this subsection, except for the subsection number and title, with the following:

Cure CGC for a minimum of 7 Calendar Days by one of the following methods:

- Cover with wet burlap, canvas, Sand, or other acceptable Material, and keep moist.
- Apply curing compounds at a rate of not less than 1 gallon per 150 square feet. Do not use on surfaces that come into contact with adjacent pours and avoid overspray on exposed reinforcement. Use curing compounds according to the following:

Table 00440-1

Section	Item	Type 1 or 1-D (Clear)	Type 2 (White-Pigmented)
00480	Drainage Curbs	*	*
00599	Slope Paving Curbs and Berm Paving	Yes	No
00759	Walks, Curb Ramps, Driveways, Surfacing, Curbs, and Islands	*	*

*Use Type 2 except when the Engineer requires Type 1 or 1-D

SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications modified as follows:

00445.11 Materials - Add the following to the list requirements:

Ductile Iron Fittings 02475.20

Add the following subsection:

00445.11(h) Ductile Iron Pipe - Furnish ductile iron pipe conforming to the requirements of 02420.11.

Add the following subsection:

00445.11(i) Restraint Gaskets - Furnish pipe manufacturer-approved push-on restraint gaskets for pressurized pipe and fitting joints according to 02475.50.

Add the following subsection:

00445.11(j) Pipe Expansion Fitting - Furnish the expansion fitting as follows:

Willamette River: Stormwater Source Control Improvements Project

- Install flexible expansion joints as shown. Flexible expansion joints need to be manufactured of ductile iron conforming to the material requirements of ASTM A536 and ANSI/AWWA C153/A21.53. Foundry certification of material needs to be readily available upon request.
- Pressure test each flexible expansion joint prior to shipment against its own restraint to a minimum of 350 psi. Apply a minimum 2:1 safety factor for pressure testing, determined from the published pressure rating. Factory Mutual approval is required.
- Furnish flexible expansion joints designed and cast as an integral part of a ball and socket type flexible joint, having a minimum per ball deflection of 20 degree and an 8-inch minimum expansion. Additional expansion sleeves need to be available and easily added or removed at the factory or in the field. Use standardized flange end connections.
- Line all internal surfaces (wetted parts) with a minimum of 15 mils of fusion-bonded epoxy conforming to the applicable requirements of ANSI/AWWA C213 and ANSI/NSF-61. Construct watertight sealing gaskets with ethylene propylene diene monomer (EPDM).
- Coat exterior surfaces with a minimum of 6 mils of fusion-bonded epoxy conforming to the applicable requirements of ANSI/AWWA C116/A21.16.
- Furnish appropriately sized polyethylene sleeves, meeting ANSI/AWWA C105/A21.5, for direct buried applications

Add the following subsection:

00445.11(k) Pipe Flexible Coupling - Furnish the flexible couplings as follows:

- Furnish flexible couplings that provide a wide range, stable fit capability in a single mechanical connection to join plain end pipe(s) of similar or different pipe diameters, a variety of pipe materials, and are manufactured according to the requirements of AWWA C219.
- Furnish flexible couplings with gasketed end connections that provide a minimum of 4 to 5 degrees of deflection and working pressures rated up to 305 PSI for nominal 2 inch – 8 inch and 260 PSI for nominal 10 inch – 18 inch pipe sizes. Furnish gaskets with EDPM rubber (or optional NBR) to ASTM D2000, certified and listed to ANSI/NSF 61.
- Furnish flexible couplings with center ring, end rings, and bolt guides made of ductile iron meeting or exceeding ASTM A536, grade 65-45-12 or 60-40-18. Furnish a center ring with integral cast handle, and fusion bonded epoxy coating that is certified and listed to ANSI/NSF 61 & 372. Furnish end rings to be removable and adjustable, with an integrally cast hinge. Furnish end rings, bolt guides, and nuts with E-Coat epoxy. Furnish Armor with heavy-gauge Type 304 stainless steel. Furnish Bolts & Nuts with Type 304 stainless steel (or optional 316).

Add the following subsection:

00445.11(l) Duckbill Check Valve - Furnish the duckbill check valve as follows:

Willamette River: Stormwater Source Control Improvements Project

- Furnish check valve to be all rubber, and the flow operated check type with an integral flanged end connection. The port area contours down to a duckbill, which allows passage of flow in one direction while preventing reverse flow. Furnish flange and flexible duckbill sleeve with one-piece rubber construction with nylon reinforcement. Rise top of valve to form the duckbill shape. Ensure bill portion is thinner and more flexible than the valve body and formed into a curve of 180°.
- Furnish flange drilling conforming to ANSI B16.1 Class 125/ANSI B16.5, Class 150 standards. Furnish the valve with galvanized or stainless-steel back-up rings for installation.
- Submit product literature that includes information on the performance and operation of the valve, materials of construction, dimensions and weights, elastomer characteristics, flow data, headloss data, and pressure ratings.
- Provide shop drawings that clearly identify the valve dimensions.

Add the following subsection:

00445.11(m) Steel Pipe Bends - Furnish steel pipe bends for the bridge downdrains according to Section 00581.

Add the following subsection:

00445.18 Reinforced Concrete Pipe (RCP) Pipe Bends - Furnish RCP Pipe Bends using one of the following options:

- Reinforced concrete pipe with beveled end, maximum 6-degree deflection.
- Reinforced concrete pipe elbow.

Add the following subsection:

00445.40 (h) RCP Pipe Bend - Install purpose-built elbow or pipe to allow for deflection at pipe joints as shown. Install according to manufacturer's installation manual and requirements.

Add the following subsection:

00445.43(j) Duckbill Check Valve - Install duckbill check valve according to manufacturer's written Installation and Operation Manual and approved submittals.

Ensure manufacturer's authorized representative is available for customer service during installation and start-up, and to train personnel in operation, maintenance, and troubleshooting of valve when requested.

- Offset duckbill so that bottom line of valve is flat, keep invert of pipe parallel with invert of valve.

Add the following subsection:

Willamette River: Stormwater Source Control Improvements Project

00445.72(e) Pressurized Ductile Iron Pipes – Conduct hydrostatic testing for pressurized ductile iron pipe according to 01140.51.

00445.80(a) Pipes - Replace the bullet that begins “Length – The length will be measured...” with the following bullet:

- Length – Measure length, with no deduction for Structures or fittings, along the pipe flow line from center to center of manholes, flow splitters, CDS units, inlets, or special sections; or the ends of pipe or end sections, whichever is applicable. Measure the length of pipe connecting to a non-circular water quality structure to the inside face of the water quality structure.

Add the following subsection:

00445.80(k) Expansion Fitting - The quantities of expansion fittings will be measured on the unit basis.

Add the following subsection:

00445.80(l) Flexible Coupling - The quantities of flexible coupling will be measured on the unit basis.

Add the following subsection:

00445.80(m) Stormwater Cleanout - The quantities of cleanout will be measured on the unit basis.

Add the following subsection:

00445.80(n) Duckbill Check Valve - The quantities of duckbill check valves will be measured on the unit basis.

00445.91 Payment

Add the following Pay Items to the Pay Item list:

- (n) Expansion Fitting, ____ Inch..... Each
- (o) Flexible Coupling, ____ Inch..... Each
- (p) Stormwater Cleanout..... Each
- (q) Duckbill Check Valve Each

In items (n) and (o), the nominal pipe size will be inserted in the blank.

Item (p) includes furnishing all labor, Materials, tools, and Equipment necessary to construct the stormwater cleanout and appurtenances as shown, including all fittings and riser pipes.

Replace the sentence beginning with “In items (c) and (d)...” with the following: In items (c) and (d), the nominal pipe size will be inserted in the blank. No separate or additional payment will be made for blind flanges as shown.

Willamette River: Stormwater Source Control Improvements Project

Add the following bullets to the end of the bullet list that begins “No separate or additional payment...”:

- restraint gasket for ductile iron pipes and fittings
- RCP pipe bends
- ____” pipe bends
- Ductile Iron Pipe Bend, ____ Inch

SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications modified as follows:

Add the following subsection:

00470.02 Submittals – Submit stamped Working Drawings and calculations for the following within 45 Calendar Days after execution of the Contract according to 00150.35:

- Debris Basket System
- Access Hatches for Debris Basket System
- Flow Splitter Adjustable Weir for All Flow Splitters

Add the following subsection:

00470.18 Monitoring Conduit – Furnish Schedule 40 PVC monitoring conduit and solvent welding as shown and according to Section 00583.

Add the following subsection:

00470.19 Flow Splitter Adjustable Weir - Furnish an adjustable weir assembly made of aluminum alloy 6061-T6 weir plate, angle brackets, and nuts, bolts, and washers as shown. Furnish silicone or similar non-adhesive sealant for the flow splitter that is easily removed.

Add the following subsection:

00470.20 Debris Basket System - Where the plans call for debris basket for ____” inflow pipe, furnish debris basket with the following requirements. Minimum water head load when screen is blinded (blinded load) is 910 lbf for baskets serving 27-inch pipe and 4,060 lbf for baskets serving 48-inch pipe.

(a) Furnish basket and guide frame with either aluminum or 316 stainless steel as shown. Furnish all necessary anchor bolts and assembly hardware with 316 stainless steel with debris basket system. Furnish all materials with a standard mill finish. Furnish the portion of aluminum guide frames in contact with concrete with a heavy shop coat of bituminous paint.

(b) Furnish debris baskets with either fine screen or coarse screen and with specified approximate open screen area as shown.

(c) Furnish baskets with integral guide plates or wheels to suit the required operation. Furnish guide wheels for all systems where the blinded load exceeds 175 pounds. Furnish guide frames for aluminum baskets with guide plates made of extruded 6063 aluminum, and with guide wheels made of extruded 6061 aluminum with required welded standoffs or support brackets of a matching alloy. Furnish guide frames for stainless steel baskets made of formed 316 stainless steel angles and channels with required welded standoffs and support brackets.

(d) Furnish baskets and guide frames designed such that the basket bottom is a minimum 6 inches below the influent opening invert elevation. Furnish the basket back plate to clear the opening. Furnish the guide frames to support the basket guide plates or wheels in all positions and incorporate a positive stop at the bottom to position the basket at the operating elevation. Furnish the guide frames to extend to the top of the structure sufficiently to allow for removal and re-insertion of the basket for emptying or cleaning, with clearance allowed for adjacent hatch or grating embedment at the top of the screened structure. Furnish the guide frames to be anchored to the wall directly through integral frame mounting holes or through mounting holes in any required standoffs or brackets. Furnish guide frame mounting to account for flat or curved wall shape and to position the basket to be sufficiently clear wall opening or any pipe extending from that opening.

(e) Furnish fine screen baskets with either perforated plate type or wire mesh type as shown. Furnish perforated plate type fine baskets with either 5052 aluminum or 316 stainless steel plate, minimum 1/8" thick, and with hole sizes, spacing, and alignment as shown. Holes are not allowed to extend into basket corners or plate edges. Furnish perforated plates with formed to make the basket sides and welded at the corners where the basket bottom and back plate are joined. Furnish perforated plate baskets with reinforcing angle frames and secondary stiffeners as required to support the plate under the blinded load.

(f) Furnish wire mesh for fine screens with wire diameter and spacing as shown. Furnish wire mesh sections with bent or cut to form the basket sides, bottom, and back plate. All wire ends to be welded to the angle frame of the basket. Furnish wire mesh baskets with reinforcing stiffeners as required to support the mesh under the blinded load.

(g) Furnish coarse screen baskets with either welded round bar mesh type or welded flat bar type as shown. Furnish welded round bar mesh type coarse baskets made of either 6061 aluminum or 316 stainless steel bars, minimum 3/8" diameter, with bar spacing as shown and with welds at all cross bar locations.

(h) Furnish flat bar baskets with minimum 1/4" x 1" bars, oriented vertically with the long side of the bars parallel to the direction of flow through the basket sides and bottom. Furnish coarse baskets with angle frames and secondary stiffeners of the same alloy as the bars and sized as required to support the basket under the blinded load. Furnish bar sections with cut to make up the basket sides, bottom, and back plate. All bar ends to be welded to the angle frame of the basket.

(i) Furnish basket frames with an integral lifting bail of the same alloy as the basket materials, with the bail connected directly to the basket angle frame. Furnish a bail capable of pivoting on its mounting holes and sized and located to achieve the lift capacity of the basket under the blinded load with a minimum of resistance from the guide frame during

Willamette River: Stormwater Source Control Improvements Project

lifting. Incorporate additional bails or lifting eyes into the basket frame where the blinded load requires multiple lift points. Locate the cable lifting mechanism (by others) to allow for proper vertical alignment of the cable to the center point of the bail(s) or lifting eyes.

Add the following subsection:

00470.21 Access Hatches for Debris Basket System - Furnish locking hatches with minimum interior unobstructed opening dimensions of the size shown. Furnish double-leaf, aluminum hatches rated for AASHTO H-20 traffic loading (minimum) with Type 316 stainless steel hardware.

Add the following subsection:

00470.49 Monitoring Conduit - Restrict bends to 45 degrees or less in the monitoring conduit.

Add the following subsection:

00470.50 Flow Splitter Adjustable Weir - Bolt the adjustable weir assembly to the water quality (WQ) outflow pipe or drainage structure wall as shown. Cut the WQ outflow pipe cleanly such that the aluminum angle can be mounted flush with the end of the WQ outflow pipe or drainage structure wall. Mount the adjustable weir plate on the frame or drainage structure wall so it can move up and down and, when tightened, be snug and flush with the angles and the pipe end with no gaps greater than 1/16". When adjustable weir plate is installed against drainage structure wall, match the inside radius of the drainage structure wall and have no gaps greater than 1/16". Set the plate as shown and then apply silicone or similar non-adhesive sealant that is easily removed to ensure a watertight fit.

00470.80 Measurement - Add the following paragraph to the end of this subsection:

Flow splitters will be measured on the each basis.

00470.90 Payment - Add the following Pay Item to the Pay Item list:

(I) Flow Splitter, Type ____ Each

In item (I), the type of Flow Splitter will be inserted in the blank.

Add the following paragraph to the end of this subsection:

Item (c) includes the installation of the monitoring conduit, including furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Add the following paragraph to the end of this subsection:

Item (I) includes the material, installation, and furnishing of all Equipment, labor, and Incidentals necessary to complete the debris basket system and access hatch as shown. The adjustable weir assembly is incidental to the installation of the Flow Splitter, including furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals

Willamette River: Stormwater Source Control Improvements Project

necessary to complete the Work as specified including but not limited to core drilling, grouting, bedding, connecting, sealing, metal fabrication, installation, adjustment, and clean-up.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications modified as follows:

00490.10 Materials - Add the following to the end of this subsection:

Portland Cement Concrete Repair Materials.....02015.20

00490.11 High Early Strength Concrete - Replace this subsection, except for the subsection number and title, with the following:

Furnish high early strength concrete meeting one of the following requirements:

- Commercial Grade Concrete designed to achieve high early strength utilizing accelerating admixture from 02040.10, Type III cement from Section 02010, or rapid setting cement from Section 02011.
- A Portland cement concrete repair material from 02015.20, rapid setting or very rapid setting.

00490.44 Filling Abandoned Pipes, Manholes and Catch Basins - Replace this subsection, except for the subsection number and title, with the following:

Cap or plug all connecting pipes to manholes and catch basins that are scheduled to be abandoned. Remove the manhole cone or flat top and manhole sections, or the catch basin frame, to a minimum depth of 3 feet below finish grade and fill the remaining manhole barrel or catch basin with Granular Material meeting the requirements of 02630.10. Compact the Granular Material to 90 percent of maximum density according to AASHTO T 99. When in landscaped or unimproved Roadway sections, backfill with approved Materials meeting the requirements of 00330.13. Place Topsoil meeting the requirements of 00330.11 for the last 1 foot of backfill.

Add the following subsection:

00490.47(e) Curb Opening and Grate Removal

(1) Solid Lid – Replace the existing grate opening with a solid lid. Furnish solid lid with the same dimensions as grate lids to fit into existing frame.

(2) Stainless Steel Studs – Install five 0.375-inch diameter stainless steel wedge anchors with 1.5-inch minimum embedment, 1" minimum cover, and 1" protrusion into the mortar fill. Locate anchors as directed and maintain 2" (minimum) edge distance.

(3) Mortar Fill – Install polymer modified, portland cement mortar/concrete as shown to prevent stormwater from entering the structure. Furnish SikaTop 111 Plus, as manufactured by Sika Corporation.

Willamette River: Stormwater Source Control Improvements Project

- Areas to be filled must be clean, sound, and free of contaminants according to manufacturer's requirements. Remove all loose and deteriorated concrete by mechanical means. Mechanically prepare the concrete substrate to obtain a surface profile of +/- 1/16" (CSP 5 or greater according to ICRI Guidelines) with a new exposed aggregate surface. The minimum depth in the area to be patched is 1/2" in.
- Mix, form & apply the mortar fill according to manufacturer's instructions to fill the gutter opening and seal the structure from surface water entering. Ensure mortar fill installation does not prevent solid lid from being removed from frame.

00490.90 Payment – Add the following Pay Items to the Pay Item list:

Pay Item	Unit of Measurement

(j) Curb Opening and Grate Removal	Each

Item (j) Payment will be payment in full for removing items to be demolished, furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified, including but not limited to surface preparation, installing stainless steel studs, installing mortar, and clean-up.

SECTION 00495 - TRENCH RESURFACING

Comply with Section 00495 of the Standard Specifications.

SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL

Comply with Section 00510 of the Standard Specifications modified as follows:

00510.04(a) Defined Shoring Systems - Replace the sentence that begins “Select Shoring systems...” with the following sentence:

Select Shoring systems for construction from the list of defined Shoring systems provided in Section 16.3.26 of the ODOT GDM.

Add the following to the end of this subsection:

Construct shoring at the location(s) listed below:

Location ID	Location Description	Shoring System Type(s) Allowed	Estimated Length (Ft)
WR79	US30 Between NW Marina Way and NW 112 th Ave	5A, 5B, 5C, 5D, 5F	109
WR204	US30 Between NW 112 th Ave and NW 108 th Ave	5A, 5B, 5C, 5D, 5F	162
WR126	US30 Between NW 107 th Ave and NW 105 th Ave	5A, 5B, 5C, 5D, 5F	138
OF22D	Between NW Bridge Ave and West Ramp to US30	5A, 5B, 5C, 5D, 5F	204
WR-510	St. Johns Bridge West	5A, 5B, 5C, 5D, 5F	105
OF-52	St. Johns Bridge East	5A, 5B, 5C, 5D, 5F	122
OF22C	Between NW Bridge Ave and East Ramp to US30	5A, 5B, 5C, 5D, 5F	64
WR206	NW Bridge Ave, Between St. Johns Bridge and East Ramp to US30	5A, 5B, 5C, 5D, 5F	162
OF19	US30 Between NW St Helens Rd and NW 44 th Ave	5A, 5B, 5C, 5D, 5F	131
OF18	US30 Between NW Express Ave and NW 35 th Ave	5A, 5B, 5C, 5D, 5F	101
OF16-2	US30 Between NW 26 th Ave and NW 26 th Dr	5A, 5B, 5C, 5D, 5F	144
OF16-3	US30 Between NW 26 th Dr and NW Brewer St	5A, 5B, 5C, 5D, 5F	76
FB-W	Fremont Bridge West	5A, 5B, 5C, 5D, 5F	114
FB-E	Fremont Bridge East	5A, 5B, 5C, 5D, 5F	0
WR-307	I-405/Fremont Bridge Interchange	5A, 5B, 5C, 5D, 5F	480

Willamette River: Stormwater Source Control Improvements Project

WR208/211	General Knappton Rd	5A, 5B, 5C, 5D, 5F	56

00510.04(b) Atypical Shoring Systems – Replace the paragraph that begins “Shoring systems that are not on the list...” with the following paragraph:

Shoring systems that are not on the list of Shoring types published in Section 16.2.4.2 of the ODOT GDM are considered atypical Shoring systems. If proposing an atypical Shoring system, submit stamped Working Drawings according to 00150.35. The review and response time allowed for the Agency to return the Working Drawings will be 120 Calendar Days. The submittal of calculations and other data must satisfy the requirements of the Specifications and include sufficient detail and explanation of the design for the Agency to process and comment on the Working Drawings. If the Engineer requests additional information or explanation related to the review of the atypical Shoring system the Engineer may restart the 120-Calendar Day review period.

SHORING DESIGN CHECKLIST

Instructions - This shoring design checklist was developed to facilitate the design, review, and erection of shoring to be used for ODOT construction projects. This checklist is intended to act as a reminder to design or check for specific important aspects of this construction. It is not a substitute for plan and/or design criteria or specification requirements.

The Checklist is to be completed by the shoring design engineer. Answer every question. Attach to the Checklist an explanation of any negative responses.

Submit this Shoring Design Checklist for each stage and phase of the project, along with the shoring design summary, Working Drawings and calculations according to 00510.04.

A. General	YES	NO	N/A
1. Are the shoring Working Drawings and supporting calculations prepared, stamped, and signed by an engineer registered to practice in the state of Oregon?	_____	_____	_____
2. Are the temporary shoring installation plans, construction sequence, and removal plan compatible with the project construction staging/phasing?	_____	_____	_____
B. Design Standards	YES	NO	N/A
1. Does the shoring design comply with standards identified in ODOT GDM 16.3.26.3 and related sections?	_____	_____	_____
2. Is the design standard and edition identified in the shoring design calculations?	_____	_____	_____
C. Loading	YES	NO	N/A
1. Have the design loads, including special loading conditions (e.g. cranes, stockpiles, etc.), used for	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

shoring design of all members been noted in the design calculations?			
2. Have the appropriate load and resistance factors or factors of safety on the shoring system been identified, for all applicable load combinations or load cases?	_____	_____	_____
3. If public traffic is near or directly above the shoring system, has a minimum traffic live load surcharge of 250 psf been applied?	_____	_____	_____
4. Have the loads from actual construction equipment and not less than 250 psf been included in the shoring system design?	_____	_____	_____
5. Have the construction loads for different stages of construction been considered and included in the calculations?	_____	_____	_____
6. Have the effects of any construction activities adjacent to the shoring system on the stability/performance of the shoring system been addressed in the shoring design (e.g., excavation or soil disturbance in front of the wall or slope, excavation dewatering, vibrations and soil loosening due to soil modification/construction activities)?	_____	_____	_____
7. Have earth pressure diagrams been included?	_____	_____	_____
8. Does the shoring design consider the effect of water saturated soil pressure acting on the full height of the shoring?	_____	_____	_____
D. Geotechnical and Structural Analysis	YES	NO	N/A
1. Has internal stability been evaluated?	_____	_____	_____
2. Has eccentricity/overturning stability been evaluated?	_____	_____	_____
3. Has sliding been evaluated?	_____	_____	_____
4. Has overall/global stability been evaluated?	_____	_____	_____
5. Has bearing capacity been evaluated?	_____	_____	_____
6. Have displacement constraints or other performance objectives of the shoring system been identified and evaluated?	_____	_____	_____
7. Has each stage of the shoring system construction been evaluated to carry traffic and construction loads	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

and ensure internal and external stability through the construction and loading sequence?

8. Are the allowable stress and the calculated stress listed in the summary for each different shoring member?	_____	_____	_____
9. Have steel beams been checked for bending, shear, web crippling and buckling of the compression flange?	_____	_____	_____
10. Have connections for all phases of construction and removal been designed for all interim loading?	_____	_____	_____
11. Has buckling, bracing strength, and stiffness been evaluated for all compression members?	_____	_____	_____

E. Materials

YES	NO	N/A

1. Are all soil, rock, and other material properties used for the design of the shoring system provided and consistent with GDM and the subsurface field and lab data?	_____	_____	_____
2. Are timber grades noted on shoring drawings and in accompanying calculations?	_____	_____	_____
3. Are the minimum lumber dimensions shown in the calculations and noted on the Working Drawings?	_____	_____	_____
4. Are steel structural shapes, bolts, connections, and plates identified by ASTM number on the shoring Working Drawings and in the calculations?	_____	_____	_____

F. Shoring Working Drawings

YES	NO	N/A

1. Is the field verified ground topography above and below the shoring wall shown?	_____	_____	_____
2. Are all existing, adjusted or new utilities, structures, and "no work zones" in proximity to the proposed shoring shown on the shoring Working Drawings and is protection of these items addressed?	_____	_____	_____
3. Are horizontal and vertical clearance requirements identified and shown on the shoring Working Drawings?	_____	_____	_____
4. Are plan view, elevation and cross sections drawn to scale, with dimensions defining location and size of the temporary shoring, components, and excavation limits?	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

5. Are the magnitude and location of all loads, equipment and personnel that will be supported by the shoring shown or noted on the shoring Working Drawings?	_____	_____	_____
6. Has a dewatering plan been shown?	_____	_____	_____
7. Have all connections been detailed?	_____	_____	_____
8. Has bracing been detailed?	_____	_____	_____
G. Testing and Monitoring	YES	NO	N/A
1. If a “yes” response to No. D-6, is a monitoring plan provided to verify adequate performance of the shoring system throughout the design life of the system?	_____	_____	_____
2. Has a load testing program been provided for soil nails, tiebacks, or other applicable elements of the shoring system?	_____	_____	_____

_____	_____
Design Engineer of Record Signature	Date

Willamette River: Stormwater Source Control Improvements Project

SECTION 00520 - DRIVEN PILES

Comply with Section 00520 of the Standard Specifications modified as follows:

00520.11 Engineer's Estimated Length List - Add the following to the end of this subsection:

The Engineer's estimated lengths of steel piling are:

Location	Number	Length (feet)	Type and Size	Coating Top Elevation ¹	Coating Bottom Elevation ¹
Fremont Br. Interchange	Settling Tank	45 per pile (Total= 1620)	Steel Pipe Pile DIA 18" THKN 5/8"	N/A	N/A

¹ Protective coating system and color requirements according to 00594.10.

00520.20(c)(4) Followers - Add the following to the end of this subsection:

Followers are permitted.

00520.20(d)(3) Wave Equation Method - Add the following paragraph and table(s) to the end of this subsection:

The input values for the wave equation analyses are:

Bent	Pile Type	Pile Length * (Feet)	Quake (Inches) Skin	Quake (Inches) Toe	Damping (sec./ft.) Skin	Damping (sec./ft.) Toe	% skin (ITYS)	R _n (kips)
Water Tank Foundation	18" Pipe	45	0.1	0.15	0.1	0.15	22	246

- * These pile lengths are based on the top of the pile being at the finished cutoff elevation. All additional pile length above the cutoff elevation, that may be required to accommodate the Contractor's pile installation method or site conditions, shall be added to the lengths listed above and appropriate changes made to the skin friction distribution input listed below. Piles must be driven to a minimum depth of 40 feet.

Use the relative skin friction distribution values listed below in the WEAP analysis:

Water Tank Foundation Depth (Feet)	Relative Distribution
0	0
30	0
35	10% of total capacity
45	22% of total capacity

00520.41(d) Preboring - Add the following sentence to the end of this subsection:

Willamette River: Stormwater Source Control Improvements Project

Use augering, wet-rotary drilling or other approved methods of preboring as directed.

00520.43(d) Reinforced Pile Tips - Add the following sentence to the end of this subsection:

For steel pipe piling, provide (inside)(outside) fit, open end cutting shoes meeting the requirements of 02520.10(e).

SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE

Comply with Section 00530 of the Standard Specifications modified as follows:

00530.10 Materials Replace this subsection, except for the subsection number and title, with the following:

Concrete Inserts	02513.35
Deformed Bar Reinforcement	02510.10
Deformed Bar Reinforcement (Stainless Steel)	02513.10
Dowels	02510.50
Dowels (Stainless Steel)	02513.50
Epoxy Coated Reinforcement	02510.11
Galvanized Coating	02510.30
Headed Bar Reinforcement	02510.25
Mechanical Splices	02510.20
Mechanical Splices (Stainless Steel)	02513.20
Ties and Supports	02510.60
Ties and Supports (Stainless Steel)	02513.60
Welded Wire Reinforcement	02510.40

00530.41(a) Fabric - Replace this subsection with the following subsection:

00530.41(a) Welded Wire Reinforcement - If welded wire reinforcement is shipped in rolls, straighten it into flat sheets before placing.

00530.41(b) Ties and Supports – Replace the bullet that begins “When stainless steel rebar is specified...” with the following bullet:

- When stainless steel reinforcing is specified, use stainless steel ties and supports meeting the requirements of 02513.60.

Delete the bullet that begins “Tie stainless steel reinforcement ...”.

Delete the bullet that begins “Support stainless steel reinforcement...”.

Replace the bullet that begins "Do not allow direct contact between stainless ..." with the following bullet:

Willamette River: Stormwater Source Control Improvements Project

- Do not allow stainless steel reinforcement to directly contact ASTM A1035 CS reinforcement. Do not allow stainless steel reinforcement or ASTM A1035 CS reinforcement in direct contact with other reinforcement with a different type of metal. When stainless steel or ASTM A1035 CS reinforcing or dowels are located near other reinforcing with a different type of metal, use nylon or polyethylene spacers to maintain a minimum 1 inch clearance between the two metals and bind them with nylon cable ties. Where insufficient space exists to maintain this minimum, either bar may be sleeved with a continuous polyethylene or nylon tube extending at least 1 inch in each direction past the point of closest contact between the two dissimilar bars.

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

- When ASTM A1035 CS reinforcing is specified, use epoxy coated ties and supports meeting the requirements of 02510.60(a).

00530.43 Splicing Welded Wire Fabric – Replace this subsection with the following subsection:

00530.43 Splicing Welded Wire Reinforcement - Overlap sheets of welded wire reinforcement as shown or provide edge and end laps not less than one mesh in width. Securely fasten sheets at the ends and edges according to 00530.41.

00530.80(a) Lump Sum - Add the following to the end of this subsection:

The estimated quantity for uncoated reinforcement in pounds is:

Structure Number	Grade 60	Grade 80	Grade 100 ASTM A615	Grade 100 ASTM A706	Grade 100 ASTM A1035 (____)
Fremont Bridge – West Pedestals	456	0	0	0	0
Fremont Bridge – West App Slab	470	0	0	0	0
St. Johns East - CIP biopod	31515	0	0	0	0
Fremont Bridge – East BioPod	22399	0	0	0	0
Fremont Bridge – East Vortex	5414	0	0	0	0
Fremont Bridge – East Footing	23337	0	0	0	0
Fremont Bridge – East Pedestals	2039	0	0	0	0

Willamette River: Stormwater Source Control Improvements Project

00530.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of reinforcement will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Reinforcement, Grade _____	Lump Sum or Pound

In item (a) the grade of reinforcement will be inserted in the blank.

Item (a) include fabricating and placing uncoated reinforcement as specified.

Payment for reinforcement will be made when the reinforcement is incorporated into the concrete.

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 clips, wire, separators, wire chairs, or other Material used in fastening the reinforcement in place.

SECTION 00535 - POST-INSTALLED ANCHOR SYSTEMS

Comply with Section 00535 of the Standard Specifications modified as follows:

00535.01 Required Submittals - Add the following to the end of the subsection:

Submit the anchor system manufacturer's installation instructions at least 21 Calendar Days before installation.

00535.40 Construction - Replace the paragraph that begins "Install the anchor system according ..." with the following paragraph:

Install the anchor system according to the manufacturer's installation instructions and to the embedment depths shown.

00535.40(a) General - Replace the paragraph that begins "Clean holes with a nonmetallic..." with the following paragraph:

Drill and clean holes according to the manufacturer's installation instructions. Protect drilled and cleaned holes from contamination. If a drilled hole becomes contaminated, as determined by the Engineer, re-clean the hole.

Add the following subsection:

00535.45(c) Anchor Test Summary - Test the installed anchors according to Table 00535-2 and Section 00165.

Willamette River: Stormwater Source Control Improvements Project

Table 00535-2

Str. #	Sheet #	Anchor System (Mech/Resin)	Anchor Type (bolt/rebar)	Anchor Size	Anchor Grade	Anchor Sustained Tension (yes/no)	Demo. Test (yes/no)	Prod. Test (yes/no)
02529	J301	Resin	Rebar	#6	Gr60	No	No	No
02529	J401	Resin	Rebar	#6	Gr60	No	No	No

Replace anchors that fail at no additional cost to the Agency.

SECTION 00540 - STRUCTURAL CONCRETE

Comply with Section 00540 of the Standard Specifications modified as follows:

Add the following subsection:

00540.10(a) Pigmented Sealer - Furnish a semi-opaque, or opaque, 100% acrylic or acrylic co polymer resin concrete sealer meeting the following requirements:

Property	Test Method	Requirement
UV Resistance	ASTM D5894	5000 hour exposure
Wind Driven Rain Resistance	ASTM D6904 reference FED TT-P-555B	No visible leaks
Permeance	ASTM E96/E96M or ASTM D1653	Minimum 10 perms
Fungal Growth	FED STD 141	No fungal growth after 21 Days

Provide colors and color samples as shown or directed. Furnish a sealer designated for vertical application when applied to walls. When applied to structures with soffits or overhangs, furnish a sealer that is designated for vertical and overhead application.

Furnish pigmented sealer color that conforms to the following colors:

Light Gray, conforming to SAE AMS-STD-595C color #36375.

Dark Gray, conforming to SAE AMS-STD-595C color #36176.

00540.17(c) Hardened Concrete – Replace the paragraph that begins “Cast and cure...” with the following paragraph:

Cast and cure test specimens according to AASHTO R 100 in 6 inch x 12 inch or 4 inch x 8 inch, single-use plastic molds and test at 28 Days according to AASHTO T 22.

Willamette River: Stormwater Source Control Improvements Project

00540.41(a) Submittal of Working Drawings and Calculations – Add the bullet to the bullet list after the paragraph that begins “Ensure the Falsework...”:

- Submittal letter from the vendor for the biopods and vortex structures that the cast in place structures shown will work for their systems, with details and process for integration, prior to casting the structures.

00540.50(d) Deck Sidewalk and Curb Ramp Finish - Replace this subsection, except for the subsection number and title, with the following:

Finish concrete surfaces on pedestrian facilities including but not limited to sidewalks, curb ramps and pedestrian structures that contain a Pedestrian Accessible Route according to 00759.50.

00540.52 Removal of Forms and Falsework, and Subsequent Loading – Replace the paragraph that begins “In determining when to remove ...” with the following paragraph:

In determining when to remove Forms and Falsework, and when to place subsequent loads, the Engineer will consider the Contractor's proposed schedule, the location and character of the Structure, the weather, and other conditions influencing the setting of the concrete. If appropriate, these operations will be controlled by compressive strength tests of cylinders cast by the Contractor and witnessed by the Engineer. Test the cylinders at a recognized testing laboratory at no additional cost to the Agency. Cast and cure cylinders according to AASHTO R 100 (field cured) which is equivalent to the most unfavorable field conditions for the portions of the concrete which the cylinders represent.

00540.53(d) Concrete Coating – Replace the paragraph that begins “Apply either a concrete paint...” with the following paragraph:

Apply either a concrete paint or a pigmented sealer as shown or specified. Where a Class 1 or Class 2 surface finish is shown, apply a concrete paint unless specified or shown otherwise.

00540.53(d)(2) Penetrating Concrete Stain or Sealer - Replace this subsection with the following subsection:

00540.53(d)(2) Pigmented Sealer - Prepare concrete surfaces and apply 2 coats of the pigmented sealer according to the manufacturer's recommendations. Follow all recommended curing schedules for newly placed concrete prior to application and for recoat or repair. Monitor and follow all environmental limitations as published by the manufacturer during application, and curing.

FALSEWORK DESIGN CHECKLIST

Instructions - This checklist was developed to facilitate the design, review, and erection of falsework to be used for Oregon Department of Transportation bridge construction projects. This checklist is intended to act as a reminder to design or check for specific important aspects of this construction. It is not a substitute for plan and/or design criteria or specification requirements.

The Checklist is to be completed and signed by the Falsework Design Engineer. Answer every question. Attach to the Checklist an explanation of any negative responses.

Submit the Checklist according to 00540.41(a).

A. Contract Plans, Specifications, Permits, Etc.	YES	NO	N/A
1. Are the falsework plans prepared, stamped and signed by an engineer registered to practice in Oregon?	_____	_____	_____
2. Have three complete sets (five if railroad approval is required) of the design calculations been included with the falsework drawings submittal?	_____	_____	_____
3. Are falsework plans in compliance with the requirements of the construction plans general notes?	_____	_____	_____
4. Are falsework plans in compliance with contract plan structural details?	_____	_____	_____
5. Are falsework plans in compliance with the requirements of the Oregon Standard Specifications for Construction, subsection 00150.35?	_____	_____	_____
6. Are all existing, adjusted or new utilities in proximity with the proposed falsework shown on the falsework plans and is protection of these utilities addressed?	_____	_____	_____
7. Are clearance requirements satisfied and shown on the falsework plans?	_____	_____	_____
8. For construction in or over navigable waters have all requirements for construction of falsework that are called for in the Coast Guard Permit been incorporated in the falsework design?	_____	_____	_____
9. Has possible damage from traffic been considered in the falsework design?	_____	_____	_____
10. Has damage from stream drift been considered in the falsework design?	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

11. Is the concrete placing sequence shown and is it consistent with the contract plans?

B. Foundation Requirements

YES NO N/A

1. Are driven falsework piling provided as called for on the contract plans?

- a. Is a minimum pile tip elevation or penetration indicated on the drawings?

- b. If timber falsework piles are specified, are the recommended order lengths sufficient to virtually eliminate the possibility of pile splices?

- c. Is a detailed static pile capacity analysis included in the calculations?

- d. If lateral loads are applied to the piling by equipment, dead loads, flowing water, or drift, is a detailed lateral load analysis included in the calculations?

- e. When piling are in an active waterway, have the potential effects of scour on axial and lateral pile support been addressed in the calculations?

- f. Does the proposed falsework pile hammer meet the minimum field energy requirements as listed in 00520.20(d)(2)?

- g. Will a driving criteria graph [FHWA Gates Equation, in 00520.42(b)] plotting blow count versus stroke for an acceptable pile hammer be provided for the project inspector?

2. Is falsework supported on spread footings or mud sills?

- a. Are the spread footing elevations shown on the drawings?

- b. Has a rational method for determining the ultimate bearing capacity of the foundation materials been presented and described in the calculations?

- c. Have the soil parameters used in calculating the ultimate bearing capacity been listed and confirmed by the designer?

Willamette River: Stormwater Source Control Improvements Project

d. Has an appropriate Factor of Safety been used for calculating the allowable bearing capacity of the foundation materials?	_____	_____	_____
e. Are spread footing settlement estimates included in the calculations?	_____	_____	_____
f. Have effective stresses been used in the calculations, when applicable?	_____	_____	_____
g. When spread footings are founded near the top of a slope or in a slope, have the ultimate bearing capacity calculations been modified accordingly?	_____	_____	_____
h. When spread footings may be subjected to flowing water, have the potential effects of scour on ultimate bearing capacity been addressed in the calculations?	_____	_____	_____
C. Loads	YES	NO	N/A
1. Are the magnitude and location of all loads, equipment and personnel that will be supported by the falsework shown and noted on the falsework plans?	_____	_____	_____
2. Has the mass of specific equipment units to be supported by the falsework been included in the calculations or on the falsework plans?	_____	_____	_____
3. Is the deck finishing machine supported in a manner that will not impose load on concrete forms except deck overhang brackets?	_____	_____	_____
4. Are design loads and material properties used to determine design stresses for each different falsework member shown on the falsework plans?	_____	_____	_____
5. Is the worst loading and member property condition, rather than the average condition, used to obtain design loads?	_____	_____	_____
6. Are deck forms for concrete box girders supported from the girder stem and not from the bottom slab?	_____	_____	_____
7. Are diaphragm loads or other concentrated loads included in the analysis of supporting beams?	_____	_____	_____
8. If sloping structural members exert horizontal forces on the falsework, is bracing or ties used to resist these loads?	_____	_____	_____
D. Allowable Stresses	YES	NO	N/A

Willamette River: Stormwater Source Control Improvements Project

1. Has the method used for falsework design of all members except for manufactured assemblies been noted in the design calculations?	_____	_____	_____
2. Are manufactured assemblies identified as to manufacturer, model, rated working capacity and ultimate capacity?	_____	_____	_____
3. Is the allowable stress and the calculated stress listed in the summary for each different falsework member, except for manufactured assemblies?	_____	_____	_____

E. Timber Falsework Construction

YES NO N/A

1. Are timber grades consistent with material to be delivered to the construction site, and noted on falsework drawings, and in accompanying calculations for all timber falsework material?	_____	_____	_____
2. If "rough" lumber is specified for falsework by the falsework designer are the actual lumber dimensions used in calculations shown?	_____	_____	_____
3. If plywood spans are governed by the strength of the plywood, are the allowable stress and the calculated stress shown on the submitted calculations?	_____	_____	_____
4. If plywood spans are governed by the allowable spacing of supporting joists, are the allowable and the proposed spacing shown on the falsework plans?	_____	_____	_____
5. Have timber stringers been checked for bending, shear, bearing stresses, and 1/240 of the span length deflection?	_____	_____	_____
6. Are joists identified as being continuous over 3 or more spans when they are not analyzed as simple spans?	_____	_____	_____
7. Have stringers and cap beams been checked for bearing stresses perpendicular to the grain as well as for bending and shear stresses?	_____	_____	_____
8. Have posts been checked as columns as well as for compression parallel to the grain?	_____	_____	_____

F. Steel Falsework Construction

YES NO N/A

1. Are steel structural shapes and plates identified by ASTM number on the falsework plans and in the calculations?	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

2. Have steel beams been checked for bending, shear, web crippling and buckling of the compression flange?	_____	_____	_____
3. Has horizontal plane bracing been shown where required to limit compression flange buckling?	_____	_____	_____
G. Deflections and Settlement	YES	NO	N/A
1. Is falsework deflection for concrete dead load shown on the plans for all falsework spans?	_____	_____	_____
2. Is falsework deflection from concrete dead load limited to 1/240 of the span length for all falsework spans?	_____	_____	_____
3. Do stringers supporting cast-in-place concrete compensate for estimated camber?	_____	_____	_____
4. For beam spans with cantilevers, has the upward deflection of the cantilevers due to load placed on the main spans been investigated?	_____	_____	_____
5. Are provisions shown for taking up falsework settlement?	_____	_____	_____
H. Compression Members, Connections and Bracing	YES	NO	N/A
1. Has general buckling been evaluated for all compression members?	_____	_____	_____
2. Has bracing been provided at all points of assumed support for compression members?	_____	_____	_____
3. Was bracing in each direction considered in establishing the effective length used to check post capacity?	_____	_____	_____
4. Is bracing strength and stiffness sufficient for the intended purpose?	_____	_____	_____
5. If temporary bracing is required during intermediate stages of falsework erection, is it shown on the falsework plans?	_____	_____	_____
6. Have all connections been designed and detailed?	_____	_____	_____
7. Are web stiffeners required on steel cap beams to resist eccentric loads?	_____	_____	_____
8. Are wedges required between longitudinal beams and cap beams to accommodate longitudinal slope or to reduce eccentric loading?	_____	_____	_____
9. Has the width to height ratio of wedge packs been verified to fall within the limits given in the special provisions?	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

10. If overhang brackets are attached to girder webs, has the need for temporary bracing to prevent longitudinal girder distortion been investigated?	_____	_____	_____
11. Have beams and stringers with height/width ratios greater than 2.5:1 been checked for stability?	_____	_____	_____
12. Have sloping falsework members that exert horizontal forces on the falsework been braced or tied to resist these loads?	_____	_____	_____
13. If beams supporting cast-in-place concrete have cantilever spans, have the falsework plans been noted to require the main spans be loaded before loading the cantilever spans?	_____	_____	_____
14. Have timber headers set on shoring towers been checked for eccentric loads, and for shear and bending stresses produced by the eccentricity?	_____	_____	_____
I. Highway and Railroad Traffic Openings (For falsework over or adjacent to highway or railroad traffic openings.)	YES	NO	N/A
1. Do falsework plans satisfy construction clearances shown on the contract plans?	_____	_____	_____
2. Are posts designed for 150% of the calculated vertical loading and increased or readjusted for loads caused by prestressing forces?	_____	_____	_____
3. Are mechanical connections 2,000 pounds minimum capacity shown at the bottom of posts to footing connections?	_____	_____	_____
4. Are mechanical connections 1,000 pounds minimum capacity shown at the top of the post to cap connections?	_____	_____	_____
5. Are beam tie downs 500 pounds minimum capacity shown for all beams?	_____	_____	_____
6. Are 5/8 inch or larger diameter bolts used at connections for timber bracing?	_____	_____	_____
7. Are temporary erection and removal bracing shown?	_____	_____	_____
J. Additional Requirements for Railroad Traffic Openings	YES	NO	N/A
1. Do falsework plans show collision posts as shown on the contract plans?	_____	_____	_____

Willamette River: Stormwater Source Control Improvements Project

2. Do posts adjacent to the openings have a minimum section modulus of?

a. steel - 9.5 cubic inches

b. timber - 250 cubic inches

3. Are soffit and deck overhang forming details shown?

4. Are falsework bents within 20 feet of centerline of the track sheathed solid between 3 feet and 17 feet above top of rail with 5/8 inch thick minimum plywood and properly blocked at the edges?

5. Is bracing on the bents within 20 feet of the centerline of the track adequate to resist the required assumed horizontal load or minimum 5,000 pounds, whichever is greater?

Designer's Signature

Date

SECTION 00563 – STAIRS, WALKWAY, & RAILING FOR DRAINAGE STRUCTURE ACCESS

Section 00563, which is not a Standard Specification, is included in this Project by Special Provision

Description

00563.00 Scope – This Work consists of the design, furnishing, fabrication, shop inspection, delivery, surface preparation, galvanizing or coating, erection, installation and final adjustment of stairs, walkways, platforms, guardrails, handrails, toe plates, gates, and associated access and safety appurtenances for drainage structure access, as shown and as specified.

00563.02 Codes and Standards – Comply with the following standards, and with any additional standards and notes shown on, where applicable:

- Standards of the American Society for Testing and Materials (ASTM).
- American Welding Society (AWS) D1.1.
- Oregon OSHA enforces the Worker Protection Standard. OAR 437 Division 3, Subdivision 1926.502 – Fall Protection Systems Criteria and Practices.
- Wherever reference is made to any of the standards mentioned above, the reference means the code, order, or standard in effect on the date of advertisement for this Project, unless specified otherwise on the Plans or Special Provisions.

00563.03 Working Drawings – Within 30 Calendar Days after execution of the Contract, submit copies of the calculations and shop drawings for review and approval.

- Submit all engineered details and drawings which are not prepared by the Agency, but are required in the Contract Documents, for review prior to fabrication. Stamp and submit designs, details, plans and calculations according to 00150.35.

Upon completion of installation, submit six copies of the as-built changes from the original Plans. Include a record of all modifications and substitutions, and identify all materials and equipment installed and in service. Provide sufficient detail and dimensions so maintenance personnel can locate, replace, or repair any component of the Project during routine or emergency maintenance by direct reference.

Materials

00563.10 Materials – Furnish structural steel, tubing, pipe, and miscellaneous metals meeting the requirements of ASTM A36 and Section 02530 of the Standard Specifications.

- Perform all structural steel welding according to AWS D1.1.
- Hot-dip galvanize structural steel, rail elements, posts, fittings, fasteners, and hardware after fabrication according to 02530.70. If galvanized portions of the rail are to be coated, coat according to Section 00594.

Furnish schedule 40 Post and Rail elements with a minimum yield strength of 50 KSI and

Willamette River: Stormwater Source Control Improvements Project

conforming to the requirements of AASHTO M 181, Type I (zinc-coated steel), Grade 1. Furnish all fittings and hardware that conform to the requirements of ASTM F626 or AASHTO M 232, whichever is applicable. All fittings to be pressed steel.

Furnish and install anchors, anchor rods/bolts, expansion or adhesive anchors, templates, and embedded items according to Section 00535.

Equipment

00563.20 Equipment – Use Equipment recommended by the product manufacturer and approved by the Engineer.

Labor

00563.30 Labor – Conform all designs and workmanship to the following standards where applicable:

Do not begin installations until all permits are obtained and copies are given to the Engineer.

Measurement

00563.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

The estimated quantities of structural steel are provided as follows:

Structure	Description	Quantity (Pound)
Stairs	Stairs at Fremont-East	2485
Bridge	Bridge at Fremont-East between concrete structures	1,087
Railing	Railing at Fremont-East, extending along the stairs and around the edges of the concrete structures and bridge	2410

Payment

00563.90 Payment – The accepted quantities of Work performed under this Section, including correction of damages, will be paid for at the Contract lump sum amount for the item “Stairs, Walkway & Railing for Drainage Structure Access”.

Payment will be in full for furnishing and installing 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 coating structural steel or connections to the concrete structures.

Willamette River: Stormwater Source Control Improvements Project

SECTION 00581 - BRIDGE DRAINAGE SYSTEMS

Comply with Section 00581 of the Standard Specifications.

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 3/4"-0 or 1"-0 size.

Add the following subsection:

00641.46 Small, Irregular Areas – Haul, place, shape and compact small irregular areas according to 00640.41 through 00640.43. A small or irregular area is outside of the Traveled Way and requires no more than 5 Tons of Aggregate Base or as otherwise approved by the Engineer.

In areas not accessible to the Equipment specified in 00641.24, use a weighted roller, vibratory plate compactor, tamping rammer compactor, or other approved Equipment suitable for the area as approved by the Engineer.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications modified as follows:

00730.11 Emulsified Asphalt – Replace the sentence that begins “Furnish CSS-1, CSS-1h...” with the following sentence:

Furnish CSS-1, CSS-1h, CMS-2, CMS-2S, CMS-2h, CRS-1, CRS-2, HFRS-2, HFMS-2 or HPTC as selected by the Contractor.

Replace the paragraph that begins “Dilution of the tack coat ...” with the following paragraph:

Except for HPTC, dilution of the tack coat material may be allowed to a maximum 1:1 ratio. Determine the proportion of water to be added to the Emulsified Asphalt. Do not dilute the Emulsified Asphalt until the Engineer approves the dilution ratio. Add the water to the Emulsified Asphalt and mix according to the asphalt Supplier. For HPTC, dilution of the tack coat material is allowed only by the asphalt Supplier at a ratio meeting the requirements of ODOT's publication *Standard Specifications for Asphalt Materials*.

00730.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for Emulsified Asphalt tack coat. Approximately __10__ Tons of Emulsified Asphalt in tack coat will be required on this Project.

SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE

Comply with Section 00745 of the Standard Specifications modified as follows:

00745.11(b) Asphalt Cement Additives - Delete the bullet that begins “Anti-stripping asphalt cement...”

00745.13 Job Mix Formula Requirements - Replace the paragraph that begins "Do not begin production of ACP for use..." with the following paragraph:

Do not begin production of ACP for use on the Project until the JMF is reviewed by the Engineer and written consent is provided to proceed. The JMF proposed for use on the Project will be evaluated based on the criteria identified in 00745.13(a) and 00745.13(b) and the latest *ODOT Contractor Mix Design Guidelines for Asphalt Concrete*. A new JMF is required if the asphalt cement source or grade, any additives, or the source of the Aggregate change during production. A change in the source of asphalt cement requires a new passing TSR.

00745.47(a)(2) Wearing Course - Replace this subsection, except for the subsection number and title, with the following:

Willamette River: Stormwater Source Control Improvements Project

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:

Sawcut 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.

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 top Base Course before opening to traffic. Traffic will be allowed on the top Base Course up to 14 Calendar Days.

Before beginning wearing Course paving operations, make repairs to the existing surface as directed. Payment for the repairs will be made according to 00195.20.

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.

SECTION 00748 - ASPHALT CONCRETE PAVEMENT REPAIR

Comply with Section 00748 of the Standard Specifications modified as follows:

00748.10 Materials – Replace the Material that begins "Aggregate Base..." with the following Material:

Aggregate Base 02630.10

SECTION 00754 - PLAIN CONCRETE PAVEMENT REPAIR

Section 00754, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00754.00 Scope - This Work consists of sawcutting and removing existing concrete Pavement and constructing new plain portland concrete Pavement repairs as shown and specified.

Willamette River: Stormwater Source Control Improvements Project

00754.01 Abbreviations:

SSD - Saturated Surface-Dry
SSFC - Stationary Side Form Construction

00754.02 Areas of Work - Locations of the areas for repair are as shown. Additional areas of repair may be required as determined by the Engineer.

00754.04 Prepaving Conference - Supervisory personnel of the Contractor and any Subcontractors who are to be involved in the concrete paving work shall meet with the Engineer, at a mutually agreed time, to discuss methods of accomplishing all phases of the paving work.

Materials

00754.10 Materials - Furnish Materials meeting the following requirements:

Resin Bonded Anchors.....	00535
Bar Reinforcement	02510
Concrete Materials	02001
Curing Materials.....	02050
Epoxy and Nonepoxy Bonding Agents	02070
Epoxy and Nonepoxy Grouts	02080
Galvanizing	02530.70
Portland Cement Concrete Repair Materials	02015
Poured Joint Fillers	02440.30
Preformed Expansion Joint Filler	02440.10

00754.11 Classes of Concrete - If the time frame designated for opening traffic is less than 72 hours after concrete placement, provide Class HES4000 - 1 1/2 concrete designed to attain a minimum average compressive strength of 3,000 psi prior to allowing traffic on the concrete. Otherwise furnish Class 4000 - 1 1/2 paving concrete.

00754.13 Concrete Mix Designs - Prepare and submit either new mix designs or current mix designs for each class of concrete required according to Section 02001.

00754.15 Quality Control - Provide quality control according to Section 00165, Section 02001, and the following:

(a) Concrete Mixture - If the results of any test are outside of the specification limits, stop the placement of the load. Correct the load or reject it and do not incorporate it into the work. Test subsequent loads before any further concrete placement. Correct the subsequent loads if any of the tests are still outside the specification limits. If the load cannot be corrected, reject it and do not incorporate it into the work. Testing of subsequent loads may return to the specified frequency when the test results from two consecutive loads are shown to meet the specification limits.

(b) Records - Deliver all batch tickets, water-cement ration calculations, and all other records required to the Engineer upon availability but no later than the morning of the next Day.

00754.16 Acceptance of Concrete:

(a) General - Acceptance of concrete will be based on the results of the Contractor's quality control testing according to Section 00165 and the MFTP.

(b) Aggregate - Acceptance will be based on the Contractor's quality control testing, if verified by the Agency according to Section 00165 and the MFTP.

(1) Aggregate Gradation - A stockpile contains specification aggregate gradation when the quality level for each sieve size calculated according to 00165.40 is equal to or greater than the quality level in Table 00165-2 for a PF of 1.00. Each required sample represents a subplot. When the quality level in Table 00165 2 yields a PF of less than 1.00 for any constituent, the material is non specification.

(2) Non-specification Aggregate Gradation - Stockpiled aggregates that contain non-specification aggregate gradation will be rejected by the Engineer unless non-specification material is removed from the stockpile. Do not add additional material to the stockpile until enough non-specification material is removed so that the quality level for each constituent is equal to or greater than the quality level in Table 00165 2 for a 1.00 PF.

(c) Plastic Concrete - Acceptance of the plastic concrete will be based on the tests performed by the Contractor's QCT, according to the tolerances and limits of Section 02001.

(d) Hardened Concrete - Cast and cure the test cylinders according to AASHTO R 100 in single use plastic molds and test at 28 Days according to AASHTO T 22.

(1) General - For all classes of concrete, acceptance of hardened concrete will be based on an analysis of compressive strength tests of cylinders cast by the QCT. Test cylinders at an ODOT certified laboratory.

(2) Actual Strength Test Value - The ASTV at 28 Days is the average compressive strength of the three cylinders tested.

(3) Sampling and Testing - Sample and test according to Section 00165 and the MFTP.

(4) Acceptance - The ASTV shall exceed the f'_c (specified strength) for the mix design. If a set of cylinders has an ASTV less than f'_c , the Engineer will review the results to determine if the concrete represented by the cylinders shall be removed. In any case, concrete that has an ASTV of less than 85 percent of the specified strength shall be removed unless otherwise authorized, in writing, by the Engineer. The cost of removal, replacement, and all related work shall be the Contractor's responsibility, subject, if the concrete is allowed to remain in place, to a price adjustment according to 00150.25.

If an ASTV falls below the f'_c , the Contractor may submit a written plan within 3 Days of the test for review by the Engineer. The plan shall outline a proposed alternate method of evaluating compressive strength. The plan shall provide evidence that a reasonable f'_{cr} (over design) was maintained and that there is credible evidence

Willamette River: Stormwater Source Control Improvements Project

(besides low strength) which warrants consideration of this option. If the Engineer determines that the compressive strength test results are suspect from definable external factors, the Engineer may allow an alternate method of acceptance.

00754.17 Spall Repair Material - For spall repair, furnish a PCC repair material meeting the requirements of Section 02015 except do not use products that contain magnesium phosphate. Use either "Rapid Setting" or "Very Rapid Setting" material.

00754.18 Bond Breaker - Bond breaker must be one of the following:

- Non-woven geotextile meeting the property requirements listed in Table 02320-4.
- Liquid curing compound evenly applied as a bond breaker in two applications, at a rate of 1 gallon per 130 to 165 square feet for each application, over the entire surface area.

Equipment

00754.20 Batch Plant - Provide batch plants according to 02001.40.

00754.21 Mixers - Provide mixers according to 02001.40.

For Projects requiring Class HES concrete, mobile mixers may be used if the mixers conform to the following:

- The mixer is self-propelled and carries sufficient unmixed dry bulk cement, Sand, Coarse Aggregate, admixtures, and water to produce a minimum of 6 cubic yards of concrete on site.
- The mixer provides positive measurement of cement being introduced into the mix by meter or counter.
- The mixer provides positive control of the flow of water into the mixing chamber. Water flow is readily adjustable to provide for minor variations in Aggregate moisture.
- Each mixer is calibrated to automatically proportion and blend all components according to the mix design on a continuous or intermittent basis as required by the placing operation.

Perform a calibration and yield test on each mixer prior to the first placement to accurately proportion the specified mix. Use a written calibration procedure from the mixer manufacturer, a procedure provided by the agency or other written procedure acceptable to the agency. The calibration process may be witnessed by the Engineer. Provide the Engineer with information about the scheduled date, time and place for the calibration. Perform a new calibration when the source of materials changes, when the mixer undergoes a major repair, or when requested by the Engineer.

00754.22 Hauling Equipment - Use truck mixers to transport concrete. Provide hauling Equipment conforming to AASHTO M 157.12 or AASHTO M 157.11.6.

00754.23 Paving Equipment - Provide paving Equipment conforming to the following:

- Able to vibrate, consolidate, and finish the slab to proper grade and Cross Section for the full width and depth of the concrete being placed.

Willamette River: Stormwater Source Control Improvements Project

- Capable of meeting the smoothness requirements.
- Approved by the Engineer.

00754.24 Concrete Saws - Provide power driven concrete saws for sawing joints, adequate in number of units and power to complete the sawing at the required rate. Also provide a standby saw on the Project Site.

00754.25 Smoothness Testing Equipment - Provide one 12-foot straightedge.

00754.26 Concrete Drills - Provide a drilling system consisting of drilling Equipment and drilling supports that:

- Is capable of drilling holes of the required diameter and depth.
- Can produce holes parallel to the Pavement surface and parallel to each other within a tolerance of $\pm 1/8$ inch.
- Can provide hole alignments at mid-depth of PCC Pavement.

Labor

00754.30 Quality Control Personnel - In addition to the certified technicians required in 02001.50 provide and designate an individual to be present at the placement site at all times during concrete placements and who is authorized and responsible for acceptance and rejection of materials.

Construction

00754.40 Weather Limitations - Coordinate all operations involved in repairing the Pavement so the Work will result in a finished Pavement conforming to the Specifications regardless of the daily or seasonal variations in weather, temperature and humidity under which the work is permitted to proceed.

Do not place PCC during periods of rain. Do not place PCC on frozen bases. Stop placement when descending air temperature falls below 35 °F. Do not begin placement until the air temperature is 35 °F in the shade and rising and is forecast to remain above 35 °F.

Protect the Pavement from weather damage. Protect unhardened PCC from precipitation with protective material. When PCC is placed during cold weather and the air temperature is forecast to drop below 33 °F, prevent the concrete from freezing for a minimum of 7 Days after placement.

Remove and replace weather-damaged Pavement at no additional cost to the Agency.

00754.41 Preparation:

(a) Removal of Existing Pavement - Remove full panels of existing concrete Pavement full depth as shown or directed. A vertical full depth sawcut is required along all longitudinal joints and at transverse locations. Cut concrete through tie bars and dowels. Remove concrete Pavement with Equipment approved by the Engineer in a manner that does not damage remaining Pavement or connections and allows for specified connections. Repair

Willamette River: Stormwater Source Control Improvements Project

damage to the existing Pavement due to the Contractor's operations, at no additional cost to the Agency, by extending the full depth repair to the satisfaction of the Engineer.

(b) Concrete Pavement Base Repair - Use material similar to existing base material or use commercial concrete. If concrete is used, place a bond breaker between the new concrete Base and the new concrete Pavement. If the repair is a nominal 2 inches deep or less, the repair may be accomplished by pouring the patch monolithically with the new concrete Pavement, without a bond breaker. PCC repair material may be substituted for Commercial Grade Concrete.

Compact unbound Granular Materials used in the Base repair as directed. Allow concrete or substitutes to cure sufficiently to support necessary construction activities without yielding prior to continuing those activities. No further testing of Pavement Base material is required.

(c) Spall Repair Area - Sawcut the existing concrete Pavement to a nominal depth of 2 inches. Remove existing concrete within the perimeter of the sawcut to a depth of 2.0 inches, or to sound concrete as determined by the Engineer. If jack hammers are used for removing Pavement, they shall not weigh more than 30 pounds, and chipping hammers shall not weigh more than 15 pounds. Do not operate hammers at an angle greater than 45 degrees measured from the surface of the Pavement. Any existing Pavement that is to remain that has been damaged shall be repaired at no additional cost to the Agency.

(d) Preparation of Existing Concrete - Before placement of concrete, blow clean the existing concrete surfaces within the pour area with compressed air and dampen the area to be paved with a light application of water. If the area becomes dry before new concrete is placed, blow clean and dampen the area again.

00754.43 Placing Dowel Bars and Tie Bars:

(a) Dowel Bars - Provide smooth, round, epoxy coated dowel bars. Coat with plastic, heavy oil, or other approved material that will neither bond with nor be harmful to the PCC. Use a framework to place dowels that is continuous across the entire lane width, holds the dowels parallel with each other, holds the dowels parallel with the surface of the Pavement, and holds the dowels parallel to the Roadway centerline. For dowels placed across an expansion joint, use a dowel bar basket or other system of support that leaves no permanent incompressible members in place within the joint. Maximum alignment tolerance shall be 5 degrees or 3/16 inch in the length of the dowel. Place dowels within 3/8 inch of the center of the slab vertically.

Place dowel bars for joint contact at existing concrete Pavement surfaces by drilling the existing concrete section and then inserting the dowel bars and grouting them in place. Drill the holes large and deep enough to insert the dowel bars with adequate epoxy or non-epoxy grout. Adjust hole locations to avoid damaging any existing reinforcement when drilling the holes. Blow the dowel bar holes clean with compressed air before grouting. Center the bar in the hole for the full length of embedment before grouting. Pump the grout into the hole around the bar so the back of the hole will be filled first. Do not allow blocking or shimming to impede the flow of the grout into the hole. If dams are needed, place them at the front of the holes to confine the grout. Place the dams to permit the escape of air without leaking grout. Do not remove dams until grout has cured in the hole.

Willamette River: Stormwater Source Control Improvements Project

(b) Tie Bars - Provide epoxy coated tie bars and place them for contact-type longitudinal joints by one of the following methods:

- By drilling the hardened concrete section and then inserting the tie bars as resin-bonded anchors in accordance with construction and testing procedures in Section 00535.
- By inserting the tie bars into the plastic slipformed concrete before vibrating and finishing the concrete. The tie bars may be bent before insertion. Replace any loose tie bars by drilling and grouting, as described above, at no additional cost to the Agency.
- By using threaded mechanical splice couplers from the QPL. Submit splices for approval before using. Rebar splices shall be:
- Accompanied by manufacturer's quality compliance certificate according to 00165.35.
- Installed according to manufacturer's recommendations.

00754.44 Handling, Measuring, and Batching Materials - The plant site, layout, Equipment and provisions for transporting material shall be adequate to assure a continuous supply of Material to the Project Site.

(a) Aggregates - Stockpile and remove the aggregate from stockpiles in a manner that holds segregation to a minimum.

Do not use Aggregates that become segregated, mixed with earth or foreign material, or contain lumps of hardened material. Thaw frozen Aggregates or Aggregates containing frozen lumps before use.

(b) Batching - Separately weigh into the hoppers the Fine Aggregate, each separated size of Coarse Aggregate, cement and fly ash in the respective proportions set by the mix design. Provide a device to indicate positively that the full amount of cement and fly ash was discharged into the batch box or container. Measure water and admixtures either by volume or by weight.

Conduct batching so that the individual weights of each Material required are within the following tolerances:

Aggregates	± 2%
Cement	- 1% to + 4%
Fly Ash	- 1% to + 4%

00754.45 Mixing Concrete:

(a) General - Mix the concrete in a batch plant mixer, truck mixer, or mobile mixer and the following:

- Charge the batch into the receiving drum so some water enters before the solids and continues to flow uniformly for a portion of the mixing time.
- Keep the skip and the throats of drums free of accumulations.
- Mix the concrete only in the quantity required for immediate use.

Willamette River: Stormwater Source Control Improvements Project

- Do not intermix batches.
- Do not retemper concrete by adding water or by other means.

(b) Batch Plant Mixers - The mixing time for batch plant mixers shall be at least 60 seconds unless the Contractor's CCT documents meeting "Concrete Uniformity", according to AASHTO M 157, Annex A1 for concrete produced at the batch plant mixer set up for this Project, to the satisfaction of the Engineer. The mixing time may then be reduced to the extent the test permits but not less than 45 seconds.

(c) Truck Mixers - The mixing time for truck mixers shall be 70 to 100 revolutions at a mixing speed recommended by the manufacturer of the truck mixer.

00754.46 Placing Concrete:

(a) General - Perform the strike-off, consolidation, final floating and surface finishing according to the following:

- Vibrate throughout the concrete until it is uniformly consolidated. Do not segregate.
- Strike off the concrete with templates or screeds designed and manipulated to shape the concrete to the specified Cross Section between the forms, carrying a slight excess of concrete in front of the leading edge of templates or screeds at all times.
- Following the vibrating and strike-off operations, float the concrete. Include transverse floating or other smoothing and finishing actions as necessary. Check and correct the surface according to 00754.49. Keep the surface free from laitance, soupy mortar, marks or irregularities.
- Finish the surface according to 00754.49.

Correct all damage to the Subgrade or Base due to the Contractor's operations, at no additional cost to the Agency, to the satisfaction of the Engineer.

(b) One Lift - Place the concrete in final position in one Lift so a minimum of finishing will be necessary to provide a dense, homogenous Pavement conforming to true grades and Cross Sections.

(c) Provision for Joints and Other Devices - While placing concrete, make provision for constructing joints, placing dowels, tie bars, and other devices, as shown and directed, and as provided in 00754.43 and 00754.48.

(d) Reject Concrete Material - Reject concrete if it:

- Is not in place within 90 minutes after being mixed.
- Has begun to take an initial set before placement.

(e) Hand Operated Equipment - Use shovels to hand spread and distribute the concrete. Do not use rakes. Do not foul the concrete with foreign matter, or disturb joint devices during such operations. Furnish hand operated mechanical vibrators satisfactory to the Engineer. Use the vibrators to consolidate the concrete Pavement at least 6 feet each side of construction and expansion joints and all other areas as directed.

Willamette River: Stormwater Source Control Improvements Project

(f) **Illumination** - During hours of darkness, adequately illuminate work areas at no additional cost to the Agency.

00754.48 Joints:

(a) **General** - Construct joints of the kinds shown and where shown or directed. Joint types in the concrete Pavement will be contraction, construction or expansion. They shall be transverse or longitudinal, as shown or directed. Extend all joints and joint filler to Pavement edges or to each other.

Joints shall not vary from specified or indicated line by more than 1/4 inch. The tops of joint filler, when required, shall be slightly, but not more than 1/8 inch, below and paralleling finished Pavement grade and Cross Section. Protect top edges of filler from damage by paving operations.

Construct all joints which contain preformed filler before the final floating and surface finishing of the concrete, unless otherwise directed.

(b) **Longitudinal Joints** - If the Contractor elects to pour the entire width of Pavement at one time, construct the longitudinal joint as shown. Longitudinal joints shall be the contact type or weakened plane type as shown:

(1) **Longitudinal Contact Joints** - Construct longitudinal contact joints when concrete is placed against hardened concrete regardless of age, between strips of Pavement or between a strip of Pavement and a concrete gutter.

(2) **Longitudinal Weakened Plane Joints** - Construct weakened plane joints by sawing to the depths and maximum width shown. Saw longitudinal weakened plane joints at the earliest possible time following placement of the concrete to prevent uncontrolled cracking without damaging the Pavement or joint. Saws may be single or tandem, as the Contractor elects, and be controlled by guides to true line. Restore curing agents broken or damaged by the sawing operations.

(c) **Construction Joints** - Construct construction joints when there is an interruption of 30 minutes in the concrete placing operations.

The new concrete placed against the joint shall conform closely to the proportions and consistency of the previously placed concrete except vibrate and consolidate it to a greater degree and with more care than normal. Unless otherwise shown, do not construct construction joints within 10 feet of a transverse expansion or contraction joint. If sufficient concrete has not been mixed at the time of interruption to form a slab at least 10 feet long, remove the concrete back to the last joint and dispose of as directed.

(d) **Transverse Contraction Joints** - Form transverse contraction joints by sawing to the required dimensions shown on the Plans. Saw transverse contraction joints at the earliest possible time following placement of the concrete to prevent uncontrolled cracking without damaging the Pavement or joint. Repair any damage to the curing material during the sawing operations immediately after the sawing is completed.

(e) **Sealing Sawed Joints** - Fill sawed longitudinal weakened plane joints and transverse contraction joints with poured joint filler. Thoroughly clean joints at the time of sealing.

Willamette River: Stormwater Source Control Improvements Project

Ensure the curing period for joints is complete before allowing construction Equipment and vehicles on the Pavement.

00754.49 Surface Finishing - After the concrete has been given a preliminary finish, check the surface of the fresh concrete in the longitudinal and transverse direction with a 12-foot straightedge. Correct surface deviations more than allowed by 00754.56(a). Lap each successive check with the previous check path by at least half the length of the straightedge.

(a) Textured Finish - Upon completion of the machine floating, straightedge testing, edge tooling and, if necessary, hand floating, and before initial set of the surface concrete, give the surface of the concrete a textured finish.

Accomplish the textured finish with a steel-tine tool with 1/8 inch tines that will mark the finished concrete to a depth of 1/8 inch to 3/16 inch. Randomly space the markings from 1/2 inch to 1 1/4 inches as approved. Avoid overlaps of the texturing. Construct markings either perpendicular or parallel to the Roadway centerline to match the adjacent concrete Pavement textured finish.

With approval of the Engineer, an astroturf or broom finish may be used in place of tining on roads to receive an overlay.

(b) Transverse Profile - Match the surface of the fresh concrete in the transverse direction to the surface of the existing concrete at the ends of the patch. Taper into existing Pavement ruts in the first and last 10 to 20 feet to provide a transverse surface finish for the remainder of the patch meeting the requirements of this section.

00754.52 Edge Tooling and Filling - Tool edges at longitudinal joints and construction joints of new Pavement and clean joints of previously placed concrete to remove laitance and mortar resulting from finishing operations, and to provide clean rounded edges without ridges on the surface. Perform tooling of edges at construction joints so that no more than a 1/8 inch radius is produced.

Fill all areas of minor honeycomb or other minor defect in composition of the concrete along the exposed sides of concrete with a stiff mortar of cement and Fine Aggregate, and apply to the moistened concrete to the satisfaction of the Engineer. Remove and replace areas showing serious defects in composition of the concrete with specified quality concrete for full panel width between longitudinal joints or edges, and for a length not less than a full panel length. Low spots exceeding 1/4 inch in depth, if in hardened concrete, may be filled with an epoxy grout, provided the filling is neat and blends inconspicuously with adjoining concrete. Prepare the area according to the grout manufacturer's recommendations.

00754.53 Curing Concrete - Immediately after the final floating, surface finishing and edging have been completed, and while the concrete surface is still moist, cover and cure the entire exposed surface of the newly placed concrete for at least 72 hours. If the Specifications require opening the lanes to traffic in less than 72 hours, remove curing covers just prior to opening to traffic. Use one of the following provisions:

(a) Liquid Membrane-Forming Compounds - Apply liquid membrane-forming compound uniformly to the concrete by pressure-spray methods at a rate of at least 1 gallon per 150 square feet. Mix the liquid membrane-forming compound thoroughly

Willamette River: Stormwater Source Control Improvements Project

before and during use. Liquid membrane-forming compounds are not allowed when an asphalt concrete layer will be placed on the new concrete.

(b) Other Coverings - Apply clear or white polyethylene film or insulated curing blankets as a waterproof and moisture-proof covering. Place the film or blankets beyond the edge of the repaired areas and weight to hold in position. Do not mar the concrete with the covering.

00754.54 Longitudinal Pavement Cracks - Remove and replace all patches that show longitudinal cracking or do not bond at no additional cost to the Agency.

00754.55 Spall Repair - In spalled areas, remove the existing Pavement according to 00754.41(c). The repair limits shall extend beyond the spalled area a minimum of 3.0 inches. Use only rectangular or square repair shapes. Prepare the repair area according to 00754.41(d) and the PCC repair material manufacturer's recommendations, then apply a coat of epoxy grout or bonding agent to all vertical surfaces and place PCC repair material before grout dries. When a spall repair is placed directly against an adjacent longitudinal joint, place a bond breaker between the existing concrete and the area to be patched. Mix and place PCC repair material according to the manufacturer's recommendation. Use shovels to hand spread and distribute the concrete. Do not use rakes. Do not contaminate the concrete with foreign matter. Cure PCC repair material according to the manufacturer's recommendation.

00754.56 Surface Tolerance, Testing, and Correction - The surface of finished Pavement shall not deviate from longitudinal and transverse smoothness more than the limits identified below. Perform straightedge testing under the supervision of the Engineer as soon as the hardness of the concrete permits.

(a) Straightedge Testing and Tolerance - Test Pavement surface longitudinal and transverse smoothness with a 12-foot straightedge. The extent of the testing will be determined by the Engineer. The Pavement surface shall not deviate from the straightedge at any point by more than 1/8 inch, except the transverse surface at the patch ends may vary as required in 00754.49(b).

(b) Correcting Deficiencies - Correct all segments that exceed the requirements of 00754.56(a) by one of the following methods:

(1) Remove the non-specification concrete Pavement as determined by the Engineer and replace with Specification concrete Pavement.

(2) Profile with an abrasive grinder equipped with a cutting head comprised of multiple diamond blades.

Retest according to 00754.56(a). Perform all corrective Work at no additional cost to the Agency, including traffic control.

Maintenance

00754.60 Protection of Concrete - Repair or replace any part of the Pavement damaged by traffic or damaged from any other causes before its official acceptance, according

Willamette River: Stormwater Source Control Improvements Project

to 00170.80. Do not operate construction Equipment or allow Public Traffic on newly placed concrete until all of the following requirements are met:

- (a) The Contractor complies with 00150.60.
- (b) The concrete attains a compressive strength of at least 3,000 psi as determined by testing at least two cylinders cured according to AASHTO R 100 (field cure) and tested according to AASHTO T 22.
- (c) Approval is given by the Engineer before opening to traffic.
- (d) The surface of the concrete is protected from scarring or abrasion and kept free of stones, loose mortar and other matter apt to be deleterious to the concrete in the paths of Equipment.

00754.61 Protection of Shoulders - A portion of the shoulder adjacent to the proposed patch, may be removed as necessary to ensure proper forming at the edge or the patch. Prior to opening to traffic, the disturbed shoulder area shall be replaced with material types and thickness similar to the existing shoulder, compacted, and restored to the existing line and grade. Include all cost of the shoulder replacement in the price bid for Concrete Pavement Repair.

Measurement

00754.80 Measurement - The quantities of Work performed under this Section will be measured according to the following:

(a) **Concrete Pavement Repair** - Concrete Pavement repair will be measured on the area basis and will be determined by measuring the width and length of each separately constructed Panel of Pavement. The width is the measured edge-to-edge width on the surface of the Pavement, perpendicular to centerline. The length is the measurement from end to end of Pavement along the center line of the Roadway, including the length of the bar lap splices.

The measurement of extra thickness of Pavement, as shown or as ordered, will be determined by conversion on a proportionate volume basis to an equivalent number of square yards of specified thickness Pavement.

(b) **Spall Repair** - Spall repair will be measured on the area basis and will be determined by measuring the width and length of each separate repair. The width is the measured edge-to-edge width on the surface of the Pavement. The length is the measurement from end-to-end of Pavement along the center line of the Roadway.

The measurement of extra thickness beyond the depth shown in the Plans or as ordered by the Engineer, will be determined by conversion on a proportionate volume basis to an equivalent number of square yards of the specified thickness.

(c) **Concrete Pavement Base Repair** - Concrete Pavement base repair will be measured on the area basis and will be determined by measuring the width and length of each separate repair. The width is the measured edge-to-edge width on the surface of the

Willamette River: Stormwater Source Control Improvements Project

Pavement, perpendicular to centerline. The length is the measurement from end-to-end of the repair along the center line of the Roadway.

Payment

00754.90 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) Plain Concrete Pavement Repair.....	Square Yard
(b) Concrete Pavement Spall Repair.....	Square Yard
(c) Concrete Pavement Base Repair	Square Yard

Item (a) includes removing concrete Pavement, preparing the Base, and preparing the cut edges. Item (a) also includes Base repair, Leveling, or backfilling, up to 2 inches deep.

Item (b) includes removing concrete.

Item (c) includes Base repair, Leveling, and related backfilling of Subbases or Subgrade greater than 2 inches.

Sawcutting will be paid for according to Section 00310.

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 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications modified as follows:

00759.02 Definitions – Delete this subsection.

00759.11 Aggregate Base - Replace this subsection, except for the subsection number and title, with the following:

Furnish Aggregate Base Materials for Base, foundation courses, Leveling courses, or bedding meeting the requirements of 00640.10 or dense graded Base Aggregate in 00641.10 as appropriate and included in the Special Provisions.

00759.12 Curb Ramp Treatment - Delete this subsection.

00759.22(a) Qualified Smart Levels – Replace this subsection, except for the subsection number and title, with the following:

Slopes will be measured with the use of a 24 inch SmartTool level model 92379 or model 92500, and a 6 inch SmartTool level model 92346 or 92510.

00759.42 Foundations - Replace this subsection with the following subsection:

Willamette River: Stormwater Source Control Improvements Project

00759.42 Aggregate Base - Before placing concrete, prepare underlying Aggregate Base surfaces according to Section 00641.

00759.50(a) General - Replace the paragraph that begins "Install truncated domes..." with the following paragraph:

Construct tactile surface indicators according to Section 00765 to the slopes, lines, grades, and dimensions as shown or established.

00759.51 Curing - Add the following paragraph to the end of this subsection:

Concrete Structures may be opened to Public Traffic before 7 Calendar Days if the concrete has reached a minimum compressive strength of 2,000 psi as verified by the rebound number determined according to ASTM C805. Test at locations as directed.

00759.80 Measurement - Replace the bullet that begins "**Each Basis**..." with the following bullet:

- **Each Basis** - Measurement will be by actual count.

00759.90 Payment - Delete Pay Items (k), (l) and (m) from the Pay Item list.

Delete the paragraph that begins "Item (k) includes..."

Delete the paragraph that begins "Item (l) includes..."

Delete the paragraph that begins "Item (m) includes..."

Add the following paragraph before the paragraph that begins "No separate or additional payment...":

Tactile surface indicators will be paid for according to Section 00765.

In the paragraph that begins "No separate or additional payment...", add the following bullet to the end of the bullet list:

- The additional Work required to construct a curb ramp or replace an existing curb ramp, including any corrective action.

SECTION 00760 - UNIT PAVERS

Section 00760, which is not a Standard Specification, is included in this Project by Special Provision.

Description

Willamette River: Stormwater Source Control Improvements Project

00760.00 Scope - This Work consists of furnishing and installing masonry unit pavers at locations shown or directed.

Materials

00760.10 Unit Paving Material - Furnish pavers and related Material meeting the following requirements:

- **Paving Unit Type** - Pervious pavers – provide paver for approval before use. Pavers should allow ground cover to grow with a minimum 40% permeable area.
- **Unit Color** - Provide sample color for approval
- **Unit Size** - Provide sample for approval _
- **Unit Strength** - 200 psi with a maximum of 5 percent absorption (ASTM C 936)
- **Joint Sand** - Fine PCC Aggregate conforming to 02690.30(g)
- **Leveling Bed** - Fine PCC Aggregate conforming to 02690.30(g)
- **Aggregate Base** - 8" Aggregate conforming to 02690.30
- **Weed Control** - Pre-emergent herbicide conforming to 01040.21

Submit proposed equivalent products to the Engineer for consideration. See 00120.16 and 00180.31.

Construction

00760.40 General - Install pavers according to the manufacturer's instructions.

00760.41 Aggregate Base - Place and compact Aggregate to 95 percent density.

00760.42 Sand Base - Place a minimum depth 1 inch leveling bed. Screed to grade and saturate with water to ensure a firm and smooth grade.

00760.43 Weed Control - Apply granular pre-emergent herbicide over the prepared leveling bed according to the manufacturer's instructions.

00760.44 Unit Pavers - Lay out rows so they are straight and parallel to the surrounding lines. Cut pavers with a masonry saw where necessary to fit pattern to edges.

00760.45 Joint Sand and Compaction - After placing pavers, sweep joint sand into the joints. Use a vibrating mechanical tamper to compact.

00760.46 Surface Tolerance - Do not deviate the longitudinal and transverse surface grades by more than 1/4 inch in 12 feet.

00760.47 Clean Up - Remove excess Sand and broken paving material from the site when complete.

Measurement

00760.80 Measurement - The quantities of unit pavers will be measured on the area basis.

Payment

00760.90 Payment - The accepted quantities of unit pavers will be paid for at the Contract unit price, per square foot for the item "Unit Pavers".

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 Base preparation.

SECTION 00765 - TACTILE SURFACE INDICATORS

Section 00765, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00765.00 Scope - This Work consists of furnishing, placing, and installation of tactile surface indicators , systems, or devices on pedestrian facilities according to the slopes, lines, grades, and dimensions shown or established in Section 00749 or Section 00759 as applicable.

Material

00765.10 Tactile Surface Treatment - Furnish truncated dome detectable warning surfaces for curb ramps, shared use paths, transit stops, rail crossings and accessible route islands as shown from the QPL. Furnish truncated dome detectable warning surfaces that are safety yellow in color on or along State Highways.

For temporary installations furnish approved securement mechanisms or surface adhesives to withstand the duration of the temporary installation.

00765.11 Detectable Guide Strips - Furnish surface applied or liquid applied detectable guide strips. Use only adhesives recommended or supplied by the manufacturer. Furnish slip-resistant detectable guide strips from the following list of pre-approved products:

Manufacturer

Vanguard ADA Systems
18122 SR9 Suite F
Snohomish, WA 98296
Phone: (360) 668-5700

Material

Liquid Applied GuideStrip / TWSI
Color: Blue

00765.12 Tactile Warning Devices – Furnish tactile warning devices as shown or specified.

Willamette River: Stormwater Source Control Improvements Project

Labor

00765.30 Personnel Qualifications - Use supervisory personnel who have an active ODOT ADA Certification for Contractors to directly supervise the curb ramp treatment Work. Provide onsite supervisory personnel that are ODOT ADA Certified during the construction and installation of the curb ramp treatment.

Construction

00765.40 Substrate Preparation - Bring areas where the tactile surface indicators are to be installed to the established slopes, lines, grades and dimensions, and make free of all Unsuitable Material or voids before installing, applying adhesives, or securing to the underlying substrate. Clean existing surfaces of debris and voids prior to installation.

00765.41 General - During installation do not allow the top and face of the tactile surface indicators to have lips, humps, sags or other irregularities.

Install manufacturer securement mechanism, or adhesives recommended or supplied by the manufacturer for permanent installations.

(a) Truncated Dome Warning Surface - Install detectable truncated dome warning surfaces as shown. Place according to the manufacturer's recommendations. Install abutting truncated dome panels with no more than 1/4 inch spacing. Install anchors along cut edges of truncated dome panels according to manufacturer's recommendations. Seal all cut tiles according to the manufacture instructions or as directed with a flush edge free from vertical discontinuities.

Install surface applied detectable truncated dome warning surfaces on clean and dry concrete surfaces.

After placement of wet set detectable truncated dome warning surface panel, remove uncured concrete from the surface of the panel.

(b) Detectable Guide Strip - Install detectable guide strips as shown. Place according to the manufacturer's recommendation. Place abutting panels within 1/4-inch of each other and install anchors, as specified by manufacturers, along cut edge. Miter adjacent panels at locations where detectable guide strips change direction. Install detectable guide strips on clean and dry concrete surfaces.

(c) Tactile Warning Device - Install tactile warning devices as shown. Place according to the manufacturer's recommendation.

00765.42 Liquid-Applied - Protect liquid applied detectable truncated dome warning surfaces and detectable guide strips after placing and finishing according to manufacturer's instructions.

Measurement

00765.80 Measurement - The quantities of Work performed under this Section will be measured according to the following:

Willamette River: Stormwater Source Control Improvements Project

(a) Area Basis - Measurement will be the finished surface, limited to the Neat Lines shown or directed.

(b) Length Basis - Measurement will be along the centerline of the device from end to end as shown or directed.

Payment

00765.90 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:

- (a) Truncated Domes on New Surfaces, _____ Square Foot
- (b) Truncated Domes on Existing Surfaces, _____ Square Foot
- (c) Detectable Guide Strip, Blue..... Square Foot
- (d) Tactile Warning Device Foot

In items (a) and (b), the type of installation “curb ramp”, “rail crossing” or “transit stop” will be inserted in the blank.

Item (a) includes installation of truncated domes on a new concrete or asphalt surface. Installation of truncated domes is not considered complete until Work that they are a part of is also complete and accepted according to Section 00749 or Section 00759, as applicable.

Item (b) includes installation of truncated domes on an existing concrete or asphalt surface.

Item (c) includes installation of blue detectable guide strips on concrete or asphalt surface. Installation of detectable guide strips is not considered complete until Work that they are a part of is also complete and accepted according to Section 00749 or Section 00759, as applicable.

Item (d) includes installation of tactile warning device on concrete or asphalt surface.

Payment will be payment in full for furnishing and installation of 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 any repair or replacement of tactile surface indicators associated with repair or replacement Work in other Sections.

Willamette River: Stormwater Source Control Improvements Project

SECTION 00820 - CONCRETE BARRIER

Comply with Section 00820 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

Site ID	HWY/MP	DFI Number	Type S2 Marker Begin
OF16-2	2.33	D00327	X
OF16-2	2.32	D00328	X
OF16-3	2.21	D00329	X
OF18-1	3.46	D00331	X
OF-18-2	3.00	D00430	X
OF-19-2	3.88	D00333	X
OF-22C	6.41	D00334	X
WR-206	0.33	D00335	X
WR-206	0.33	D00336	X
WR-208/211	7.03	D00337	X
OF-22D	7.29	D00338	X
OF-22D	7.29	D00405	X
WR-126	8.26	D00406	X
WR-204	8.65	D00407	X
WR-204	8.64	D00408	X
WR-79	9.06	D00409	X
WR-510	US30 BYPASS/0.61	D00428	X
OF-52	US30 BYPASS/1.23	D00429	X
WR-307	I-405/3.03	D00431	X
WR-307	I-405/3.02	D00514	X
WR-307	I-405/3.02	D00515	X
FB-W	US30/3.20	D00432	X
FB-W	US30/3.20	D00507	X
FB-E	US30/3.43	D00508	X
FB-E	US30/3.43	D00509	X

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications modified as follows:

00850.44 Alignment Layout – Replace the paragraph that begins "Place control points for lines every ..." with the following paragraph:

Place control points for lines every 40 feet on tangent and every 25 feet on a curve. Place layout transition details at the start of pavement markings, where pavement markings transition into a different pavement marking, and at the end of pavement markings. Using these control points and layout transition details, layout a continuous narrow guideline for each line, along one edge of, or uniformly offset from the intended permanent line location. Do not proceed with installation until the guidelines are approved by the Engineer.

00850.47(c) Retroreflectivity - Replace the sentence that begins "Except for paint applications..." with the following sentence:

Except for paint and colored lane marking applications, evaluate longitudinal and transverse marking retroreflectivity according to ODOT TM 777.

SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications modified as follows:

00855.90 Payment – Replace this subsection, except for the subsection number and title, with the following:

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) Mono-Directional _____ Type I Markers	Each
(b) Mono-Directional _____ Type IAR Markers	Each
(c) Bi-Directional _____ Type I Markers	Each
(d) Bi-Directional _____ Type IAR Markers	Each
(e) _____ Type II Markers	Each
(f) Mono-Directional _____ Type IAR Markers, Recessed	Each
(g) Bi-Directional _____ Type IAR Markers, Recessed	Each

In items (a), (b), (c), (d), (e), (f) and (g) the color of marker 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.

No separate or additional payment will be made for constructing Pavement grooves, Pavement preparation, adhesive, or clean-up.

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.

SECTION 00868 - COLORED LANE MARKINGS

Comply with Section 00868, of the Standard Specifications.

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 00920 - SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications modified as follows:

Willamette River: Stormwater Source Control Improvements Project

00920.10 Materials - Replace this subsection, except subsection number and title, with the following:

Furnish Materials for constructing sign support footings meeting the following requirements:

Anchor Bolts	02560.30
Backfill, unless otherwise directed	00510.10 or 00510.11
Commercial Grade Concrete	00440
Reinforcement	02510
Structural Concrete	00540

Furnish Commercial Grade Concrete for minor sign support foundations. Furnish structural concrete for major sign support foundations.

00920.41 Concrete - Replace the paragraph beginning “Construct concrete sign foundations...” with the following:

Construct concrete minor sign support foundations according to Section 00440 and the applicable portions of 00540.48(a). Construct major sign support footings according to Section 00540.

00920.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of concrete for minor sign supports are:

Support Type	Quantity
Pipe Sign Supports	0.02 cu. yd.

SECTION 00930 - METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications modified as follows:

00930.01 Definitions - Add the following definition at the end of this subsection:

Street Name Sign Mount - This group includes plates, brackets, and fasteners necessary to install a street name sign on a sign support.

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)
Minor Sign Supports	
Pipe Sign Supports	53

Willamette River: Stormwater Source Control Improvements Project

00930.90 Payment –

Replace the paragraph that begins "No separate or additional payment will..." with the following paragraph:

No separate or additional payment will be made for:

- Coating steel sign supports
- Route marker frames
- Wind bracing
- Pole clamps
- Stainless steel clamps
- Mast Arm Street Name Sign Mounts
- Street Name Sign Mounts
- Special sign brackets.

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:

Trimming and removal of branches, vegetation, or other materials will be paid for according to 00320.90.

No separate or additional payment will be made for anti-graffiti coating of signs.

SECTION 00950 - REMOVAL OF ELECTRICAL SYSTEMS

Comply with Section 00950 of the Standard Specifications modified as follows:

00950.41 Removal and Abandonment - Replace the paragraph that begins with "remove the top of the foundation, anchor..." with the following paragraph:

Remove the full-depth of the foundation, anchor bolts, and conduits. Backfill resulting holes with material equivalent to the surrounding material. Finish and blend the surface area to the adjacent surface area.

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(f) Conduit on Structures - Install conduit according to 00583.40.

Add the following subsection:

00960.45 Grounding and Bonding: - Replace this subsection, except for the subsection number and title, with the following:

- (a) **General** - Make all ground rods, metal conduit, metal poles, grounding wire, metallic junction boxes, metallic junction box covers, and cabinets mechanically and

Willamette River: Stormwater Source Control Improvements Project

electrically secure to form a continuous, effectively grounded and bonded system. Bond together all rigid steel conduit ends that terminate at the same location. Bond the copper grounding electrode conductor between the metal poles to the grounding rod at each foundation.

- (b) **Grounding/Bonding Wire** - Use a no. 6 AWG stranded grounding/bonding wire in conduit or as shown. Use an un-insulated no. 4 AWG stranded copper grounding/bonding wire outside of conduit or as shown.
- (c) **Ground Rods** - Ground each above ground metallic structure with a separate ground rod. Install a separate ground rod for each electrical system that originates from a separate power source. Construct accessible grounding conditions with ground rods according to 02920.27.
 - (1) **Located in Junction Box** - Install ground rod in a junction box if shown. Drive ground rods into the ground with the top of the ground rod 2 inches to 3 inches above the bottom of the junction box to allow for an accessible clamp.
 - (2) **Located in Foundation** - Install ground rod in a foundation if shown, with the ground rod 2 inches to 3 inches above the top of the foundation to allow for an accessible clamp. Drive ground rods diagonally in all pole and controller foundations.
 - (3) **Other Locations** - Drive ground rods into the ground with the top about 6 inches below the finished grade at the ground rod locations. If approved, other ground rods may be driven diagonally. Where rock prevents full length driving, a buried galvanized iron or copper plate may be installed at the bottom of the concrete foundation hole, if approved. The plate shall be at least 2 feet square and 1/4 inch thick.
- (d) **Services and Cabinets** - Bond the neutral conductor, the control cabinets, and the metal base to the grounding electrode system.
- (e) **Structure Mounted Poles and Cabinets** - Bond all poles and cabinets mounted on structures or walls to a common ground rod at the end of the structure. Ground the system at the first convenient acceptable location off the structure.

For standard 4-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 an "acorn style" grounding wire clamp.

- (f) **Wood Poles** - Bond all metallic conduit, messenger cable, terminal cabinet, and other metallic parts within 10 feet of the ground line.
- (g) **Non-metallic Conduit** - In all non-metallic conduits, run a ground/bond wire continuously between all poles, pedestals, posts, and cabinets. Use green bond/ground wire no. 8 copper wire or as required by NEC, or as shown. Bond wires are not required in conduit that only contains circuits that operate at less than 25 volts.

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 -

Willamette River: Stormwater Source Control Improvements Project

Add the following to the end of the subsection:

Table 00960-1 contains Utility contact information to arrange for Utilities to make electrical hookups:

Table 00960-1

Location	Utility	Utility Contact Person's Name, Email and Phone Number	Utility Job Number
See sheet TA201 for service point location	Verizon Internet	Ian Lambie 2550 NE Aloclek Dr Hillsboro, OR 97124 ian.lambie@verizon.com 503-867-2758	To be provided by ODOT
See sheet TA201 for service point location	PGE Power	Sam Cope (PGE Power) 2213 SW 153 rd Drive Beaverton, OR 97003 Sam.Cope@pgn.com 503-349-7316	M5871720

Furnish and install a meter base approved by the serving Utility (with cover by the Utility), where shown.

SECTION 00970 - HIGHWAY ILLUMINATION

Comply with Section 00970 of the Standard Specifications modified as follows:

00970.41 Metal Light Pole or Tower Table - Replace this subsection, except for the subsection number and title, with the following:

The light poles for the project are as shown.

00970.42 Cable and Wire - Replace this subsection, except for the subsection number and title, with the following:

Use type XHHW stranded copper wire in all current-carrying conductors in raceways. Do not use multi-conductor cables unless otherwise specified.

Support the conductors at the top of the pole using a flexible metal cable support grip or zip ties to prevent insulation damage at the upsweep arm opening. When splicing cable into a new or existing circuit at a pole base (minimum wire length: 18 inches outside handhole), install a watertight, in-line fuse holder in the pole base for each current-carrying wire going up the pole. Furnish fuse holder to conform according to the requirements of 02920.26 and be constructed so the wire to the luminaire can be disconnected without cutting or disconnecting wiring at the luminaire. Insulate terminal ends of the in-line fuse holder using either heat shrink tubing or electrical insulating rubber tape over-wrapped with electrical vinyl plastic tape as specified.

Willamette River: Stormwater Source Control Improvements Project

Use no. 10 AWG Type XHHW wire from the control cabinet to the photoelectric relay.

Use 3 conductors no. 10 AWG XHHW wire from the pole base to luminaire. Use 2 conductors for luminaire connection and 1 conductor for circuit grounding the luminaire. Extend and securely connect electrical circuit grounding for each circuit connected to the luminaire end.

For multiple luminaires on a single pole, 2 sets of wires to be installed separately from the pole base to each luminaire. Do not splice wires inside the illumination pole except at the pole base.

00970.43 Photocontrol Electronic Relay - Replace this subsection, except for the subsection number and title, with the following:

Install the photocontrol electronic relay on either the luminaires, wood pole, or metal pole as shown or specified. Use a pole-top mounted photocontrol electronic relay with twistlock plug where shown or specified.

Mount the relay away from adjacent luminaires and orient the light sensitive relay's window to the northern sky. Mark the date of installation on the bottom of the photocontrol electronic relay.

00970.44 HID Luminaires - Replace this subsection, except for the subsection number and title, with the following:

Level luminaires on the upsweep arms in both the transverse and the longitudinal direction as recommended by the manufacturer. On roadway grades greater than 4 percent, orient luminaires on the upsweep arm so that the light beams strike the pavement equidistant from the luminaire.

(a) **Mounting Height** - Mount luminaires at heights shown. Measure the nominal mounting height from the top of the nearest edge of pavement to be lighted to the center of the luminaire.

(b) **Luminaire Size and Identification Decals:**

(1) **Identification Decals** - Indicate the luminaires size and type with a NEMA-approved decal on each luminaire as specified below. Apply decals on clean and prepared surfaces. Use decals that provide a durable, legible surface for the life of the luminaire, and:

- Are at least 3 inches square
- Are made of noncorrosive, pressure sensitive material
- Have a colored background with black numbers as shown in Table 00970-1

For pole-mounted cobrahead and shoebox style luminaires, install the decals on the bottom side of the luminaire or on the arm adjacent to the luminaire, whichever is more visible, as directed.

For wall-mounted luminaires, install the decals vertically on the luminaire housing or adjacent to the luminaire on the wall, as directed.

For pendant-mounted luminaires, install the decals horizontally on the luminaire housing.

Willamette River: Stormwater Source Control Improvements Project

- (2) **Lamp Size and Identification Decal Code** - Use the lamp size and color codes that conform to the following:

Tables 00970-1 A and B - Lamp Decal Code			
TABLE 00970-1 A		TABLE 00970-1 B	
Lamp Wattage	Identifying Number	Lamp Type	Background Color
LED	Consumed power	LED	White

00970.45 LED Luminaires - Replace this subsection, except for the subsection number and title, with the following:

Install LED luminaires as shown or as specified.

00970.50 Grounding and Bonding - Replace this subsection, except for the subsection number and title, with the following:

In addition to the requirements of 00960.45 and 00962.50, ground and bond metal illumination poles according to the following:

Install 1-inch nonmetallic conduit from the pole base to the concrete and polymer concrete junction box at each pole. Install a ground rod in each junction box and install copper ground wire from the ground stud in the pole base to the ground rod in the junction box. The ground rod may be installed in the same junction box that provides illumination circuitry to the pole if a separate and independent conduit is installed for the ground wire. Bond all metal conduit and metal junction box covers, if used, together the ground rod.

00970.60 Maintaining Existing and Temporary Illumination Systems - Replace this subsection, except for the subsection number and title, with the following:

Protect existing illumination systems and approved temporary replacements. Shutdown of a system may be allowed for alterations or final removal as approved. Lighting system shutdowns are not to interfere with the regular lighting schedule. Notify the Engineer before performing any work on existing systems.

Determine the exact location of existing direct burial wire, conduit runs, and pull boxes before using equipment that may damage such facilities or interfere with any system.

Where roadways are to remain open to Public Traffic and existing lighting systems are to be modified, keep the existing systems in operation until the final connection to the modified circuit is made. The modified circuit is to be complete and operating by nightfall of the same day the existing system is disconnected.

00970.70 Field Test - Replace this subsection, except for the subsection number and title, with the following:

Operate the completed lighting system or subsystem continuously for 14 Days under normal conditions (off during the day, on at night). When the lighting performance is satisfactory, the

Willamette River: Stormwater Source Control Improvements Project

Contractor may be relieved of maintenance responsibility according to 00170.80(b). Notify the Engineer 2 working Days in advance of start of the test.

00970.90 Payment - Replace the paragraph that begins with "Item (a) includes..." with the following paragraph:

Item (a) includes all concrete foundations for lighting poles. This includes removal of the existing foundation.

Replace the paragraph that begins with "Item (b) includes..." with the following paragraph:

Item (b) includes all poles and arms for lighting poles. This includes removal, refurbishing, and reinstallation of the poles and arms.

Replace the paragraph that begins with "Item (d) includes..." with the following paragraph:

Item (d) includes all switches, conduit, cabinets, wiring, delineators, junction boxes, and other items required to construct the lighting system as specified. This includes removal, refurbishing, and reinstallation of these items.

Willamette River: Stormwater Source Control Improvements Project

SECTION 01010 - STORMWATER CONTROL, WATER QUALITY STRUCTURES

Section 01010, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01010.00 Scope - This Work consists of furnishing and installing a Water Quality Structure as shown.

01010.02 Definitions:

Water Quality Structure - A self-activating Structure which removes pollutants from stormwater runoff and retains the pollutants in the Structure.

01010.03 Submittals - Furnish Water Quality Structures as shown.

Provide the following Water Quality Structures as indicated in Table 01010-1: The information provided in this table is for reference only, the design requirements, configurations, and model numbers are as shown:

Table 01010-1

Drainage Facility Identification Number	Approximate Location * (See Plans for precise location)	Stormwater Control Facility Treatment Category	Stormwater Control Facility Model	Pre-Cast or Cast in Place
D00428	N:194547.62, E: 323562.61	Basic, Metals and Phosphorus	BioPod BPU-825.67IB	Precast
D00429	N:196316.39, E:326171.65	Basic, Metals and Phosphorus	BioPod BPU-1420.5IB	Cast in place
D00508	N:178388.64, E:345661.55	Pretreatment	Vortechs 2000	Cast in place
D00509	N:178394.27, E:345672.94	Basic, Metals and Phosphorus	BioPod BPU-832.17IB	Cast in place
D00327	N:180302.63, E: 339897.41	Basic, Metals and Phosphorus	BioPod BPS-48IB	Precast
D00328	N:180294.03, E: 339921.90	Basic, Metals and Phosphorus	BioPod BPS-612IB	Precast
D00329	N:179854.13, E: 340339.59	Basic, Metals and Phosphorus	BioPod BPS-68IB	Precast
D00334	N:192250.68, E:325031.26	Pretreatment	CDS2020-5-C	Precast
D00335	N:193535.58, E:323930.49	Pretreatment	CDS2015-5-C	Precast
D00336	N:193520.54, E:323936.22	Basic and Phosphorus	MWS-L-8-12-V-UG	Precast
D00432	N:177388.14, E:344810.16	Pretreatment	Stormceptor STC900	Precast

Willamette River: Stormwater Source Control Improvements Project

D00507	N:177361.76, E:344840.44	Basic, Metals and Phosphorus	BioPod BPU-1024IB	Precast
D00431	N:176710.18, E:344221.51	Basic, Metals and Phosphorus	BioPod BPU27108.33- TV	Precast
D00331	N: 182821.52, E: 334413.38	Basic, Metals and Phosphorus	BioPod BPU-612IB	Precast
D00430	N: 181681.88, E: 336654.71	Pretreatment	CDS3020-6-C	Precast
D00333	N:183912.76, E:332558.01	Pretreatment	CDS4045-8-C	Precast
D00337	N: 194972.51, E: 323138.75	Basic, Metals and Phosphorus	(Boxless) BioPod BPU-8.552.58	Precast
D00338	N:195861.90, E:3220099.77	Pretreatment	CDS2020-5-C	Precast
D00405	N:195874.76, E:322084.78	Basic and Phosphorus	MWS-L-18-16- V-UG	Precast
D00406	N: 199815.92, E: 318985.89	Basic, Metals and Phosphorus	BioPod BPU-820IB	Precast
D00407	N:201649.72, E:318053.62	Basic, Metals and Phosphorus	BioPod BPU-819.67IB	Precast
D00408	N:201588.98, E:318084.15	Basic, Metals and Phosphorus	BioPod BPS-412IB	Precast
D00409	N: 203514.15, E: 316870.93	Pretreatment	CDS2015-5-C	Precast

* Coordinates are provided in Northings and Eastings

Submit the following according to 00150.35:

- Stamped Working Drawings for pre-cast structures that include the following information:
 - All design and construction details.
 - Structural capacity (i.e. traffic loading)
 - Buoyancy design.
 - Structure plan view with dimensions.
 - Typical section with dimensions.
 - All appurtenances labeled.
 - Installation and pipe connection details.
 - Peak flow bypass details.
- Design calculations, showing the water quality design flow rate and online peak flow rate requirements for each Water Quality Structure listed in the Table 01010-2.
- Provide documentation, signed by the manufacturer, that the manufacturer has verified proper installation.
- Provide a maintenance manual from the manufacturer containing detailed information for maintaining the treatment system.

Willamette River: Stormwater Source Control Improvements Project

Table 01010-2

Drainage Facility Identification Number	Approximate Location* (See Plans for precise location)	Contributing Drainage Area (Acres)	On-line or Off-line	Water Quality Design Flow Rate (cubic feet per second)	On-line Water Quality Structure Peak Flow Rate (cubic feet per second)
D00428	N: 194547.62, E: 323562.61	1.61	Online	0.49	1.32
D00429	N: 196316.39, E: 326171.65	2.77	Online	0.84	2.27
D00508	N: 178388.64, E: 345661.55	2.08	Online	0.63	1.7
D00509	N: 178394.27, E: 345672.94	2.08	Online	0.63	1.7
D00327	N: 180302.63, E: 339897.41	0.39	Online	0.10	0.5
D00328	N: 180294.03, E: 339921.90	0.75	Online	0.20	1.95
D00329	N: 179854.13, E: 340339.59	0.42	Online	0.13	0.59
D00334	N:192266.07, E: 325056.84	39.6	Online	0.51	10.71
D00335	N:193537.08, E: 323938.22	29.2	Online	0.27	0.7
D00336	N: 193524.90, E: 323946.51	29.2	Online	0.27	10.51
D00432	N: 177388.14, E: 344810.16	2.08	Online	0.63	1.7
D00507	N: 177351.44, E: 344826.89	2.08	Online	0.63	1.7
D00431	N: 176723.00, E: 344166.15	61.80	Offline	8	
D00331	N: 182829.41, E: 334443.35	0.55	Online	0.17	0.78
D00430	N: 181681.88, E: 336654.71	4.48	Offline	1.3	
D00333	N: 183938.38, E: 332525.01	23.5	Online	6.9	62.4

Willamette River: Stormwater Source Control Improvements Project

D00337	N: 194972.51, E: 323138.75	8.17	Offline	1.04	
D00338	N: 195872.78, E: 322111.91	3.8	Offline	0.71	
D00405	N: 195885.06, E: 322097.50	3.8	Offline	0.71	
D00406	N: 199815.92, E: 318985.89	2.82	Online	0.35	2.07
D00407	N: 201649.72, E: 318053.62	14.57	Online	0.35	4.48
D00408	N: 201588.98, E: 318084.15	4.31	Online	0.11	1.41
D00409	N: 203514.15, E: 316870.93	33.6	Online	0.56	10.45

* Coordinates are provided in Northings and Eastings

Materials

01010.11 Stormwater Control Field Facility Markers - Furnish Type S2 field markers according to 00842.10.

01010.12 Hatches - Furnish hatches of the size shown on the plans. Provide locking hatches with a minimum interior unobstructed opening dimension of the size as shown and have safety grate systems and lift assist. Furnish hatches rated for AASHTO HS-25 traffic loading (minimum).

01010.13 Manhole Frames and Covers - Furnish manhole frames and covers of the size as shown. Furnish manhole frames and covers according to 02450.30.

01010.14 1/4" to 1/2" Crushed Rock Fill:

- (a) **Grading** - 1/4" to 1/2" Crushed Rock Fill to consist of crushed rock, including sand. Determine sieve analysis according to AASHTO T 27. Ensure grading conforms to the grading requirements shown in the table below:

Sieve Size	Percent Passing (by Weight)
3/4"	99 - 100
1/2"	85 - 95
#4	0 - 11
#30	0 - 5
#200	0 - 2.1

01010.15 Butterfly Valves and Actuators - Furnish butterfly valves with cartridge style, resilient seated, ductile iron, lug or double flange type meeting API Standard 609 and MSS

Willamette River: Stormwater Source Control Improvements Project

Standard SP-61. Use butterfly valve compatible with the pipe and fittings to ensure smooth valve operation.

Furnish actuators for butterfly valve be by Rotork, Limitorque, or Auma and of a type to be compatible with the butterfly valve, weather-tight and rated for exterior installation.

Construction

01010.40 General - Construct pre-cast Water Quality Structures according to the manufacturer's recommendations and as shown or directed. Construct cast-in-place Water Quality Structures according to SP00540 (Structural Concrete) and the manufacturer's recommendations.

After installation, demonstrate that the full treatment system has been properly installed at the correct location(s), elevations, and with appropriate components. All components associated with the treatment system and its installation are subject to inspection by the Engineer at the place of installation. In addition, demonstrate that the treatment system has been installed according to the manufacturer's specifications and recommendations. Demonstration may be documented with a letter from the manufacturer confirming the system was properly installed.

Ensure all pre-cast Water Quality Structures subject to traffic loading accommodate AASHTO HS-25 (minimum). Design the DFI D00428 Water Quality Structure to accommodate a Taylor XH-400L forklift with a loaded front axle load of 90,600 lbs. (minimum). Ensure all other vaults accommodate AASHTO H-20 loading (minimum).

Abandon all pipes to be abandoned in place according to 00490.43.

01010.41 Pipe Connections - Place connecting pipe at the required alignment and grade. Set the connecting pipe through the full thickness of the wall and flush with the inner face of the wall. Ensure that pipe connections to the Structure are watertight. Grout concrete pipe connections to Water Quality Structures so they are watertight, using non-shrink grout according to 02440.50. Connect flexible pipe to Water Quality Structures using an adapter specifically manufactured for the intended service. Flexible pipe adapters are required to be watertight after installation. Follow the manufacturer's recommendations. Do not use field-fabricated water stops or improvised adapters. Anchor and finish adapters requiring the use of grout for installation according to 02440.50.

01010.42 Stormwater Control Field Facility Markers - Install field markers as shown and according to Section 00842.

01010.43 Commissioning & Testing – Provide a letter from the manufacturer certifying that each Water Quality Structure was installed according to their requirements, is functioning as designed, has been tested, and is ready to receive stormwater. Include an O&M training by the manufacturer for the owner's O&M staff for each Water Quality Structure commissioning.

Maintenance

01010.70 Cleaning - Remove all accumulated sediment and debris before completing the facility. Do not place Water Quality Structures in operation (activated) until the project site is clean and stabilized (construction erosion control measures no longer required).

Willamette River: Stormwater Source Control Improvements Project

Keep a maintenance/inspection record. The record includes any maintenance activities performed, amount and description of debris collected, and the condition of the filter.

Measurement

01010.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

Stormwater Control Field Facility Markers will be measured according to 00842.80.

Payment

01010.90 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 Structure, _____".

The drainage facility identification number will be inserted in the blank.

Stormwater Control Field Facility Markers will be paid for according to 00842.90.

Rock Excavation and Boulder Excavation will be paid for according to 00405.90.

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 including but not limited to: excavation, backfill, abandoning pipes in place, CLSM, compaction, shop drawings, furnishing and placing pre-cast & cast in place structures, pipe and structure connections, piping within the Water Quality Structure, grouting, gaskets, fittings, frames, grates, butterfly valves, valve actuators, commissioning and adjusting butterfly valves and actuators to ensure smooth operation, hatches, lids, concrete collar(s) and adjustment to grade, internal components, mulch, treatment & underdrain media, delivery, testing and commissioning, and cleanup.

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:

- **Permanent Seeding:**

**Botanical Name
(Common Name)**

**PLS Specified Rate
(lb/acre)**

Lolium perenne ssp. Multiflorum
(Italian (Annual) Ryegrass)

26.7/acre

Festuca rubra var. Sealink

Willamette River: Stormwater Source Control Improvements Project

(Sealink Slender Creeping Red Fescue)	20.9 lbs./acre
<u>Festuca brevipolia var. Spartan II</u> (Spartan II Hard Fescue)	16.7 lbs./acre
<u>Triflorium repens</u> (White Clover)	6.7 lbs./acre
<u>Festuca brevipolia var. Spartan II</u> (Spartan II Hard Fescue)	16.7 lbs./acre
<u>Triflorium repens</u> (White Clover)	6.7 lbs./acre
<u>Puccinellia pumila var Fults</u> (Fults Dwarf Alkaligrass)	12.5 lbs./acre

* Oregon Certified Seed

Lawn Seeding:

Name	PLS Specified Rate (260-350lb/acre)
Lolium perenne (perennial ryegrass)**	<u>50%-60%</u>
Poa pratensis (Kentucky Bluegrass)**	<u>20-30%</u>
Festuca pratensis (Tall Fescue)**	<u>10-20%</u>

** Furnish strong growing, site appropriate, disease resistant varieties

Add the following subsection:

01030.14(b)(4) Organic Fertilizer - Furnish organic fertilizer that analyzes 21 % nitrogen, 2% phosphoric acid, and 11% soluble potash. Furnish fertilizer that has no toxicity to sites where it will be applied.

01030.17 Pesticides - Add the following to the end of this subsection:

Do not apply herbicides that include any herbicide carrier (i.e. solvent) other than water or vegetable oil. Utilize only the following herbicides for Project Work:

- aquatic imazapyr
- aquatic glyphosate
- aquatic triclopyr-TEA
- chlorsulfuron
- clopyralid
- imazapic
- imazapyr

Willamette River: Stormwater Source Control Improvements Project

- metsulfuron-methyl
- picloram
- sethoxydim
- sulfometuron-methyl

Apply only the herbicide adjuvants described in Table 01030-1 for Project Work.

Table 01030-1

Adjuvant Type	Trade Name
Surfactant	Agri-Dex
Surfactant	LI 700
Drift Retardant	41-A
Drift Retardant	Vale

01030.42(b) - Weed Control Inspections Replace the paragraph that begins "Inspect the Project for new growth..." with the following paragraph:

Inspect the Project for new growth of specified weeds at least monthly and apply weed control measures as appropriate. This requirement may be waived by the Engineer during the period that weeds are fully dormant. To ensure satisfactory Weed removal, the last WMA inspection will occur at least 30 Days after growing has begun or as directed.

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 and 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 0.5 inches or greater in a 24-hour period.
- When wind speeds exceed 10 miles per hour, or are less than 2 miles per hour.
- During temperature inversions.
- When ground temperatures exceed 80 °F.

Adhere to the adjuvant application limitations in Table 01030-2. Regulated work area (RWA) is defined in 00290.34(a).

Willamette River: Stormwater Source Control Improvements Project

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 through Table 01030-10.

Table 01030-3: Application Buffer Width for Perennial Streams and Wetlands, and Intermittent Streams and Roadside Ditches with flowing or standing water present, Labeled for Aquatic Use

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
aquatic glyphosate	100 feet	Waterline	Waterline
aquatic imazapyr	100 feet	15 feet	Waterline
aquatic triclopyr-TEA	Not Allowed	15 feet	Waterline

Table 01030-4: Application Buffer Width for Dry Intermittent Streams, Dry Intermittent Wetlands, Dry Roadside Ditches, Labeled for Aquatic Use

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
aquatic glyphosate	50 feet	No buffer	No buffer
aquatic imazapyr	50 feet	No buffer	No buffer
aquatic triclopyr-TEA	Not Allowed	No buffer	No buffer

Table 01030-5: Application Buffer Width for Perennial Streams and Wetlands, and Intermittent Streams and Roadside Ditches with flowing or standing water present, Low Risk to Aquatic Organism

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
Imazapic	100 feet	15 feet	RWA boundary
Clopyralid	100 feet	15 feet	RWA boundary
metsulfuron-methyl	100 feet	15 feet	RWA boundary

Table 01030-6: Application Buffer Width for Dry Intermittent Streams, Dry Intermittent Wetlands, Dry Roadside Ditches, Low Risk to Aquatic Organism

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
Imazapic	50 feet	No buffer	No buffer
Clopyralid	50 feet	No buffer	No buffer
metsulfuron-methyl	50 feet	No buffer	No buffer

Willamette River: Stormwater Source Control Improvements Project

Table 01030-7: Application Buffer Width for Perennial Streams and Wetlands, and Intermittent Streams and Roadside Ditches with flowing or standing water present, Moderate Risk to Aquatic Organism

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
Imazapic	100 feet	50 feet	RWA boundary
sulfometuron-methyl	100 feet	50 feet	5 feet
Chlorsulfuron	100 feet	50 feet	RWA boundary

Table 01030-8: Application Buffer Width for Dry Intermittent Streams, Dry Intermittent Wetlands, Dry Roadside Ditches, Moderate Risk to Aquatic Organism

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
Imazapic	50 feet	15 feet	RWA boundary
sulfometuron-methyl	50 feet	15 feet	RWA boundary
Chlorsulfuron	50 feet	15 feet	RWA boundary

Table 01030-9: Application Buffer Width for Perennial Streams and Wetlands, and Intermittent Streams and Roadside Ditches with flowing or standing water present, High Risk to Aquatic Organism

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
Picloram	100 feet	50 feet	50 feet
Sethoxydim	100 feet	50 feet	50 feet

Table 01030-10: Application Buffer Width for Dry Intermittent Streams, Dry Intermittent Wetlands, Dry Roadside Ditches, High Risk to Aquatic Organism

Herbicide	Broadcast Spraying	Spot Spraying	Hand Selective
Picloram	100 feet	50 feet	50 feet
Sethoxydim	100 feet	50 feet	50 feet

01030.62(b)(3) Weed Control - Replace this subsection, except for the subsection number and title, with the following:

Kill and remove Specified Weeds as directed, prior to the Weeds going to seed. Keep WMAs and seeded areas, Weed Free throughout the Establishment Period.

01030.90 Payment – Delete Pay Items (l) and (m) from the Pay Item list.

Add the following to the end of this subsection:

Topsoil, soil amendments, and bio-amendments will be paid for according to 01040.90.

SECTION 01040 – PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

Willamette River: Stormwater Source Control Improvements Project

01040.02 Definitions: Add the following definitions to the end of this subsection:

Fall - The period beginning on the equinox in September through solstice in December.

Summer - The period beginning on the solstice in June through the equinox in September.

01040.04(a) Planting Work Plan – Replace the bullet that begins "Plant installation and..." with the following bullet:

- Plant installation

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

- Plant establishment plan according to 01040.70

Add the following subsection:

01040.05 Submittals – Submit the following for review and approval:

- Contract Growing Plan according to 01040.19(g).
- Planting work plan according 01040.04(a).
- Plant establishment plan according to 01040.70.
- Weed Control Work Plan according to 01030.42(a).
- Photo log 10 Days after each plant establishment visit and periodic inspection. Furnish date stamped photographs in photo log of each plant establishment site visit with photos of multiple individual plants, seeded areas and weed control areas that are sufficiently close to display plant condition and that are representative of the health, vigor and growth of the site plantings.

01040.19(b) Quality - Replace the paragraph that begins "Furnish plants that are acclimated..." with the following paragraph:

Furnish plants that are acclimated to the specific Project environmental site conditions prior to planting. Store all container-grown and balled and burlapped plant materials acquired for planting a minimum of 3 months before planting, as specified in 01040.41 or 01040.42, at a location north of the Oregon - California border.

01040.19(h)(2) Deciduous Trees - Replace the paragraph that begins "Trees with leaves that are..." with the following paragraph:

Trees which shed their leaves annually.

01040.19(h)(7) Seedling Trees - Replace the paragraph that begins "Plants that are grown from seed..." with the following paragraph:

Plants that are grown from seed in a nursery and brought to the site in a bare root condition. Provide seedlings labeled with age and certification (class number) which shows the length

Willamette River: Stormwater Source Control Improvements Project

of time grown in a nursery seedbed, followed by the length of time grown in a transplant bed. Furnish seedling trees that are a minimum 2 years old.

01040.20(e) Wood Chip Mulch - Add the following to the end of this subsection:

Provide wood chip mulch in the following size range:

- Medium grade wood chip mulch with chip size between ½ inch to 1½ inches

01040.41 Planting Season (West of the Cascades) - Replace the title of this subsection with “**Planting (West of the Cascades)**”.

01040.42 Planting Season (East of the Cascades) - Replace the title of this subsection with “**Planting (East of the Cascades)**”.

01040.48(b) Method "B" (Non-Cultivated Planting Areas) - Replace the paragraph that begins "Finish Wetland mitigation planting ..." with the following paragraph:

Finish Wetland mitigation planting areas to specified finish elevations, blending to existing ground smoothly, as required and directed. Except for projects that are less than 1 year in duration and unless otherwise approved, review the hydrology of the area to be planted for the period November 15 to February 28 prior to planting any Wetland plants. Adjust plant types and planting locations as required or directed, based on the review of site hydrology.

01040.50(a)(1) Mechanical Digging - Replace this subsection, except for the subsection number and title, with the following:

Use a tree spade unless otherwise directed. Move only while the tree is dormant. Treat deciduous plants with anti-transpirant prior to excavation. Confirm with the Agency that the size of the spade is appropriate to the size and type of tree prior to beginning Work. Dig the receiving hole prior to digging the tree to be transplanted. Take care not to damage the tree bark. Refill the original hole after transplanting. Do not move Oregon White Oak (*Quercus garryana*) by this method.

01040.50(g) Plant Cuttings - Replace the paragraph that begins "Collect and plant the cuttings ..." with the following paragraph:

Collect and plant the cuttings while the plant is dormant, generally between October and March. Notify the Agency if conflicts exist with permit requirements. Store all cut material in ventilated plastic containers that allow free flow of water. Protect root systems from excessive drying at all times. Do not store plants in airtight containers.

01040.53(b)(3) Compost Blanket - Replace this subsection with the following subsection:

01040.53(b)(3) - Compost Mulch - Spread compost on top of the Soil to a nominal depth of 3 inches. Where a compost erosion blanket is in place according to 00280.44(f) apply and spread additional compost to achieve a depth of 3 inches.

01040.54(a) Pressure Moisture Stress Sensor - Replace the bullet that begins "At 1 month intervals..." with the following bullet:

Willamette River: Stormwater Source Control Improvements Project

- At 1 month intervals throughout the Summer, up to the first Fall rain or snow.

01040.70 Plant Establishment – Add the following paragraph and bullets after the paragraph that begins “The Contractor is responsible...”

At a minimum of 15 Days prior to landscape Work, submit the plant establishment plan as part of the planting work plan according to 01040.05. Should the plan become unworkable at any time during Plant Establishment Period, submit a revised plan prior to proceeding with further Work. Include the following in the plant establishment plan:

- Activity descriptions necessary to ensure continued health and vigor of planted and seeded areas according to 01030.60 and 01040.71.
- Proposed scheduling of joint inspection meetings, weeding, and watering/irrigation schedule.
- Materials including herbicides and fertilizers, and Equipment to be utilized for the plant establishment.
- Proposed adaptive management activities for successful establishment of seeded, sodded, and planted areas, during changing environmental conditions or unanticipated weather.

01040.71 Plant Care and Success Criteria - Add the following to the end of this subsection:

The following watering frequencies are required between dates May 1st to October 30th:

- Deciduous trees that are 1 1/2 inch and larger, water at a frequency of once per week.
- Conifer trees that are over 4 feet tall, water at a frequency of once per week.
- All shrubs, water at a frequency of once per week.

01040.72 Periodic Inspections - Replace the bullet that begins "Spring..." with the following bullet:

- Early May

Replace the bullet that begins "Summer..." with the following bullet:

- Mid-July

Replace the bullet that begins "Fall..." with the following bullet:

- Late September

01040.73 Corrective Work - Replace the paragraph that begins "The Contractor will be allowed..." with the following paragraph:

The Contractor will be allowed to replace plants outside the planting times described in 01040.41 or 01040.42 as applicable to perform corrective work after each periodic inspection

Willamette River: Stormwater Source Control Improvements Project

01040.75 Weed Control - Replace this subsection, except for the subsection number and title, with the following:

Perform weed control throughout the Plant Establishment Period. Kill and remove Specified Weeds as directed, prior to the Weeds going to seed. Keep the plant areas Weed Free throughout the Plant Establishment Period.

01040.77(b) Trimming and Pruning - Replace the paragraph that begins "Prune during the dormant..." with the following paragraph:

Prune during dormancy unless otherwise specified. Remove and dispose of all dead and critically damaged plant material to maintain the overall appearance of the Project.

SECTION 01050 - FENCES

Comply with Section 01050 of the Standard Specifications modified as follows:

01050.80(a) Barbed and Woven Wire Fence and Gateways – Replace this subsection, except for the subsection number and title, with the following:

Barbed wire Fence, woven wire Fence, and barbed and woven wire Fence will be measured on the length basis. Measurement will be from center to center of posts, measured along the line and grade of each separate continuous Run of Fence as constructed, exclusive of Gates. Where existing Fences are extended to intersect the new Fence, the length of extension, from point of joining to the center of the new end post, will be measured and included for payment, if similar in design or type to a Pay Item, otherwise this Work will be paid for according to 00195.20.

SECTION 01069 - METAL HANDRAIL AND PEDESTRIAN FENCE

Comply with Section 01069 of the Standard Specifications modified as follows:

01069.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

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) Metal Handrail, _____ Rail.....	Foot
(b) Pedestrian Fence	Each
(c) Metal Handrail, _____ Rail with Optional Rail	Foot

In item (a), "two" or "three" will be inserted in the blank.

Willamette River: Stormwater Source Control Improvements Project

In item (c) “two” or “three” will be inserted in the blank. Item (c) also includes the additional optional bottom rail.

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 01140 - POTABLE WATER PIPE AND FITTINGS

Comply with Section 01140 of the Standard Specifications.

SECTION 01180 – UTILITY PUMP STATION

Section 01180, which is not a Standard Specification, is included in this Project by Special Provision

Description

01180.00 Scope - This Work consists of furnishing and installing the precast concrete wet-well and valve vault, pumps and mountings, piping integral to pumping station, ventilation system, pump motor control panel, control panel, electrical power junction box, instrumentation junction boxes, and wet well instrumentation.

01180.01 Submittals -

Submit the following:

(a) Product Data - Submit stamped structural calculations and shop drawings, and unstamped Working Drawings and submittals according to 00150.35 at least 21 Calendar Days prior to the preconstruction conference. Submit manufacturer's technical data, including station capacities and operating characteristics. Include the following:

- Pump performance curves.
- Shop drawings: Show fabrication, field interconnection wiring schematics, panel layout drawing, and installation details.
- Manufacturer qualifications: NPCA-certified plant, with experience and demonstrated capability to produce work specified in this Section.

(b) Submittals following completion of the Work - Submit stamped structural calculations and shop drawings, and unstamped Working Drawings and submittals according to 00150.35 at least 21 Calendar Days after the completion of the utility pump station. Provide quality-control test reports documenting station operation performance. Include the following:

(1) Warranty – Provide the signed copy of pump station warranty according to 01180.75.

(2) Operation and maintenance manual - Provide Equipment installation and operation manuals for the pump station, pumps and electrical control equipment, approved submittals, and schedule for maintenance requirements.

(3) Red line record drawings - Provide redline drawings complete with field markups representing the as constructed information.

(4) Quality Assurance Electrical Components, Devices, and Accessories - Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to the Engineer, and marked for intended use.

01180.06 Precast Pumping Station Design Criteria - Furnish and construct site assembled precast stormwater pumping station manufactured by Jensen Precast, (855) 468-5600, pumpstations@jensenprecast.com, www.JensenEngineeredSystems.com as shown with a control system configured to limit maximum pumping rate of 5,000 USGPM. This includes specified pumps, valves, internal piping, instrumentation, electrical and control panels, and precast concrete wet-well and valve vault .

Materials

01180.10 Precast Concrete Structures - Furnish precast concrete structure as indicated, with provision for sealant at joints, meeting ASTM C913, designed according to ASTM C890 and AASHTO HS25-44 for heavy traffic, structural loading.

(a) Wet Well - Provide base, barrel, and flat top precast sections to correspond to height of precast structures as shown. The nominal diameter of the precast concrete wet well is 192 inches, inlet pipe size is 18 inches, and the discharge pipe size is 12 inches meeting the following requirements:

- ASTM C890, precast, reinforced concrete.
- **Joint Sealant:** ASTM C990, bitumen or butyl rubber.
- **Flexible Resilient Pipe Connectors:** ASTM C923, cast or fitted into structure walls, for each pipe connection.

(b) Precast Concrete Vaults - Furnish precast concrete vault according to ASTM C858.

- **Joint Sealant:** ASTM C990, bitumen or butyl rubber.
- **Flexible Resilient Pipe Connectors:** ASTM C923, cast or fitted into structure walls, for each pipe connection.

(c) Precast Concrete Materials and Mix Design - Furnish precast concrete according to ACI 318/318R with a concrete design mix of 4,000 psi minimum, with 0.45 maximum water/cementitious materials ratio.

(d) Precast Concrete Structure Fabrication - Furnish precast concrete structure according to ASTM C478. Fabricate structures with continuous joints to provide watertight construction. Prepare valve vault with factory-installed piping, valves, sleeves, and other devices required.

01180.13 Access Doors and Frames - Furnish triple-leaf opening, 63-by 153 inch stainless steel access hatch manufactured by Jensen MetalTech or USF Fabrication, angle frame. Furnish access doors and frames with lift assist, bituminous paint, flush lifting handle, 316 stainless steel nuts & bolts, hinges, Slamlock, hinged hatch safety grates, and hold-open arm. The loading capacity is HS-25 traffic loading.

Willamette River: Stormwater Source Control Improvements Project

01180.14 Wet Well Accessories - Furnish wet well meeting the following requirements:

- (a) **Pipe Supports** – Furnish pipe supports according to the manufacturer's standard.
- (b) **Guide Rail Assembly** – Furnish Type 304 stainless steel guide rails, with pump guide brackets configured to match requirements of selected pumps.
- (c) **Flexible Resilient Pipe Connectors** – Furnish flexible connector according to ASTM C923.
- (d) **Ventilation** – Furnish PVC piping, with internal insect screening.

01180.15 Pumps - Furnish 3 HOMA Model AMS644-340ASC/56GUFM, 6-inch discharge, electric submersible stormwater pumps. Each consisting of a single-stage, non-clog, centrifugal pump, close-coupled to a squirrel cage induction-type electric motor assembled in a single-body, watertight aggregate, capable of maintaining its watertight integrity submerged under 65 feet of water.

Design the pumps to handle raw, unscreened sewage, storm water, sludge, or similarly contaminated liquid at an operating point of 5,000 USGPM at a total dynamic head (TDH) of 47.6 feet with 3 pumps running concurrently. TDH with a hydraulic efficiency of at least 40 percent. Provide a shut-off head of 70 ft minimum. Provide a pump capable of repeatedly passing non-compressible, spherical solids up to 6 inch in diameter. Provide a 56.1 HP motor designed for operation with a 3-phase, 60 Hz, 480-volt electrical supply. Connect each motor for operation with 120 feet of power and control cable. Configure the Variable Frequency Drive (VFD) with a maximum speed of 55 HZ and a minimum frequency of 40 Hz. Furnish pumps with the following:

- Provide a motor that is listed for operation in Class 1 Division 1, Groups C & D Areas by Factory Mutual (FM).

Provide motor cooling using an integrated cooling jacket around the motor housing. The jacket is filled with pumped liquid during operation, and circulation is maintained by impeller back vanes. Include an air vent to prevent air entrapment within jacket. External heat exchangers, fans, or separate cooling liquid supplies are not permitted.

- Incorporate Nitrile (Buna-N) O-rings in controlled compression in two planes of the sealing interface when sealing between castings. Machine the sealing interfaces to ensure precise alignment and maintain metal-to-metal contact, while allowing the O-rings to provide the seal without requiring specific torque on the fasteners. Rectangular cross sectioned gaskets that require specific torque limits to achieve compression are not permitted.
- **Materials of Construction:** Major castings: ASTM A48 Class 40B Cast Iron. - Wear Ring: ASTM B505 Bronze. - Shaft: AISI 420 Stainless Steel. - Fasteners: AISI 304 Stainless Steel. - O-Rings: Nitrile Rubber. - Shaft Seals: Silicon Carbide/Silicon Carbide (impeller and motor side). Cable Jacket: Neoprene. - Cable Entry: elastomer grommet, stainless steel washers. - Protective Coating: High Solids Epoxy
- **Total Pump System Characteristics:** Meet the following performance requirements.

Willamette River: Stormwater Source Control Improvements Project

- Number of Pumps: Three.
- Total combined system capacity: 5000 USGPM.
- Individual Motor Size: 56.1 hp.
- Total Dynamic Head: 47.6 feet.
- Speed: 1750 rpm
- Hydraulic Operating Efficiency: 40 percent, minimum.
- Shut-off Head: 73 feet.
- Pumping Station Electrical Characteristics:
 - Electrical Service:
 - Volts: 480 V.
 - Phases: Three.
 - Frequency: 60 Hz.
 - Full-Load Amperes: 66A Each Pump.

01180.16 Piping - Furnish discharge piping meeting the following requirements:

(a) Ductile-Iron, Mechanical-Joint Pipe and Fittings - Furnish pipes and fittings meeting the following requirements:

- Ductile-Iron Pipe - Comply with Section 02420 with mechanical-joint bell and plain spigot end unless flanged ends are indicated. Use Special Thickness Class 53.
- Provide flanged ends within wet well and valve vault.
- Ductile-Iron Fittings: AWWA C110/A21.10, mechanical-joint, ductile- or gray-iron standard pattern or AWWA C153/A21.53, ductile-iron compact pattern. Comply with 02475.20.
- Glands, Gaskets, and Bolts: AWWA C111/A21.11, ductile- or gray-iron glands, rubber gaskets, and steel bolts.

(b) Stainless-Steel Pipe and Fittings - Furnish pipe and fittings with socket and spigot ends following the requirements of ASME A112.3.1. Apply within submerged portion of wet well where indicated on approved shop drawings.

(c) Check Valves - Furnish swing check valves with flange ends as shown.

(d) Isolation Valves - Furnish eccentric plug valves with flange ends as shown.

01180.17 Electrical, controls, instrumentation - Furnish electrical components, controls and instrumentation meeting the following requirements:

(a) Motor control center - Furnish motor control panel with NEMA 12 metal custom pump control panels, complete with motor disconnects, and VFDs, and the following:

- Furnish VFDs sized to match the electrical requirements of the pumps. Furnish each VFD with a local hand off auto switch, local speed potentiometer, and human

Willamette River: Stormwater Source Control Improvements Project

interface module (HIM) mounted to the motor control panel. Submit VFD make and model according to 00150.37.

- Furnish and install a pump monitor relay inside the control panel for each pump.
- Set up the VFDs to control the pumped flow rate to a maximum of 5000 USGPM when all three pumps are in operation.
- Panel to complete a factory acceptance test (FAT) prior to acceptance and shipment to site.
- Install the motor control center as shown.

(b) Electrical power junction box - Furnish a NEMA 4X junction box (JB-300A) for marshalling power cables between the pump station and the building. Mount the junction box directly to the pre-settling tank or pole mounted in front of the pre-settling tank.

(c) Local control panel - Provide a National Electrical Manufacturers Association (NEMA) 12 metal custom control panel complete with Human-Machine Interface (HMI) and Programmable Logic Control (PLC), programming, configuration services for all supplied Equipment, and the following requirements:

- Fabricate the panels to meet the functionality implied on the P&ID, block diagram, and control strategies. Control panel to control, monitor and alarm all instruments and valves.
- Provide all required components (disconnects, fuses, terminals, accessories, etc.) for fully-functional, code-compliant, UL 508 labeled control panel.
- Provide CAT6 patch cables for all ethernet connections inside the control panel.
- Furnish and install Rockwell Automation CompactLogix PLC system and PanelView 7 HMI.
- Furnish and install an unmanaged network switch to provide network communications between the components in the control panel. Acceptable manufacturers include:
 - Ntron model 105TX
 - Rockwell Automation model 1783-US5T
- Furnish and install an eWon Flexy firewall router to provide secure remote access via the internet.
- Furnish and install an alarm callout system capable of handling hardwired discrete alarms and sending. Provide 8 hardwired alarms from the PLC to the alarm callout system. The preferred alarm dialer is B1285 Protalk Link:
 - B1285-M1 Master Module
 - B1285-T1 for Telephone Dial Out
 - B1285-W1 for Cellular Dial Out
- Furnish and install an uninterruptible power supply (UPS) inside or next to the control panel. UPS to provide power for the PLC, instrumentation and motorized valve actuators for 20 minutes.
- Provide pdf copy of HMI graphics as part of the submittal package.
- Provide wiring drawings as part of the submittal package.

Willamette River: Stormwater Source Control Improvements Project

- Control Panel to complete a factory acceptance test (FAT) prior to acceptance for shipment to site and a site acceptance test (SAT) as part of commissioning. Provide test results within 14 calendar days of each completed test.
- Install the control panel in the pump control room Structure.

(d) Pump station instrumentation - Furnish, install, and commission instrumentation for wet well. Marshall instrumentation in a junction box located next to pre-settling tank. Wet well area is classified as Class 1 Div 1 hazardous area.

(1) Level transmitter - Provide a 2 wire, 4-20 mA radar or ultrasonic level transmitter with a minimum measuring distance of 30 feet. Furnish NEMA 4 or better housing rated for a Class 1 Div 1 hazardous area. Field mount transmitter through a pipe flange. Mount the transmitter in a location to ensure full reading from top to bottom of the measurement range. Confirm measurement range during construction.

Acceptable manufacturers:

- Pulsar
- Siemens
- Endress & Hauser

(2) High Level Float Ball Switch - Provide level switch for high level alarm inside the wet well. Field mount device through a pipe flange. Locate switch away from any obstructions.

Acceptable manufacturers:

- Flygt model ENM-10 ("Ex" (explosion-proof) version)
- SJE model MilliAmpMaster WPS

(3) Hatch Access Door Switch - Provide corrosion resistant, weather sealed NEMA 4x lever type limit switches for the wet well and valve chamber hatches to detect when the hatches are opened or closed. Furnish 10A/120VAC SPDT contacts that open when hatches are opened. All areas are classified as Class 1 Div 1 except the pump control building.

Acceptable manufacturers:

- Omron model D4N-3131
- Rockwell
- Eaton

(4) Accessories - Furnish all mounting brackets, hardware, and appurtenances required for installing the instruments with stainless steel material.

(a) Instrumentation Junction Boxes - Provide one lockable NEMA 4X junction box for marshalling low voltage instrument and control wiring. Mount directly to the pre-settling tank or pole mounted in front of the reservoir on the pad.

- Spare terminals are required for an additional 4-20 mA level signal and two discrete inputs for the Reservoir.

Willamette River: Stormwater Source Control Improvements Project

- Accessories: Furnish all mounting brackets, hardware and appurtenances required for mounting the panel.
- Bolts, brackets, nuts: 316 stainless steel.
- Mounting Plates: Carbon steel.

(b) Panel Accessories - Furnish all mounting brackets, hardware, and appurtenances required for mounting the panel.

- Bolts, brackets, nuts: 316 stainless steel.
- Mounting Plates: Carbon steel.
- Pipe stands: Hot-dip galvanized 2 inch schedule 40, ASTM A106 Grade B carbon steel.

Acceptable manufacturers for enclosures:

- Hoffman
- Hammond

Acceptable manufacturers for terminals:

- Weidmuller
- Wago
- Phoenix Contact

(e) Flow Splitter Instrumentation - Furnish, install, and commission instrumentation for the wet well. Marshall instrumentation in a junction box located next to flow splitter. Flow splitter is classified as Class 1 Div 1 hazardous area.

(1) Level Transmitter for Overflow Weir Flow Measurement - Provide a 4-20 mA radar or ultrasonic level transmitter, capable of open channel flow measurement, with a minimum measuring distance of 50 feet. Furnish NEMA 4 or better housing rated for a Class 1 Div 1 hazardous area. Field mount the sensor with a bracket in the wet well. Mount the transmitter outside the chamber in a location to ensure full reading from top to bottom of the measurement range behind the weir. Confirm measurement range during construction.

Acceptable manufacturers:

- Siemens
- Endress & Hauser
- Pulsar

(2) Inlet Flow Meter - Provide two flow meters to measure inlet flows inside flow splitter. Field mount device according to manufacturer's instructions inside the inlet piping. Confirm measurement range during construction.

Acceptable manufacturers

- SonTek model SON-IQP

(3) Hatch access door switch - Provide corrosion resistant, weather sealed NEMA 4x lever type limit switches for the wet well and valve chamber hatches to detect when

Willamette River: Stormwater Source Control Improvements Project

the hatches are opened or closed. Furnish 10A/120VAC SPDT contacts that open when hatches are opened.

Acceptable manufacturers:

- Omron model D4N-3131
- Rockwell
- Eaton

(4) Hatch access door accessories - Furnish all mounting brackets, hardware and appurtenances required for installing the instruments with stainless steel material.

(5) Instrumentation junction boxes - Provide one lockable NEMA 4X junction box for marshalling low voltage instrument and control wiring. Pole mount junction box on a pad next to the diversion chamber.

(6) Panel Accessories - Furnish all mounting brackets, hardware and appurtenances required for mounting the panel.

- Bolts, brackets, nuts: 316 stainless steel.
- Mounting Plates: Carbon steel.
- Pipe stands: Hot-dip galvanized 2 inch schedule 40, ASTM A106 Grade B carbon steel.

Acceptable manufacturers for enclosures:

- Hoffman
- Hammond

Acceptable manufacturers for terminals:

- Weidmuller
- Wago
- Phoenix Contact

(f) Bolted Steel Tank Instrumentation - Furnish, install, and commission instrumentation for the Tank. Marshall instrumentation in a junction box located next to the tank. Area inside tank is classified as Class 1 Div 1 hazardous area.

(1) Level Transmitter - Provide a 4-20 mA radar or ultrasonic level transmitter, with a minimum measuring distance of 50 feet. Furnish NEMA 4 or better housing rated for a Class 1 Div 1 hazardous area. Field mount the sensor to a process connection on the tank. Mount the transmitter outside the chamber in a location to ensure full reading from top to bottom of the measurement range behind the weir. Confirm measurement range during construction.

Acceptable manufacturers:

- Siemens
- Endress & Hauser
- Pulsar

Willamette River: Stormwater Source Control Improvements Project

(2) Outlet Flow Meter - Provide one flow meters to measure the outlet flow from the tank. Field mount device according to manufacturer's instructions inside the flow meter chamber at the base of the tank. Confirm measurement range during construction.

Acceptable manufacturers:

- SonTek model SON-IQP

(3) Hatch Access Door Switch - Provide corrosion resistant, weather sealed NEMA 4x lever type limit switch for the tank hatches to detect when the hatches are not closed. Furnish 10A/120VAC SPDT contacts that open when hatches are opened.

Acceptable manufacturers:

- Omron model D4N-3131
- Rockwell
- Eaton

(4) Accessories - Furnish all mounting brackets, hardware, and appurtenances required for installing the instruments with stainless steel material.

(a) Instrumentation Junction Boxes: Provide one lockable NEMA 4X junction box for marshalling low voltage instrument and control wiring. Pole mount junction box on a pad next to the diversion chamber.

(b) Accessories: Furnish all mounting brackets, hardware, and appurtenances required for mounting the panel.

- Bolts, brackets, nuts: 316 stainless steel.
- Mounting Plates: Carbon steel.
- Pipe stands: Hot-dip galvanized 2 inch schedule 40, ASTM A106 Grade B carbon steel.

Acceptable manufacturers for enclosures:

- Hoffman
- Hammond

Acceptable manufacturers for terminals:

- Weidmuller
- Wago
- Phoenix Contact

(g) Biopod Instrumentation - Furnish, install, and commission instrumentation. Marshall instrumentation in a junction box located next to the tank. Area inside Biopod is classified as Class 1 Div 1 hazardous area. Furnish instrumentation with the following requirements:

(1) Motorized Valve Actuator – Furnish and install a 120/208VAC powered actuator powered by control panel, and actuator is controlled from a PLC digital output. Wire PLC for open, closed, and fault signals. Furnish actuators with the following requirements:

Willamette River: Stormwater Source Control Improvements Project

Furnish actuators conforming to latest edition of AWWA C542 and C504 to be provided, mounted, and adjusted at valve manufacturer's facility.

- Furnish actuators to be suitable for underground chamber housing and have a built-in packing leakage bypass to prevent possible water ingress into the actuator housing. Design valve and actuator so that shaft seal leakage cannot enter actuator housing.
- Furnish actuators to be suitable and be approved for use in hazardous areas classified as Zone 1 (Class I, Division 1) according to NEC.
- Furnish gear box to be fitted with a visual position indicator easily understandable and readable from a distance of approximately five to seven meters.
- The valve manufacturer is responsible for sizing the actuator. Actuator torque capabilities to be determined by the valve manufacturer to the requirements in Sections 4.2.8.2 and 4.2.8.7 of the latest edition of AWWA C504, and Section 4.3 of AWWA C542. Actuator torques include capability for dynamic torque, bearing friction torque, seating and unseating torque, and hydrostatic torque acting in combination.
- Size actuator to guarantee valve closure of supplied valves at specified operating conditions with safety margin of at least 40 percent. Design actuator with the following general requirements:
 - Install power to the actuator from the PLC control panel.
 - Design actuator for heavy-duty, outdoor operation. Design actuator to be of a fully enclosed to preclude possibility of injury to personnel during operation. Design actuator to be capable of being easily lubricated by oil or grease if design warrants such maintenance.
 - Furnish actuator to be capable of being mounted on gear box in a minimum of four positions.
 - Furnish materials and lubricants for actuator suitable for normal operation over a temperature range of -13 degrees to +140 °F.
 - Furnish electric actuators to include integral facility to locally lock out electrical operation.
 - Furnish Equipment to meet IP68, prolonged submersible indoor/outdoor use, and to be capable of submersion for up to 72 hours at a depth of 10 feet.
 - Furnish a hand wheel for emergency operation.
- Acceptable manufacturers:
 - Rotork
 - Auma
 - Bray Valve

(2) High Level Switch - Provide level switch for high level alarm inside the wet well. Field mount device with a bracket. Locate switch away from the valve.

Acceptable manufacturers:

- Siemens model SITRANS LVL 100 Vibrating Fork
- Flygt model ENM-10 ("Ex" version)
- SJE model MilliAmpMaster WPS

Willamette River: Stormwater Source Control Improvements Project

(3) Accessories - Furnish all mounting brackets, hardware, and appurtenances required for installing the instruments with stainless steel material.

01180.18 Pump Control Room Structure – Provide cast-in-place concrete structures according to Sections 00530 and 00540.

01180.19 Pump Control Room Structure Electrical Equipment - Furnish, install and connect the following electrical equipment in the pump control room structure. Equipment to be grounded, wired, powered, and fully functional. Furnish UL-certified Equipment with the following requirements:

(a) Utility power meter – Furnish, install and connect the Power meter at the demarcation point identified on the layout drawing.

Acceptable manufacturers:

- Eaton 121413
- ABB
- Siemens

(b) Current transformer cabinet - Furnish, install, and connect the current transformer (CT) cabinet and CT mounting bracket beside the meter.

Acceptable manufacturers:

- Millibank (CT364811-HC, K4904)
- Eaton

(c) Power distribution circuit breakers - Furnish, install, and connect power distribution circuit breaker according to single line drawing as shown.

Acceptable manufacturers:

- Eaton
- ABB

(d) Manual Transfer Switch and Receptacle

Acceptable manufacturers:

- Eaton
- ABB

(e) Splitter Box

Acceptable manufacturers:

- Eaton
- ABB

(f) Transformer

Willamette River: Stormwater Source Control Improvements Project

Acceptable manufacturers:

- Eaton
- ABB

(g) Lighting Panelboard

Acceptable manufacturers:

- Eaton
- ABB

(h) Interior Lights - Furnish and install additional lights to ensure the interior has a minimum of 500 lux.

(i) Exterior Lights – Furnish and install additional lights as shown on building layout drawing.

(j) Baseboard Heater - Furnish and install baseboard heaters. Refer to lighting schedule as shown.

Acceptable manufacturers:

- Eaton
- ABB

(k) Additional Receptacles - Furnish 120VAC duplex receptacles as shown.

Construction

01180.40 Precast Concrete Structures - Install precast concrete structure sections with sealants according to ASTM C891.

01180.41 Field Quality Control - Perform tests, inspections, and prepare test reports.

(a) Manufacturer's Field Service – Notify the Engineer and arrange for Jensen Precast's authorized service representative to be on-site to assist with testing and startup. Provide a minimum of 14 days' advance notice before the scheduled activity.

(b) Tests and Inspections - Provide the following test and inspections:

- Before shipping to site, provide factory acceptance tests (FAT) for all electrical, instrumentation junction boxes, and control panels supplied for the project. Engineer to witness all FATs remotely via Teams or Zoom Meeting. Provide a minimum of 14 days' advance notice before FAT.
- Provide test sheets for check out. Submit test sheets for approval before FAT and commissioning.
- Test completed piping systems according to requirements of Agency. Submit reports.
- After installing stormwater pumping station and after electrical circuitry has been energized, test pumps and controls for compliance with requirements.

Willamette River: Stormwater Source Control Improvements Project

- After electrical equipment has been energized, start units to confirm the station can run at pre-specified design parameters.
- Test piping for leaks and defects.
- Test and adjust controls, alarms, and safeties.
- Force Main: Test at pressure not less than 1-1/2 times the maximum system operating pressure, but not less than 150 psig.
- Pump Flow: Measure pump flow to confirm the pumps operate at the design duty point but do not exceed the specified maximum flow rate.
- Loop Check-Out: Check control signal generation, transmission, reception, and response for all control loops under simulated operating conditions by imposing a signal on the loop at the instrument connections.

(c) Failed Tests - Remove and replace components of the stormwater pumping station that do not pass tests and inspections, and retest as specified above.

01180.75 Trade Practice Guarantees – Furnish trade practice guarantees if available for pump station and pump control room electrical pay items according to 00170.85(c)(2).

Measurement

01180.80 Measurement - No measurement of quantities will be made for Work performed under this section.

Payment

01180.90 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) Pump Station	Lump Sum
(b) Pump Control Room Structure	Lump Sum
(c) Pump Control Room Electrical	Lump Sum

Item (a) includes furnishing and installing all components of the pump station package.

Item (b) includes furnishing and installing all components of the pump control room structure.

Item (c) includes furnishing and installing electrical components located inside the pump control room, as well as those outside of it.

Payment will be payment in full for furnishing and installing all Materials and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for:

- Excavation, aggregate base, backfill, and compaction
- Instrumentation and controls for the flow splitter, BioPod treatment facility, or the pre-settling tank.

Willamette River: Stormwater Source Control Improvements Project

Inlet pipes, discharge pipes beyond the limits of the pump station package, and drainage structures upstream of wet well will be paid according to Section 00445 and Section 00470.

SECTION 01191 – BOLTED STEEL TANKS

Section 01191, which is not a Standard Specification, is included in this Project by Special Provision.

Description

01191.00 Scope - This Work consists of designing, furnishing, installing, and testing of bolted steel tanks at locations shown and as specified. The Work also includes installation of tank appurtenances as shown and as specified.

Select the bolted steel tank type to provide the specified volume capacity and satisfy the acceptance criteria.

01191.01 Submittals - Submit the following at least 21 Calendar Days prior to beginning excavation at the WR307 site:

- Tank manufacturer's product information, specifications, and installation instructions for building components and accessories. Include the following:
 - Erection drawings: Submit tank manufacturer's erection drawings, including plans, elevations, sections, and details, and accessory installation details to clearly indicate proper assembly of components.
 - Foundation drawings: Submit tank foundation drawings, including plans, elevations, reinforcement, sections and details.

(a) Working Drawings - At least 21 Calendar Days prior to beginning excavation at the WR307 site, submit stamped Working Drawings and calculations from the manufacturer according to 00150.35. Diagrams showing load magnitudes and locations, separated into dead, live, wind, and seismic components applied to the primary structure are required in the Working Drawings and calculations. Submit for the following:

- Steel tanks with roof
- Steel tank anchorages
- Railings at roof, hatches, glass windows, and other appurtenances and associated connections.

01191.02 Manufacturer Operation and Maintenance Manual - Submit the tank manufacturer's project-specific operation and maintenance manual after installation completion.

01191.03 Manufacturer Warranty - Submit the tank manufacturer's warranty according to 00170.85(c)(2).

Materials

01191.10 Tank - Furnish a bolted steel tank meeting the following requirements:

(a) Tank Measurements - Furnish a bolted steel tank meeting the following measurements:

- Nominal capacity: 74,428 gallons
- Actual capacity with freeboard: 74,428 gallons
- Freeboard height: 12-inches
- Diameter: 26 feet inside diameter
- Height: 20 feet inside clear

(b) Tank Standard - Furnish materials for the fabrication and erection of a bolted steel tank conforming to the latest revision of ANSI/AWWA D103 "Factory-Coated Bolted Steel Tanks For Water Storage."

(c) Tank Coating - Furnish a tank coating system meeting the latest revision of section 10.4 of ANSI/AWWA D103. For surfaces in contact with the stored water, provide coating additives certified and listed by the National Sanitation Foundation (NSF) to meet ANSI/NSF Additives Standard No. 61. Certification of a coating type alone is not sufficient to meet this requirement.

01191.11 Plates and Sheets - Furnish steel plates and sheets meeting the following requirements:

- Tank shell, tank floor (when supplied) and tank roof: AWWA D103, latest edition.
- Mild strength steel: ASTM A1011 Grade 30 with maximum allowable tensile stress of 14,566 psi (100 MPa)
- High strength steel: ASTM A1011 Grade 50 with a maximum allowable tensile stress of 26,000 psi (179 MPa)
- Minimum steel thickness: 1/4 inch

(a) Ultimate Steel Strength - Consider the annealing effect created from the glass coated firing process when determining ultimate steel strength.

(b) Effective Net Section Area - When multiple vertical bolt line sheets and plates of ASTM A1011 Grade 50 are used, the effective net section area cannot be taken as greater than 85 percent of the gross area.

(c) Surface Preparation - Prepare the sheet surface by blasting with steel grit on both sides to the equivalent of Steel Structures Painting Council (SSPC) SP-10 (Near-White Metal Blast Cleaning). Provide a surface anchor pattern of at least 1.0 mil (0.001 inch).

(d) Sheet Edges - After initial sheet preparation, bevel all full height vertical wall sheets and all rectangular shaped floor sheets. Thermally bond a metal coating of 316 stainless steel on these edges at a thickness of 1.5 to 5 mils (0.0015 to 0.005 inch). Provide a coating with a tensile strength of >1500 psi (10 MPa) (according to ASTM C633-79).

Willamette River: Stormwater Source Control Improvements Project

(e) Cleaning - After fabrication and prior to application of the coating system, thoroughly clean all sheets by a caustic wash and hot rinse process followed immediately by hot air drying.

Inspect all sheets for traces of foreign matter, soil particles, grease or rust prior to coating.

(f) Coatings - Furnish coating of all sheets according to the following requirements:

- Apply a base coat of glass frit containing nickel oxide to both sides of the sheet.
- Apply a second coat of milled cobalt blue glass to both sides of the sheets.
- Apply a third coat of white glass mixture reinforced with titanium oxide, equivalent to Aquastore Vitrium to all interior sidewall and floor sheet surfaces, or approved equal. An acceptable alternate three coat system must be submitted to Engineer for approval prior to manufacturing.
- Apply the same glass coating as applied to the exterior sheet surfaces to the exposed edges.
- Fire the sheets at a minimum temperature of 1500° F (816 C) according to the manufacturer's ISO 9001 quality control procedures, including firing time, furnace humidity, temperature control, etc.
- Provide the 3-coat process to the interior coating for sidewall sheets and floor. Furnish a white interior color and a cobalt blue exterior color.
- Provide 10.0 to 18.0 mils (0.010 to 0.018 inch) minimum dry film interior coating thickness.
- Provide 7.0 to 15.0 mils (0.007 to 0.015 inch) minimum dry film exterior coating thickness.
- Provide a coating of anti-graffiti paint applied to the above grade exterior tank wall surfaces. Include the coating color with the submittal for approval by the Engineer.

(g) Factory Inspection - Ensure the manufacturer's quality system is ISO 9001 certified and refer to ISO for the following testing and procedures:

- **Chemical Resistance of Glass Coating:** Individual test frits to determine chemical resistance of glass coating according to pertinent sections of ISO 28706-1:2008.
- **Measurement of Glass Thickness:**
 - Measure glass thickness using an SSPC approved electronic dry film thickness gage (magnetic induction type) and with a valid calibration record.
 - Provide measurement records to the Engineer to document coatings were applied as specified, and to the dry film thicknesses specified in Section (f) above.
- **Impact Adherence Test:** Test the glass coating adherence to the steel according to ISO standards. Reject any sheet that has poor adherence.
- **Fishscale Test:** Test the glass coating in-house for fishscale by placing the full size production sheets in an oven at 400° F (204° C) for one hour. Then, examine the sheets for signs of fishscale. Reject any sheet exhibiting fishscale and test all sheets from that gage lot similarly.

Willamette River: Stormwater Source Control Improvements Project

(h) Packaging - Package all sheets that pass factory inspection and quality control checks to protect from damage prior to packing for shipment. Place heavy paper or plastic foam sheets between each panel to eliminate sheet-to-sheet abrasion during shipment. Wrap individual stacks of panels in heavy mil plastic and steel band to special wood pallets built to maintain the roll-radius of the tank panels and minimize contact or movement of finished panels during shipment. Ship tank components alone from the factory by truck.

01191.12 Roof - Furnish an aluminum, dome roof integral to the tank, with a clear span designed to be self-supporting from the periphery structure with primary horizontal thrust contained by an integral tension ring and supporting all specified live loads. Furnish a roof meeting the following requirements:

- Triangulated dome frame struts: AA6005A-T6 aluminum.
- Structural frame node plates: 0.375 inch nominal thickness, AA6061-T6 aluminum.
- Triangular dome panels: 0.050 inch nominal thickness, AA3003-H16 aluminum Sheet.
- Perimeter tension/compression ring: AA6005A-T6 aluminum.
- Fasteners: AA2024-T4 aluminum or austenitic series 300 stainless steel as required by the manufacturer's design.
- Sealant: Silicone, conforming to federal specification TT-S-00230.
- Gaskets: Silicone, conforming to federal specification ZZ-R-765, Class 2, Grade 50 or equal or Neoprene conforming to ASTM C509-00.
- Dormers, doors, and hatches: AA6061-T6, AA6005A-T6, AA5086-H34 or AA5052-H36 aluminum, 0.090inch nominal thickness.

01191.13 Rolled Structural Shapes - Furnish rolled structural shapes according to ASTM A36 or ASTM A992.

01191.14 Horizontal Wind Stiffeners - Furnish wind stiffeners according to the following:

- Design and provide "web truss" type intermediate horizontal wind stiffeners with an extended tail creating multiple layers of stiffener, permitting wind loads to be distributed around the tank.
- Provide hot-dipped galvanized coated steel web truss stiffeners.
- Rolled steel angle stiffeners are not permitted for use as intermediate horizontal wind stiffeners.

01191.15 Bolt Fasteners - Furnish bolt fasteners meeting the following requirements:

(a) Lap Joint Bolts - Furnish 1/2" - 13 UNC- 2A rolled thread bolts for tank lap joints that meet the minimum requirements of AWWA D103, Section 2.2.

(b) Bolt Material - Furnish bolts meeting the minimum requirements of AWWA D103, Section 2.2 and the following requirements:

- SAE J429 Grade 2 (1-inch bolt length):

Willamette River: Stormwater Source Control Improvements Project

- Tensile Strength - 74,000 psi (510 MPa) Min.
- Proof Load - 55,000 psi (379 MPa) Min.
- Allowable shear stress with threads excluded from the shear plane - 18,163 psi (125 MPa) Min
- SAE J429 Grade 5 (1-1/4-inch bolt length)
 - Tensile Strength - 120,000 psi (827 MPa) Min.
 - Proof Load - 85,000 psi (586 MPa) Min.
 - Allowable shear stress with threads excluded from the shear plane – 29,454 psi (203 MPa) Min.
- SAE J429 Grade 8 (>1-1/4-inch bolt length)
 - Tensile Strength - 150,000 psi (1034 MPa) Min.
 - Proof Load - 120,000 psi (827 MPa) Min.
 - Allowable shear stress with threads excluded from the shear plane – 36,818 psi (254 MPa) Min.

(c) Bolt Finish - Provide a minimum of 2.0 mils (0.002 inch) of mechanically deposited zinc under the bolt head, on the shank and the threads.

(d) Bolt Head Encapsulation – Provide high-impact polypropylene copolymer encapsulation meeting ANSI/NSF Standard 61 for indirect additives. Apply the encapsulation on the entire bolt head up to the splines on the shank. Provide ultraviolet light-resistant material to cover and stabilize the resin such that it produces a black appearance.

Install bolts on the vertical tank wall such that the head portion is located inside the tank, and the washer and nut are on the exterior.

When selecting bolts for lap joints, select bolts that will not result in exposure of threaded portions to the “shear plane” between tank sheets. Provide lap joint bolts that include a minimum of 4 splines on the underside of the bolt head at the shank in order to resist rotation during torquing.

Size bolt lengths to achieve a neat and uniform appearance. Excessive threads extending beyond the nut after torquing will not be permitted.

01191.16 Sealants - Furnish sealants to seal lap joints, bolt connections, and edge fillets for sheet notches and starter sheets according to the following:

(a) Joint Sealant - Furnish a one-component, moisture-cured, polyurethane compound lap joint sealant suitable for contact with potable water and certified to meet ANSI/NSF Additives Standard 61 for indirect additives.

Provide a sealant suitable for interior and exterior use that has excellent adhesion to glass coating and exhibits low shrinkage when curing to a rubber-like consistency.

(b) Sealant Curing - Furnish sealant that cures at 73°F (23°F) and 50 percent RH.

(c) Tack-Free Time - Furnish sealant with a tack-free time of 6 to 8 hours.

Willamette River: Stormwater Source Control Improvements Project

(d) Final Cure Time - Furnish sealant with a final cure time of 10 to 12 Days.

(e) Gasket - Furnish gaskets meeting the requirements of AWWA D-103 Section 4.10. Furnish gaskets tested and certified for use in potable water according to NSF 61.

01191.17 Inlet Check Valve - Furnish a Red Valve Company Tideflex check valve on the inlet pipe according to 00445.11(I).

01191.18 Appurtenances - Furnish appurtenances according to AWWA D103, section 5 and according to the following:

(a) Pipe Connections - Furnish pipe connections according to the following:

- Where pipe connections are shown to pass through tank panels, field locate, saw cut, and utilize an interior and exterior flange assembly. Acetylene torch cutting or welding is not permitted. Reinforce the tank shell according to AWWA D103 latest edition. Apply a single component urethane sealer on any cut panel edges or bolt connections.
- **Inlet Pipe:** Class 52 Ductile Iron Pipe of the diameter as shown. Inside the tank, terminate the pipe at 3 inches above the floor slab.
- **Outlet Pipe:** Class 52 Ductile Iron Pipe of the diameter as shown. Inside the tank terminate the pipe as shown in the plans above the foundation slab. Mount the pipe 6 inches (min.) to 12 inches (max.) off the inside face of the tank wall. Provide pipe supports to anchor the pipe to the inside wall of the tank at the top of the pipe and 3-foot maximum spacing down the length of the vertical run of pipe.
- **Overflow Pipe:** Class 52 Ductile Iron Pipe of the diameter as shown. Inside the tank terminate the pipe above the foundation slab as shown. Mount the pipe 6 inches (min.) to 12 inches (max.) off the inside face of the tank wall. Provide pipe supports to anchor the pipe to the inside wall of the tank at the top of the pipe and 3-foot maximum spacing down the length of the vertical run of pipe.
- **Sediment Removal Port:** Provide a 12-inch diameter, Class 52 ductile iron gate valve flange x flange sediment removal port. Provide a gate valve with a handwheel. Bolt on a blind flange using stainless steel bolts with tamper proof hardware.
- **Supernatant Removal Port:** Provide a 3-inch diameter, stainless steel full port ball valve with PTFE seals and seats, stainless steel male cam and groove coupling, and stainless steel female cam and groove cap.

(b) Pipe Supports - Provide stainless steel saddles and u-bolt type and bolted or welded pipe supports to the wall of the tank.

(c) Roof Sleeve for Conduit Connection - Provide 2 process connections into the tank (6-inch ASME 150 lb flat-faced flange for level transducer and floatball level switch instruments).

(d) Roof Access Hatch – Provide a 4 by 6-foot double-leaf personnel access hatch fabricated of aluminum. Provide aluminum or stainless steel hardware. Locate the hatch with the long dimension parallel to the radius of the tank and centered over the sediment removal port. Set back the hatch from the edge of the tank so as to not conflict with the

Willamette River: Stormwater Source Control Improvements Project

roof safety system. Equip the access hatch with a lifting handle, a stainless steel spring assist mechanism, and a stainless steel automatic hold-open arm to lock the door in the open position. Fabricate hinges with aluminum lugs and stainless steel pins. Provide staples for affixing padlocks for security. Construct the hatch gasketed and watertight.

(e) Sidewall Access Hatch – Provide a 4-foot diameter watertight sidewall access hatch with two lifting handles and a minimum 30-inch inside clearance for personnel access. Locate the hatch as shown. Bolt the sidewall access hatch closed. Provide hatches with a davit or hinges that conform to AWWA D 103. Hatches may be round or square. Set the bottom of the hatch 24 inches above the interior slab. Provide a locking mechanism to secure the watertight sidewall access hatch that is keyed to match a key standard provided by ODOT.

(f) Roof Ventilators – Provide one 2-foot minimum diameter aluminum roof ventilator, with 2 by 2 foot 316 stainless steel insect screens. Provide removable screened openings between the vertical support members of the vent. Size and design the vent to allow venting of a 5,000 gpm pumping rate assuming an effective area of 75% (maximum) of screen opening.

(g) Roof Safety Rail System - Install a 42-inch tall safety rail system through 90 degrees of the top of the tank centered on the access hatch. Install the safety rail to meet OSHA Standards and capable of resisting a structural load of 200 lb. (minimum) in all directions. Provide hot-dipped zinc galvanized rails with factory-finished powder coat paint in safety yellow.

(h) Safety Anchor Point - Install 24-inch tall commercial roof anchors for the connection of a fall protection system according to manufacturer's instructions and ANSI Z359.18, ANSI A10.32, OSHA 1926 and OSHA 1910. Provide hot-dip galvanized safety anchor points that have a 5,000-lbf (minimum) breaking strength.

(i) Identification Plate – Furnish a manufacturer's nameplate listing the tank serial number, tank diameter and height, and maximum design capacity. Install the nameplate on the tank exterior sidewall at a location approximately 5 feet from grade elevation in a position of unobstructed view.

(j) Cathodic Protection – Install a passive cathodic protection system supplied by the tank manufacturer based upon information supplied by the Engineer or Owner.

(k) Baffle Walls – Provide galvanized steel baffle walls as shown. Extend baffle walls the full interior width of the tank where shown. A gap of up to 2 inches may be provided where the baffle wall attaches to the sidewall of the tank. Design the baffle wall to support its own weight and the hydrodynamic forces when the pump is running at its peak flow of 5,000 gpm. Provide up to two vertical columns to support the baffle wall on the foundation slab. Extend the columns from the floor to the ceiling as needed. Provide up to 2 horizontal struts to support the baffle wall and anchor to the sidewall of the tank. Furnish stainless steel fasteners for baffle wall assemblies.

Labor

01191.30 Manufacturer Qualifications:

Willamette River: Stormwater Source Control Improvements Project

(a) Providing Manufacturer Qualifications - The Engineer's selection of factory applied glass-fused-to-steel bolted tank construction for this facility has been predicated upon specific criteria, construction methods, and an optimum coating for resistance to internal and external tank corrosion. Reductions in the specified design, construction or coating standards are not acceptable unless demonstrated to provide greater strength, serviceability and performance.

Contract a manufacturer firm for the tank specializing in the design, fabrication and erection of factory applied glass-fused-to-steel bolted tanks. The manufacturer must employ a staff of full-time design engineers and must own and operate its steel fabrication facilities and glass coating facilities.

The contractor submittal includes the following documentation to demonstrate that the proposed tank manufacturer meets the following qualifications:

- Typical structure drawings.
- List of tank materials, appurtenances and tank coating specifications.
- List of 5 tanks presently in potable water service designed to AWWA D 103 Standard, of equal or greater size and character specified, operating satisfactorily for a minimum of 5 years, including the name and telephone number of Owner and Engineer.

The Engineer reserves the right to evaluate suppliers based on long-term, 30-year minimum operation, coating and maintenance costs. Values to be used in this evaluation are at the discretion of the Engineer.

(b) Alternate Manufacturers - Manufacturers lacking the experience requirement will be considered, if the manufacturer provides a satisfactory 5-year 100 percent Performance Bond in lieu of evidence of experience and long-term operation.

To propose alternate tank suppliers, provide the following minimum qualifications to the Engineer:

- Typical structure drawings.
- List of tank materials, appurtenances and tank coating specifications.
- List of 5 tanks presently in potable water service designed to AWWA D 103 Standard, of equal or greater size and character specified, operating satisfactorily for a minimum of 5 years, including the name and telephone number of Owner and Engineer.

The Engineer reserves the right to evaluate suppliers based on long-term, 30-year minimum operation, coating and maintenance costs. Values to be used in this evaluation will be at the discretion of the Engineer.

01191.31 Personnel Qualifications - Perform the sidewall erection Work using personnel experienced in sidewall erection and using factory-trained erectors. Select personnel who are authorized dealers of the tank manufacturer and regularly engage in erection of these tanks.

Construction

01191.40 Concrete Tank Floor Installation:

- (a) **Tank Floor** - Provide the reinforced concrete tank floor with the slopes and elevations as shown with an embedded glass coated steel starter sheet according to the manufacturer's design and according to AWWA D103 latest edition, Sec 11.4. Slot mount style foundation is not acceptable.
- (b) **Starter Ring** – Leveling of the starter ring is required. The maximum differential elevation within the ring is 1/8 inch, and the maximum differential elevation within any 10-feet of length is 1/16 inch.
- (c) **Securing Starter Ring** – Use a leveling plate assembly consisting of two anchor rods and a slotted plate as shown to secure the starter ring, prior to encasement in concrete. Installation of the starter ring on concrete blocks or bricks, using shims for adjustment, is not permitted.
- (d) **Water Seal** - Place one butyl rubber elastomer waterstop seal on the inside surface of the starter ring below concrete floor line. Place one bentonite impregnated water seal below the butyl rubber seal. Install the materials according to tank manufacturer's instructions.
- (e) **Foundation** - Furnish and drive piles according to 00520.80, as applicable.

01191.41 Tank Sidewalk Erection:

- (a) **Procedures** – Field erect the glass-coated, bolted-steel tank according to the procedures outlined in the manufacturer's erection manual.
- (b) **Equipment** – Use specialized erection jacks and building equipment developed and manufactured by the tank manufacturer to erect the tanks.
- (c) **Protection of Coating** – Take particular care in handling and bolting of the tank panels, structural members, and appurtenances to avoid abrasion of the coating system. Prior to filling the tank and performing any testing, provide equipment and facilitate access to the Engineer to visually inspect all surface areas. Repair or replace any areas found to be damaged as directed, at no additional cost to the Agency. Complete repairs according to AWWA D-103. Submit complete details of proposed repair materials and procedures to the Engineer for review and approval prior to initiating any repair work
- (d) **Leak Test** - Perform an electrical leak test during erection using a wet sponge 9-volt leak detection device. Repair all electrical leak points found on the inside surface according to manufacturer's published touch up procedure.
- (e) **Backfill** - Backfill placed against the tank sidewall allowed only by prior written approval of the tank manufacturer. Place approved backfill against the tank sidewall according to the tank manufacturer.

Finishing and Cleaning Up

Willamette River: Stormwater Source Control Improvements Project

01191.70 Hydrostatic Field Testing - Following completion of erection and cleaning of the tank, test the structure (including sidewall hatches) for liquid tightness by filling tank to its overflow elevation.

Correct any leaks disclosed by this test according to the manufacturer's recommendations and AWWA D-103.

01191.75 Trade Practice Guarantees – Furnish trade practice guarantees if available for pump station and pump control room electrical pay items according to 00170.85(c)(2).

Measurement

01191.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

01191.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, as lump sum, for the item "Presettling Tank, 26'D x 20'H (WR-307)".

Payment will be payment in full for furnishing and installing all Materials and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified, including design and construction of a glass-fused-to-steel bolted, water storage tank and tank appurtenances as shown and as specified.

Furnishing and driving piles will be paid for according to 00520.90, as applicable.

No separate or additional payment will be made for:

- Manufacturer's representative

SECTION 02050 – CURING MATERIALS

Comply with Section 02050 of the Standard Specifications modified as follows:

02050.10 Liquid Compounds – Replace the paragraph that begins “Furnish liquid membrane-forming curing ...” with the following:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309. Before use, submit two, one quart samples from each lot for testing. Samples will be tested according to ODOT TM 721. Samples are not required for curing compounds used on Commercial Grade Concrete.

SECTION 02320 - GEOSYNTHETICS

Comply with Section 02320 of the Standard Specifications modified as follows:

02320.20 Geotextile Property Values – Replace Table 02320-3 with the following table:

Table 02320-3 Geotextile Property Values for Sediment Fence ¹

Geotextile Property	ASTM Test Method	Unit	Geotextile Property Requirements
			Woven and Nonwoven
Grab Tensile Strength (minimum) Machine and Cross Machine Directions	D 4632	lb	120 100
Apparent Opening Size (AOS) (maximum) U.S. Standard Sieve	D 4751	—	30
Permittivity (minimum)	D 4491	sec ⁻¹	0.05
Ultraviolet Stability Retained Strength (minimum)	D 4355 (at 500 hours)	%	70

¹ All geotextile properties are Minimum Average Roll Values (MARV). The test results for any sampled roll in a lot shall meet or exceed the values shown in the table.

SECTION 02415 - PLASTIC PIPE

Comply with Section 02415 of the Standard Specifications modified as follows:

02415.40 Polypropylene Pipe – Replace this subsection, except for the subsection number and title, with the following:

Furnish polypropylene pipe and fittings as follows:

(a) Non-Pressure Storm Sewers and Culverts - Furnish polypropylene pipe and fittings for non-pressure storm sewers and culverts from the QPL and meeting the following requirements:

Dual Wall Pipe ASTM F2764, ASTM F2881,
.....or AASHTO M 330 Type S
Triple Wall Pipe ASTM F2764 or AASHTO M 330 Type D
Watertight Joints ASTM D3212

(b) Non-Pressure Sanitary Sewers - Furnish polypropylene pipe and fittings for non-pressure sanitary sewers from the QPL and meeting the following requirements:

Dual Wall Pipe ASTM F2764
Triple Wall Pipe ASTM F2764
Watertight Joints ASTM D3212

SECTION 02510 – REINFORCEMENT

Comply with Section 02510 of the Standard Specifications modified as follows:

02510.11(c) Coated Reinforcement Ties and Supports - Delete this subsection.

02510.11(d) Epoxy Coating Repair - Delete this subsection.

02510.20 Mechanical Splices - Replace this subsection, except for the subsection number and title, with the following:

Furnish mechanical splices from the QPL. Where bars of different sizes or strengths are connected, the strength of the smaller or weaker bar governs. Measure the total slip displacement after loading in tension to 30.0 ksi and relaxing to 3.0 ksi. The maximum allowed displacement for bars up to No. 14 is 0.01 inches. and is 0.03 inches for No. 18 bar.

Type 1 Mechanical Splices - Furnish Type 1 Mechanical Splices that develop at least 125 percent of the specified minimum yield strength of the reinforcing bars. Type 1 Mechanical Splices are not allowed for column bars.

Type 2 Mechanical Splices - Furnish Type 2 Mechanical Splices that develop at least 125 percent of the specified minimum yield strength of the reinforcing bars and 100 percent of the specified tensile strength of the reinforcing bars.

02510.30(d) Ties and Support - Delete this subsection.

02510.60 Wire Reinforcement - Replace this subsection with the following subsection:

02510.60 Ties and Supports - Provide tie wire and supports according to *CRSI Manual of Standard Practice*.

(a) Coated Reinforcement Ties and Supports – Provide nonmetallic coated ties and supports for coated reinforcement, including ties for coated-to-uncoated reinforcement connections.

(b) Uncoated Reinforcement Ties and Supports - Tie all mats of galvanized steel bars with galvanized ties. Provide precast concrete blocks with galvanized ties that support galvanized reinforcement.

SECTION 02560 - FASTENERS

Comply with Section 02560 of the Standard Specifications modified as follows:

02560.60(a)(1) Method 1 – Replace the paragraph that begins “Continue to tighten the nut until...” with the following:

Willamette River: Stormwater Source Control Improvements Project

Continue to tighten the nut until the nut has turned twice the rotation shown in Table 00560-3 of Section 00560 from its snug-tight position mark for bolt lengths up to 8D (for greater than 8D up to 12D bolt lengths tighten to 1 1/6 turn from snug-tight).

SECTION 02630 – BASE AGGREGATE

Comply with Section 02630 of the Standard Specifications modified as follows:

02630.11(a) Grading – Replace this subsection, except for the subsection number and title, with the following:

Provide open-graded Aggregate meeting the following grading requirements:

Table 02630-2
Aggregate Gradation for Open-Graded Aggregate

Sieve Size	Percent Passing (by Weight)
1"	100
3/4"	80 - 98
1/2"	60 - 85
3/8"	30 - 45
No. 100	0 - 6 (Dry Sieve)

02630.11(b) Fracture of Rounded Rock – Replace this subsection, except for the subsection number and title, with the following:

Determine fracture of rounded Rock according to AASHTO T 335. Provide Open-graded Aggregate meeting the following fracture requirements:

Percentage of Fracture (by Weight)
Material Retained on 3/4", 1/2", and 1/4" Sieves (two fractured faces) 90

SECTION 02910 - SIGN MATERIALS

Comply with Section 02910 of the Standard Specifications modified as follows:

Add the following subsection:

02910.23 Digital Printing -

(a) Digitally Printed Ink Systems – Provide digitally printed ink systems from the QPL that meet the following requirements:

- Produce traffic signs using components, and processes that comply with the retroreflective sheeting manufacturer's recommendations.
- Meet and comply with daytime and nighttime chromaticity (color standards) as recognized in ASTM D4956 Standard Specification for Retroreflective Sheeting for Traffic Control.
- Meet 70% for type XI standards of the initial retroreflectivity specifications of each respective reflective film color as found in ASTM D4956.

(b) Retroreflective Sheeting – Furnish retroreflective sheeting that:

- Consists of white or colored sheeting having a smooth outer surface and that has the property of a retroreflector over its entire surface.
- Conform to all requirements of the current version of ASTM D4956. Designate the retroreflective sheeting as type XI ASTM D4956 classification.
- Has a Class 1 pressure-sensitive adhesive, as defined by ASTM D4956, protected by an easily removable liner. Fabricate finished traffic signs and traffic sign faces using retroreflective sheeting of Type XI ASTM D4956 classification.

(c) Protective Overlay Film – Fabricate permanent traffic signs printed with digital ink systems with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. Comply with the retroreflective sheeting manufacturer's recommendations for the overlamine to ensure proper adhesion and transparency. Meet the reflective film durability as identified in the warranty requirements.

02910.33 Permanent Legends – Replace this subsection, except for the subsection number and title, with the following:

(a) General – Permanent legends consist of white retroreflective screened, red retroreflective screened, black screened or cut-out white retroreflective sheeting. Meet the design of the FHWA Standard Rounded Capital Letter Alphabets for the letters and numerals of all permanent legends.

(b) Retroreflective White Screened Legend – Use transparent paste materials for the reverse screening of retroreflective white legends and for the screening of retroreflective red legends conforming to the recommendations of the manufacturer of the reflective sheeting.

Willamette River: Stormwater Source Control Improvements Project

(c) Retroreflective Cut-out Legend – Use Material for retroreflective cut-out legend conforming to the requirements of 02910.20.

(d) Nonreflective Black Screened Legend – Furnish Material for nonreflective black screened legends that is compatible with the sign sheeting, as recommended by the sign sheeting manufacturer.

(e) Nonreflective Black Cut-out Legend – Use Material for nonreflective cut-out legend conforming to 02910.21.

(f) Digitally Printed Sign – Use processes and Materials for digitally printed signs conforming to the requirements of 02910.23.

Add the following subsection:

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.

BID SCHEDULE

Blank Page

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643 **PROJECT:** WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS
PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)

SECTION: 0001 TEMPORARY FEATURES AND APPURTENANCES

0010	0210-0100000A MOBILIZATION	ALL LUMP SUM		
0020	0221-0100000A TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	ALL LUMP SUM		
0030	0222-0102000J TEMPORARY SIGNS	2,371.00 SQFT		
0040	0222-0162000E SEQUENTIAL ARROW SIGNS	3.00 EACH		
0050	0222-0164000E PORTABLE CHANGEABLE MESSAGE SIGNS	6.00 EACH		
0060	0223-0168000T FLAGGERS	408.00 HOUR		
0070	0223-0168100T FLAGGER STATION LIGHTING	120.00 HOUR		
0080	0223-0169000E TRAFFIC CONTROL SUPERVISOR	362.00 EACH		
0090	0224-0104000E TEMPORARY BARRICADES, TYPE II	24.00 EACH		
0100	0224-0105000E TEMPORARY BARRICADES, TYPE III	36.00 EACH		
0110	0224-0145000E TEMPORARY PLASTIC DRUMS	219.00 EACH		
0120	0225-0153000F TEMPORARY STRIPING	10,897.00 FOOT		
0130	0225-0154000F STRIPE REMOVAL	11,341.00 FOOT		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0140	0225-0155100J LEGEND REMOVAL	64.00 SQFT		
0150	0226-0126100F TEMPORARY BARRIER	2,472.00 FOOT		
0160	0226-0133000E TEMPORARY IMPACT ATTENUATOR, SAND BARREL SYSTEM	6.00 EACH		
0170	0226-0134000E TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM	6.00 EACH		
0180	0226-0136000E MOVING TEMPORARY IMPACT ATTENUATORS, SAND BARREL SYSTEM	5.00 EACH		
0190	0226-0137000E MOVING TEMPORARY IMPACT ATTENUATORS, NARROW SITE SYSTEM	4.00 EACH		
0200	0226-0138000E TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED	1.00 EACH		
0210	0226-0141300E REPAIR TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM	5.00 EACH		
0220	0226-0141400E REPAIR TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED	1.00 EACH		
0230	0226-0141500E REPAIR TEMPORARY IMPACT ATTENUATOR, SAND MODULE	42.00 EACH		
0240	0228-0141600F PEDESTRIAN CHANNELIZING DEVICES	1,101.00 FOOT		
0250	0228-0167670E TEMPORARY CURB RAMP, PARALLEL TO CURB	4.00 EACH		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0260	0228-0167680J TEMPORARY WALKS	277.00 SQFT		
0270	0270-0114000F TEMPORARY TYPE CL CHAIN LINK FENCE	2,292.00 FOOT		
0280	0280-0101000J PLASTIC SHEETING	50.00 SQYD		
0290	0280-0106060E CHECK DAM, TYPE 6	1.00 EACH		
0300	0280-0110000A EROSION AND SEDIMENT CONTROL MANAGER	ALL LUMP SUM		
0310	0280-0110030E CONSTRUCTION ENTRANCE, TYPE 3	3.00 EACH		
0320	0280-0112500E CONCRETE WASHOUT FACILITY	3.00 EACH		
0330	0280-0113000F SEDIMENT FENCE	1,529.00 FOOT		
0340	0280-0114030E INLET PROTECTION, TYPE 3	59.00 EACH		
0350	0280-0114070E INLET PROTECTION, TYPE 7	28.00 EACH		
0360	0280-0115020F SEDIMENT BARRIER, TYPE 2	1,677.00 FOOT		
0370	0280-0119000E STRAW BALE	3.00 EACH		
0380	0290-0100000A POLLUTION CONTROL PLAN	ALL LUMP SUM		
0390	0294-0100000A HEALTH AND SAFETY PLAN	ALL LUMP SUM		
0400	0294-0200010M CONTAMINATED SOIL DISPOSAL	10,180.00 TON		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS

PROJECT KEY: 22552

ADDENDUM NO.: 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0410	0294-0300000A CONTAMINATED GROUNDWATER MOBILIZATION	ALL LUMP SUM		
0420	0294-0400000P CONTAMINATED GROUNDWATER REMOVAL	2,000.00 GAL		
0430	1999-9Z90000A TEMPORARY DEWATERING	ALL LUMP SUM		

SECTION: 0002 ROADWORK

0440	0305-0100000A CONSTRUCTION SURVEY WORK	ALL LUMP SUM		
0450	0310-0100000F REMOVAL OF PIPES	739.00 FOOT		
0460	0310-0101000F REMOVAL OF CURBS	558.00 FOOT		
0470	0310-0102000J REMOVAL OF WALKS AND DRIVEWAYS	239.00 SQYD		
0480	0310-0106000A REMOVAL OF STRUCTURES AND OBSTRUCTIONS	ALL LUMP SUM		
0490	0320-0100000A CLEARING AND GRUBBING	ALL LUMP SUM		
0500	0330-0105000K GENERAL EXCAVATION	130.00 CUYD		
0510	0350-0105000J SUBGRADE GEOTEXTILE	434.00 SQYD		

SECTION: 0003 DRAINAGE AND SEWERS

0520	0405-0100000K ROCK EXCAVATION	259.00 CUYD		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0530	0405-0104000K BOULDER EXCAVATION	622.00 CUYD		
0540	0405-0106000K TRENCH FOUNDATION	200.00 CUYD		
0550	0415-0100000F MAINLINE VIDEO INSPECTION	2,055.00 FOOT		
0560	0415-0401000F MAINLINE VIDEO WITH LASER PROFILE INSPECTION	122.00 FOOT		
0570	0445-035010AF 10 INCH STORM SEWER PIPE, 5 FT DEPTH	160.00 FOOT		
0580	0445-035012AF 12 INCH STORM SEWER PIPE, 5 FT DEPTH	142.00 FOOT		
0590	0445-035012BF 12 INCH STORM SEWER PIPE, 10 FT DEPTH	382.00 FOOT		
0600	0445-035012CF 12 INCH STORM SEWER PIPE, 20 FT DEPTH	25.00 FOOT		
0610	0445-035018AF 18 INCH STORM SEWER PIPE, 5 FT DEPTH	271.00 FOOT		
0620	0445-035018BF 18 INCH STORM SEWER PIPE, 10 FT DEPTH	306.00 FOOT		
0630	0445-035018CF 18 INCH STORM SEWER PIPE, 20 FT DEPTH	159.00 FOOT		
0640	0445-035018DF 18 INCH STORM SEWER PIPE, OVER 20 FT DEPTH	51.00 FOOT		
0650	0445-035024BF 24 INCH STORM SEWER PIPE, 10 FT DEPTH	22.00 FOOT		
0660	0445-035048DF 48 INCH STORM SEWER PIPE, OVER 20 FT DEPTH	86.00 FOOT		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0670	0445-040012AF 12 INCH SLOTTED DRAIN PIPE, 5 FT DEPTH	76.00 FOOT		
0680	0445-060012AF 12 INCH DUCTILE IRON PIPE, 5 FT DEPTH	31.00 FOOT		
0690	0445-060016AF 16 INCH DUCTILE IRON PIPE, 10 FT DEPTH	88.00 FOOT		
0700	0445-060018AF 18 INCH DUCTILE IRON PIPE, 5 FT DEPTH	81.00 FOOT		
0710	0445-060018AF 18 INCH DUCTILE IRON PIPE, 10 FT DEPTH	250.00 FOOT		
0720	0445-0660000E PIPE WYES, 10 INCH	3.00 EACH		
0730	0445-0735030K CONCRETE IN BLOCKS	14.00 CUYD		
0740	0445-0735050E PIPE SLOPE ANCHOR, CONCRETE, 12 INCH	2.00 EACH		
0750	0445-0735050E PIPE SLOPE ANCHOR, CONCRETE, 18 INCH	2.00 EACH		
0760	0470-0101000E CONCRETE STORM SEWER MANHOLES	12.00 EACH		
0770	0470-0106000E CONCRETE MANHOLES, LARGE PRECAST	7.00 EACH		
0780	0470-0307000E CONCRETE INLETS, TYPE CG-2	3.00 EACH		
0790	0470-0313000E CONCRETE INLETS, TYPE G-1	6.00 EACH		
0800	0470-0315000E CONCRETE INLETS, TYPE G-2	1.00 EACH		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0810	0490-0104000E CONNECTION TO EXISTING STRUCTURES	15.00 EACH		
0820	0490-0117000E FILLING ABANDONED STRUCTURES	5.00 EACH		
0830	0490-0121000E MAJOR ADJUSTMENT OF MANHOLES	2.00 EACH		
0840	0490-0123000E EXTRA FOR MANHOLES OVER EXISTING SEWERS	19.00 EACH		
0850	0495-0100000J TRENCH RESURFACING	496.00 SQYD		
0860	1999-9Z90000E CURB OPENING AND GRATE REMOVAL	1.00 EACH		
0870	1999-9Z90000E DUCKBILL CHECK VALVE	1.00 EACH		
0880	1999-9Z90000E EXPANSION FITTING, 10 INCH	2.00 EACH		
0890	1999-9Z90000E FLEXIBLE COUPLING, 16 INCH	1.00 EACH		
0900	1999-9Z90000E FLEXIBLE COUPLING, 18 INCH	2.00 EACH		
0910	1999-9Z90000E FLOW SPLITTER, TYPE 1	1.00 EACH		
0920	1999-9Z90000E FLOW SPLITTER, TYPE 2	1.00 EACH		
0930	1999-9Z90000E FLOW SPLITTER, TYPE 3	1.00 EACH		
0940	1999-9Z90000E FLOW SPLITTER, TYPE 4	1.00 EACH		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552

ADDENDUM NO.: 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0950	1999-9Z90000E FLOW SPLITTER, TYPE 6	1.00 EACH		
0960	1999-9Z90000E FLOW SPLITTER, TYPE 7	1.00 EACH		
0970	1999-9Z90000E FLOW SPLITTER, TYPE 8	1.00 EACH		
0980	1999-9Z90000E PIPE CAP	1.00 EACH		
0990	1999-9Z90000E STORMWATER CLEANOUT	9.00 EACH		

SECTION: 0004 BRIDGES

1000	0510-0100000A SHORING, CRIBBING, AND COFFERDAMS	ALL LUMP SUM		
1010	0510-0108000K GRANULAR STRUCTURE BACKFILL	924.00 CUYD		
1020	0520-0100000A FURNISH PILE DRIVING EQUIPMENT	ALL LUMP SUM		
1030	0520-0131000F FURNISH PP 18 X 0.625 STEEL PILES	1,476.00 FOOT		
1040	0520-0316000E DRIVE PP 18 X 0.625 STEEL PILES	36.00 EACH		
1050	0520-0325000E DRIVE TEST PILES	2.00 EACH		
1060	0530-0104000A REINFORCEMENT, GRADE 60	ALL LUMP SUM		
1070	0540-0102000A FOUNDATION CONCRETE, CLASS 4000	ALL LUMP SUM		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643 **PROJECT:** WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS
PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1080	0581-0100000E BRIDGE DRAINS	2.00 EACH		
1090	1999-9Z90000A STAIRS, WALKWAY, & RAILING FOR DRAINAGE STRUCTURE ACCESS	ALL LUMP SUM		

SECTION: 0005 BASES

1100	0641-0102000M AGGREGATE BASE	2,275.00 TON		

SECTION: 0006 WEARING SURFACES

1110	0730-0100000M EMULSIFIED ASPHALT FOR TACK COAT	10.00 TON		
1120	0745-0302000M LEVEL 3, 1/2 INCH ACP	406.00 TON		
1130	0745-0402000M LEVEL 4, 1/2 INCH ACP	2,364.00 TON		
1140	0745-0620000M PG 64-22 ASPHALT IN LEVEL 3, 1/2 INCH ACP	23.00 TON		
1150	0745-0640100M PG 70-22ER ASPHALT IN LEVEL 4, 1/2 INCH ACP	131.00 TON		
1160	0748-0103000J 2 INCH ASPHALT CONCRETE PAVEMENT REPAIR	18,005.00 SQYD		
1170	0748-0103000J 5 INCH ASPHALT CONCRETE PAVEMENT REPAIR	262.00 SQYD		
1180	0748-0109000J 17 INCH ASPHALT CONCRETE PAVEMENT REPAIR	817.00 SQYD		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1190	0748-0110000J 19 INCH ASPHALT CONCRETE PAVEMENT REPAIR	173.00 SQYD		
1200	0748-0111000J 20 INCH ASPHALT CONCRETE PAVEMENT REPAIR	184.00 SQYD		
1210	0748-0114000J 23 INCH ASPHALT CONCRETE PAVEMENT REPAIR	272.00 SQYD		
1220	0754-0100000J PLAIN CONCRETE PAVEMENT REPAIR	588.00 SQYD		
1230	0759-0100000F CONCRETE CURBS	558.00 FOOT		
1240	0759-0122000J CONCRETE ISLANDS	284.00 SQFT		
1250	0759-0134000F MONOLITHIC CURB AND SIDEWALKS	414.00 FOOT		
1260	0760-0100000J UNIT PAVERS	1,020.00 SQFT		

SECTION: 0007 PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES

1270	0820-0500000F REMOVE AND REINSTALL EXISTING CONCRETE BARRIER	36.00 FOOT		
1280	0842-0103001E FACILITY FIELD MARKERS, TYPE S2	26.00 EACH		
1290	0855-0101100E MONO-DIRECTIONAL WHITE TYPE IAR MARKERS	149.00 EACH		
1300	0855-0103100E BI-DIRECTIONAL YELLOW TYPE IAR MARKERS	170.00 EACH		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1310	0855-0107100E BI-DIRECTIONAL YELLOW TYPE IAR MARKERS, RECESSED	35.00 EACH		
1320	0857-0101000L CONTINUOUS RUMBLE STRIPS	0.27 MILE		
1330	0865-0116600F THERMOPLASTIC, EXTRUDED, SURFACE, PROFILED	17,700.00 FOOT		
1340	0867-0103100E PAVEMENT LEGEND, TYPE B-HS: ARROWS	4.00 EACH		
1350	0867-0131000E PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	3.00 EACH		
1360	0867-0145100J PAVEMENT BAR, TYPE B-HS	100.00 SQFT		
1370	0868-0200000J GREEN BICYCLE LANE, METHYL METHACRYLATE	48.00 SQFT		

SECTION: 0008 PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS

1380	0902-0101000E CROSSWALK CLOSURE SUPPORTS	1.00 EACH		
1390	0905-0101000A REMOVE AND REINSTALL EXISTING SIGNS	ALL LUMP SUM		
1400	0920-0100000A SIGN SUPPORT FOOTINGS	ALL LUMP SUM		
1410	0930-0116000A PIPE SIGN SUPPORTS	ALL LUMP SUM		
1420	0940-0202000J SIGNS, STANDARD SHEETING, SHEET ALUMINUM	6.00 SQFT		
1430	0970-0100000A POLE FOUNDATIONS	ALL LUMP SUM		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1440	0970-0105000A SWITCHING, CONDUIT, AND WIRING	ALL LUMP SUM		
1450	0970-0200000A LIGHTING POLES AND ARMS	ALL LUMP SUM		

SECTION: 0009 RIGHT-OF-WAY DEVELOPMENT AND CONTROL

1460	1010-0100000A WATER QUALITY STRUCTURE, D00327 OF16-2	ALL LUMP SUM		
1470	1010-0100000A WATER QUALITY STRUCTURE, D00328 OF16-2	ALL LUMP SUM		
1480	1010-0100000A WATER QUALITY STRUCTURE, D00329 OF16-3	ALL LUMP SUM		
1490	1010-0100000A WATER QUALITY STRUCTURE, D00331 OF18-1	ALL LUMP SUM		
1500	1010-0100000A WATER QUALITY STRUCTURE, D00333 OF19-2	ALL LUMP SUM		
1510	1010-0100000A WATER QUALITY STRUCTURE, D00334 OF22C	ALL LUMP SUM		
1520	1010-0100000A WATER QUALITY STRUCTURE, D00335 WR206	ALL LUMP SUM		
1530	1010-0100000A WATER QUALITY STRUCTURE, D00336 WR206	ALL LUMP SUM		
1540	1010-0100000A WATER QUALITY STRUCTURE, D00337 WR208	ALL LUMP SUM		
1550	1010-0100000A WATER QUALITY STRUCTURE, D00338 OF22D	ALL LUMP SUM		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1560	1010-0100000A WATER QUALITY STRUCTURE, D00405 OF22D	ALL LUMP SUM		
1570	1010-0100000A WATER QUALITY STRUCTURE, D00406 WR126	ALL LUMP SUM		
1580	1010-0100000A WATER QUALITY STRUCTURE, D00407 WR204-1	ALL LUMP SUM		
1590	1010-0100000A WATER QUALITY STRUCTURE, D00408 WR204-2	ALL LUMP SUM		
1600	1010-0100000A WATER QUALITY STRUCTURE, D00409 WR79	ALL LUMP SUM		
1610	1010-0100000A WATER QUALITY STRUCTURE, D00428 WR510	ALL LUMP SUM		
1620	1010-0100000A WATER QUALITY STRUCTURE, D00429 OF52	ALL LUMP SUM		
1630	1010-0100000A WATER QUALITY STRUCTURE, D00430 OF18-2	ALL LUMP SUM		
1640	1010-0100000A WATER QUALITY STRUCTURE, D00431 WR307	ALL LUMP SUM		
1650	1010-0100000A WATER QUALITY STRUCTURE, D00432 FB-W	ALL LUMP SUM		
1660	1010-0100000A WATER QUALITY STRUCTURE, D00507 FB-W	ALL LUMP SUM		
1670	1010-0100000A WATER QUALITY STRUCTURE, D00508 FB-E	ALL LUMP SUM		
1680	1010-0100000A WATER QUALITY STRUCTURE, D00509 FB-E	ALL LUMP SUM		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15643

PROJECT: WILLAMETTE RIVER: STORMWATER SOURCE CONTROL
IMPROVEMENTS

PROJECT KEY: 22552 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1690	1030-0108000R PERMANENT SEEDING	0.13 ACRE		
1700	1040-0101000K TOPSOIL	72.00 CUYD		
1710	1040-0114000E CONIFER TREES, 6 FT HEIGHT	1.00 EACH		
1720	1040-0130000E DECIDUOUS TREES, 2 INCH CALIPER	44.00 EACH		
1730	1040-0153000E SHRUBS, #1 CONTAINER	69.00 EACH		
1740	1040-0193000K WOOD CHIP MULCH	80.00 CUYD		
1750	1050-0187000E 4 FOOT X 24 INCH CHAIN LINK SINGLE GATES	1.00 EACH		
1760	1050-0240000F REMOVING AND REBUILDING FENCE	142.00 FOOT		
1770	1069-0200000E PEDESTRIAN FENCE	6.00 EACH		

SECTION: 0010 WATER SUPPLY SYSTEMS

1780	1999-9Z90000A PRESETTLING TANK, 26'D X 20'H (WR-307)	ALL LUMP SUM		
1790	1999-9Z90000A PUMP CONTROL ROOM ELECTRICAL	ALL LUMP SUM		
1800	1999-9Z90000A PUMP CONTROL ROOM STRUCTURE	ALL LUMP SUM		
1810	1999-9Z90000A PUMP STATION	ALL LUMP SUM		

TOTAL BID: _____

