

**SPECIAL PROVISIONS
FOR HIGHWAY CONSTRUCTION**



**OREGON DEPARTMENT OF TRANSPORTATION
SALEM, OREGON**



**GRADING, DRAINAGE, STRUCTURE, PAVING, SIGNING & ROADSIDE
DEVELOPMENT**

US101: BUTTE CREEK CULVERT PROJECT

OREGON COAST HIGHWAY

TILLAMOOK COUNTY

SEPTEMBER 17, 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, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook 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 17th day of September, 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:

Scott Nelson, Resident Engineer, 855 Airport Rd SE, Building P, Salem 97301; or Email Scott.NELSON@odot.oregon.gov. All requests for information must be in writing with reference to the Project name.

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.....	7
SECTION 00150 - CONTROL OF WORK.....	7
SECTION 00160 - SOURCE OF MATERIALS	9
SECTION 00165 - QUALITY OF MATERIALS	14
SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES.....	16
SECTION 00180 - PROSECUTION AND PROGRESS.....	28
SECTION 00190 - MEASUREMENT OF PAY QUANTITIES	31
SECTION 00195 - PAYMENT	32
SECTION 00196 - PAYMENT FOR EXTRA WORK.....	37
SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK.....	37
SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS.....	38
SECTION 00210 - MOBILIZATION	39
SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC	39
SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL	41
SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS.....	44
SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES	46
SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES	50
SECTION 00225 - TEMPORARY PAVEMENT MARKINGS	51
SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS	52
SECTION 00230 – TEMPORARY ROADBED AND SURFACING	54
SECTION 00231 - TEMPORARY ACCESS ROAD	56
SECTION 00236 - AGENCY PROVIDED DISPOSAL SITES.....	58
SECTION 00240 - TEMPORARY DRAINAGE FACILITIES	62
SECTION 00245 - TEMPORARY WATER MANAGEMENT.....	62
SECTION 00280 - EROSION AND SEDIMENT CONTROL.....	66
SECTION 00290 - ENVIRONMENTAL PROTECTION	73
SECTION 00294 - CONTAMINATED MEDIA.....	87
SECTION 00295 - ASBESTOS MATERIALS	93

US101: Butte Creek Culvert Project

SECTION 00298 - WELL PRESERVATION AND ABANDONMENT	95
SECTION 00305 - CONSTRUCTION SURVEY WORK	98
SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS	98
SECTION 00320 - CLEARING AND GRUBBING	99
SECTION 00330 - EARTHWORK	100
SECTION 00331 - SUBGRADE STABILIZATION	107
SECTION 00350 - GEOSYNTHETIC INSTALLATION	107
SECTION 00390 - RIPRAP PROTECTION	109
SECTION 00415 - VIDEO PIPE INSPECTION	111
SECTION 00430 - SUBSURFACE DRAINS	113
SECTION 00440 - COMMERCIAL GRADE CONCRETE	113
SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE	115
SECTION 00460 - PAVED CULVERT END SLOPES	121
SECTION 00480 - DRAINAGE CURBS	121
SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES	122
SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL	126
SECTION 00520 - DRIVEN PILES	134
SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE	141
SECTION 00531 - GLASS FIBER REINFORCED POLYMER BAR REINFORCEMENT FOR CONCRETE	145
SECTION 00535 - POST-INSTALLED ANCHOR SYSTEMS	149
SECTION 00540 - STRUCTURAL CONCRETE	151
SECTION 00545 - REINFORCED CONCRETE BRIDGE APPROACH SLABS	167
SECTION 00550 - PRECAST PRESTRESSED CONCRETE MEMBERS	167
SECTION 00582 - BRIDGE BEARINGS	169
SECTION 00587 - BRIDGE RAILS	173
SECTION 00593 - POWDER COATING METAL STRUCTURES	174
SECTION 00620 - COLD PLANE PAVEMENT REMOVAL	177
SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS	177
SECTION 00730 - EMULSIFIED ASPHALT TACK COAT	182
SECTION 00740 - COMMERCIAL ASPHALT CONCRETE PAVEMENT (CACP)	183
SECTION 00744 - ASPHALT CONCRETE PAVEMENT	184
SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES	189
SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES	190
SECTION 00810 - METAL GUARDRAIL	196
SECTION 00820 - CONCRETE BARRIER	198
SECTION 00840 - DELINEATORS AND MILEPOST MARKER POSTS	200
SECTION 00842 - FACILITY IDENTIFICATION MARKERS	201
SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS	202
SECTION 00855 - PAVEMENT MARKERS	204
SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE	204
SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS	205
SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS	207
SECTION 00910 - WOOD SIGN POSTS	207
SECTION 00920 - SIGN SUPPORT FOOTINGS	207
SECTION 00930 - METAL SIGN SUPPORTS	208
SECTION 00940 - SIGNS	213
SECTION 01014 - STORMWATER CONTROL, WATER QUALITY FILTER STRIP	217

US101: Butte Creek Culvert Project

SECTION 01030 - SEEDING	218
SECTION 01040 - PLANTING	227
SECTION 01091 - WATERWAY ENHANCEMENTS.....	240
SECTION 02001 - CONCRETE	245
SECTION 02010 – PORTLAND CEMENT	249
SECTION 02030 – SUPPLEMENTARY CEMENTITIOUS MATERIALS	250
SECTION 02050 – CURING MATERIALS	251
SECTION 02080 – GROUT	251
SECTION 02110 – POSTS, BLOCKS, AND BRACES	253
SECTION 02190 – PRESERVATIVE TREATMENT OF TIMBER	256
SECTION 02210 – COATING MATERIALS FOR TIMBER AND CONCRETE	257
SECTION 02320 - GEOSYNTHETICS.....	258
SECTION 02340 – ROCK GABION BASKETS.....	259
SECTION 02410 - CONCRETE PIPE	262
SECTION 02415 - PLASTIC PIPE	263
SECTION 02420 - METAL PIPE	264
SECTION 02440 – JOINT MATERIALS	268
SECTION 02450 – MANHOLE AND INLET MATERIALS	269
SECTION 02510 - REINFORCEMENT	272
SECTION 02513 – STAINLESS STEEL REINFORCEMENT.....	273
SECTION 02515 – PRESTRESSING REINFORCEMENT.....	275
SECTION 02520 – STEEL PILES.....	276
SECTION 02530 – STRUCTURAL STEEL	278
SECTION 02560 - FASTENERS.....	279
SECTION 02570 – COMPOSITE BEARINGS.....	281
SECTION 02571 – ELASTOMERIC BEARING PADS	284
SECTION 02610 – SPECIAL FILTER MATERIAL.....	287
SECTION 02630 – BASE AGGREGATE	287
SECTION 02690 – PCC AGGREGATES	288
SECTION 02810 – BRIDGE RAIL.....	291
SECTION 02820 – METAL GUARDRAIL.....	292
SECTION 02910 - SIGN MATERIALS	293
SECTION 03020 - EROSION MATERIALS.....	298

BID SCHEDULE

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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.

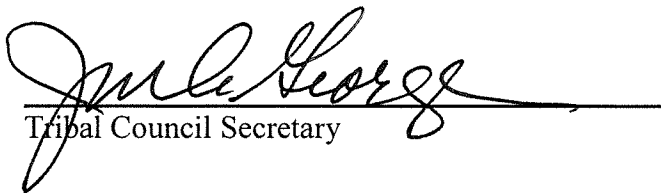
(2) The notice of appeal shall set forth the order from which the appeal is taken and the grounds upon which reversal or modification is sought.

(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

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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

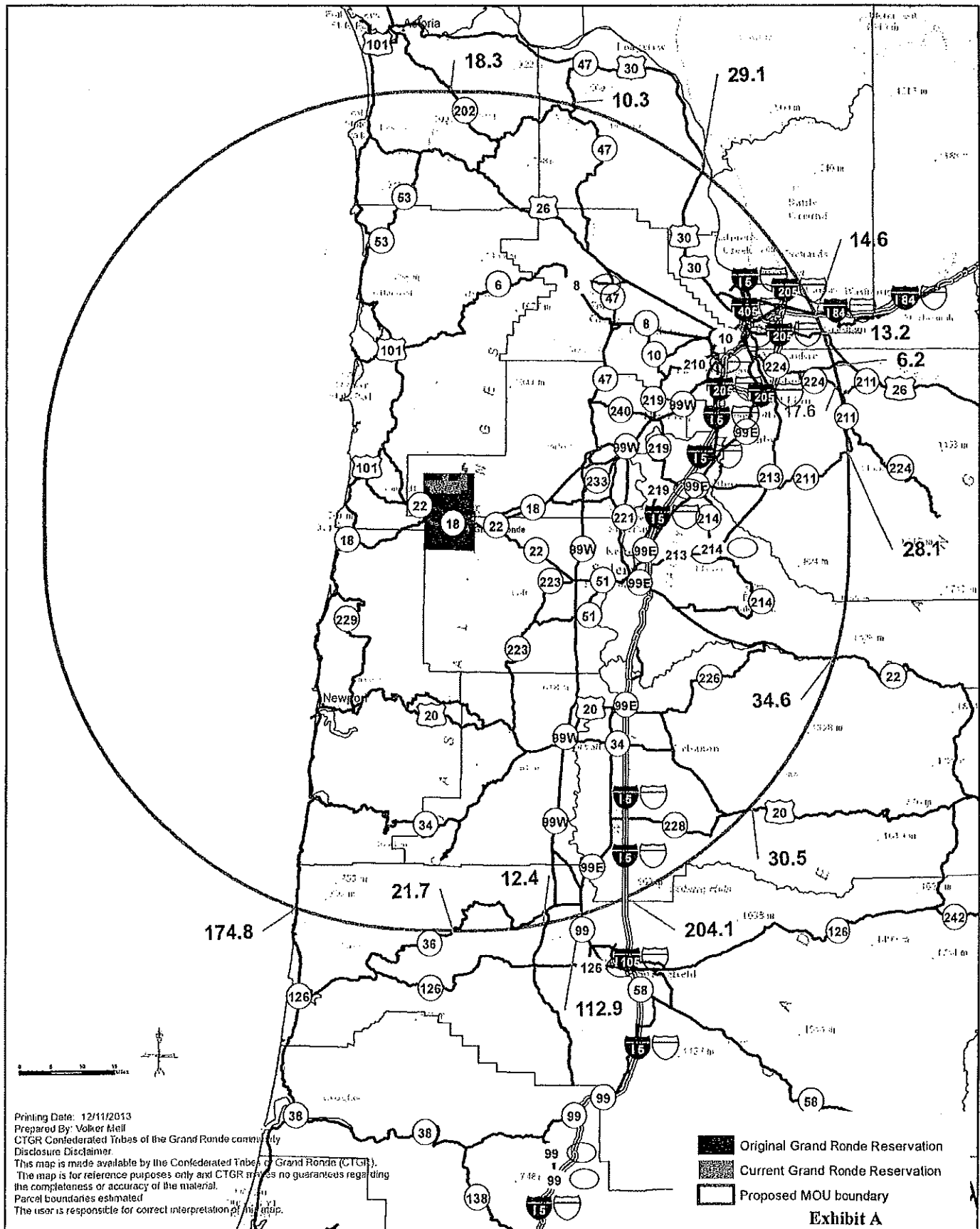
Date 06/27/2024

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

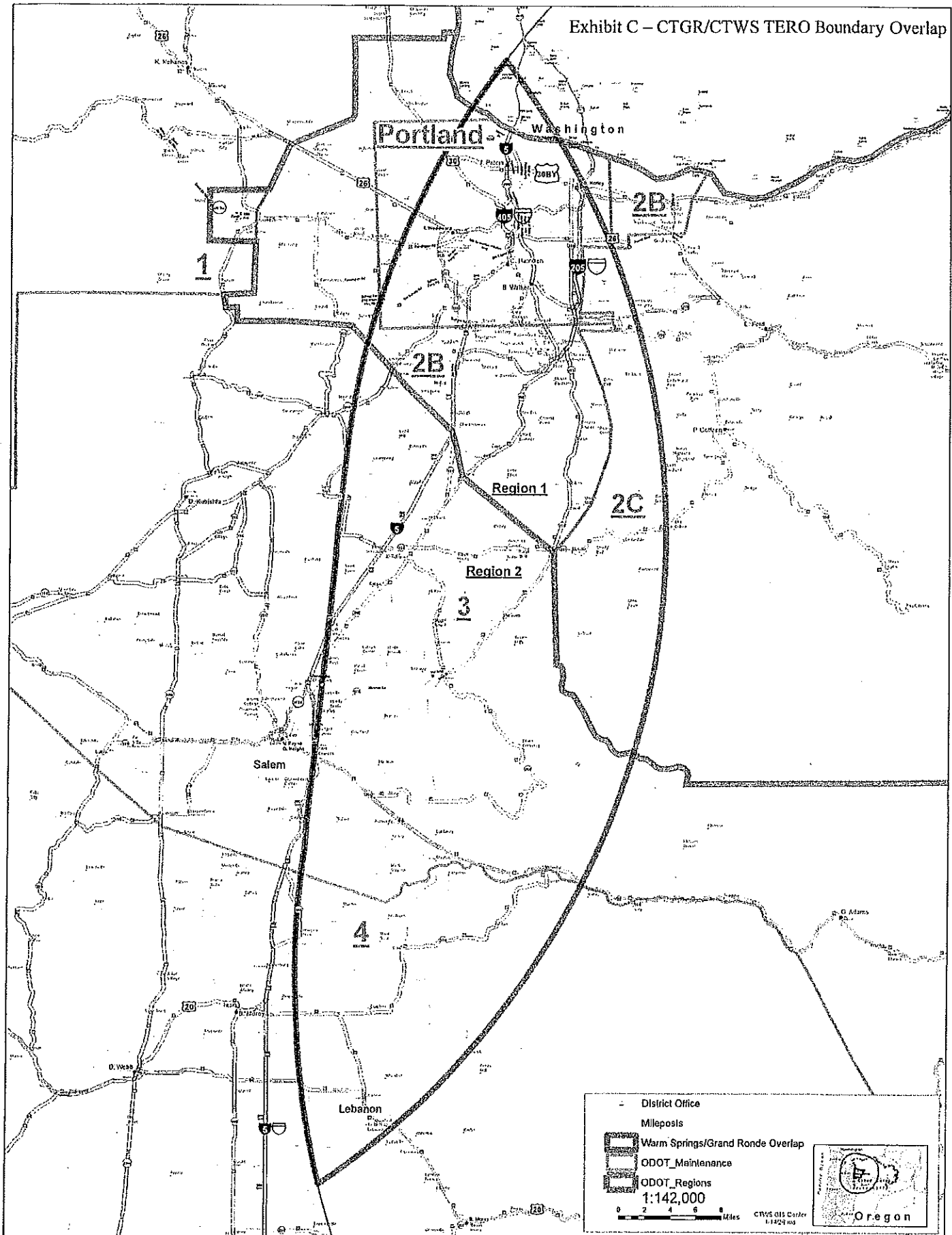


Exhibit C – CTGR/CTWS TERO Boundary Overlap

US101: Butte Creek Culvert Project

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

Applicable Wages - The following federal prevailing wage rates and the State prevailing wage rates (including any wage rate determinations, modifications, or amendments), last published prior to Bid Opening apply to this Project and will be incorporated into the Contract:

(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".

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.

Wage Rates are Internet-Accessible - Contractor may access the Davis-Bacon/BOLI Combined Prevailing Wage Rates, on the table provided by Bid Opening Date on the web page located at:

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

Covered Occupations – The BOLI publication titled "Definitions of Covered Occupations" last published prior to bid opening applies to this project and is located at:

<https://www.oregon.gov/boli/employers/pages/occupational-definitions.aspx>

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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, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook 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 Pavements. Modified Special Provisions were prepared by me or under my supervision. Section(s) 00331, 00350, 00620, 00641, 00730, 00740, 00744, 00680 and 02630
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

 RENEWS: 12-31-2026	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Permanent Signing and Pavement Markings. . Modified Special Provisions were prepared by me or under my supervision. Section(s) 00840, 00850, 00855, 00865, 00867, 00905, 00910, 00920, 00930, 00940, 02190, 02510, 02560
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

 RENEWS: 06-30-2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for (Stream Enhancement, Revetment, Temporary Water Management, & Stormwater) . Modified Special Provisions were prepared by me or under my supervision. Section(s) 00231, 00245, 00390, 00490, 01014, 01091, 02010, 02030, 02340, & 02450
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

 72877PE Digitally Signed 2026.06.29 07:31:19 -07'00' OREGON JANUARY 8, 2009 ERIC VOUGHT RENEWS: 06-30-2028	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Roadway. Modified Special Provisions were prepared by me or under my supervision. Sections 00230, 00240, 00305, 00310, 00320, 00330, 00415, 00440, 00445, 00460, 00480, 00749, 00759, 00810, 02410, 02415, 02420, 02440, 02610 & 02820.
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook 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 Traffic Control. Modified Special Provisions were prepared by me or under my supervision. Section(s) 00220, 00221, 00222, 00223, 00224, 00225, 00226, 00820, 02110, 02910
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

REGISTERED PROFESSIONAL LAND SURVEYOR Digitally Signed Date: 2026.01.12 06:59:44 -08'00' OREGON JULY 12, 2016 JAMISON L. BEST 85112 RENEWS: 12-31-2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Roadway. Modified Special Provisions were prepared by me or under my supervision. Section 00305
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  EXPIRES: 02-01-2027	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Contaminated Media and Asbestos Materials. Modified Special Provisions were prepared by me or under my supervision. Section(s) 00294, 00295
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  RENEWALS: 06-30-2028	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for <u>Bridge No. 24348</u>. Modified Special Provisions were prepared by me or under my supervision. Sections: 00430, 00510, 00520, 00530, 00531, 00535, 00540, 00545, 00550, 00582, 00587, 00593, 00842, 02001, 02050, 02080, 02210, 02510, 02513, 02515, 02520, 02530, 02570, 02571, 02630, 02690, 02810
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature 	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Roadway. Modified Special Provisions were prepared by me or under my supervision. Sections 00280, 01030, 01040, 02320, 03020
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature  EXPIRES: 12-1-2026	I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for Agency Provided Disposal Sites and Well Preservation and Abandonment. Modified Special Provisions were prepared by me or under my supervision. Sections 00236 and 00298
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

SPECIAL PROVISIONS

WORK TO BE DONE

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

1. Install temporary traffic control.
2. Install erosion control.
3. Construct and remove temporary roadbed and surfacing.
4. Construct general excavation.
5. Construct bridge work.
6. Construct cold plane pavement removal and ACP.
7. Install guardrail.
8. Install permanent traffic control and signs.
9. Construct water quality swales.
10. Perform additional and Incidental Work as called for by the Specifications and Plans.

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:

- AASHTOWare Project TM
www.oregon.gov/odot/Construction/Pages/AW-Construction.aspx
- 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

US101: Butte Creek Culvert Project

- ODOT Oregon Trucking Online - "Highway Restriction Notice - Size and/or Weight" (Form No. 734-2357)
<https://www.oregon.gov/odot/Forms/2ODOT/7342357.pdf>
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms
www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx
- ODOT Procurement Office - Construction Contracts Unit Notice of Intent
www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx
- 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.

US101: Butte Creek Culvert Project

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:

US101: Butte Creek Culvert Project

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

"Grading, Drainage, Structure, Paving, Signing & Roadside Development
US101: Butte Creek Culvert Project
Oregon Coast Highway
Tillamook County
September 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
00294.30	Personnel Qualifications
00295.30	Personnel Qualifications
00535.30	Personnel Qualifications
01030.30	Personnel Qualifications

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

00160.20(d) Build America Buy America Act Requirements

00120.40(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:

US101: Butte Creek Culvert Project

- 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.

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.

00130.80 Project Site Restriction - Replace the paragraph that begins “Until the Agency sends the Contractor ...” with the following paragraph:

US101: Butte Creek Culvert Project

Until the Agency sends the Contractor written Notice to Proceed with the Work, and the Contractor has filed the public works bonds required in 00170.65(b), the Contractor shall not go onto the Project Site on which the Work is to be done, nor move Materials, Equipment, or workers onto that Project Site.

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.

00150.30 Delivery of Notices - Replace the paragraph and bullets that begin "Following Notice to Proceed, all notices and other documents submitted..." with the following paragraph and bullets:

Following Notice to Proceed, all notices and other documents submitted to the Contractor by the Engineer, or to the Engineer by the Contractor, electronically under 00170.08 or 00170.09:

- If recorded in Doc Express® or AASHTOWare Project™ as received before 5:00 p.m. PST on a business day it shall be considered as received on the business day on which it was actually received in Doc Express® or AASHTOWare Project™.
- If recorded in Doc Express® or AASHTOWare Project™ as received on a non-business day, or after 5:00 p.m. PST on a business day, it shall be considered as received at 8:00 a.m. PST on the next business day.

US101: Butte Creek Culvert Project

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 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
Charter Communications	Steve Fournier 1014 Pacific Ave Tillamook, OR 97141 Steven.fournier@charter.com 541-418-1962
Neskowin Regional Sanitary Authority	Derrick Shippee 34460 Hwy 101 South Cloverdale OR 97112 NrSa02@centurylink.net 503-392-3257
Tillamook PUD	Zach Hudspeth 1115 Pacific Ave Tillamook, OR 97141 zhudspeth@tpud.org 503-815-8654

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, at no cost to the Contractor.

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

Add the following subsection:

US101: Butte Creek Culvert Project

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)	Lumen Technologies	Joshua Coplantz 740 State St. Room 407 Salem, OR 97301 Joshua.coplantz@lumen.com 503-508-7459	April 2, 2026
00150.50(g)(2)	Neskowin Water District	Troy Trute 5880 S Fairway Rd Neskowin OR 97149 tnt@neskowinwater.com 503-392-3966	April 15, 2026

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, at no cost to the Contractor.

(1) Lumen Technologies - "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.

(2) Neskowin Water District - "Water Utility":

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

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:

US101: Butte Creek Culvert Project

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...”.

00160.05 Qualified Products List (QPL) - Replace this subsection, except for the subsection number and title, with the following:

The QPL is a listing of manufactured products available on the market (shelf items) that ODOT has evaluated and found suitable for a specified use in highway construction. The QPL is available from ODOT's Construction Section website (see 00110.05(e)).

The most current version of the QPL on ODOT's Construction Section website at the time of Advertisement is the version in effect for the Project. When the Contract specifies the use of the QPL, unless specified as the subject of an exemption per ORS 279C.345, the Agency may approve for use a product qualified for inclusion in a later edition of the QPL, or other equivalent product that meets the requirements of the QPL, following the Standard Guidelines for Product Review, if the Agency finds the product acceptable for use on the Project.

Use of listed products shall be restricted to the category of use for which they are listed. The Contractor shall install all products as recommended by the manufacturer. The Contractor shall replace qualified products not conforming to Specifications or not properly handled or installed at no additional cost to the Agency.

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

US101: Butte Creek Culvert Project

Materials Origin, on a form furnished by the Engineer, before incorporating any iron or steel products into the Project. Unless a Certificate of Materials Origin has been provided to the Engineer, the Materials shall be considered of foreign origin.

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

The Contractor shall include this provision in all subcontracts.

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

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

The Build America Buy America Act requirements apply to construction materials 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.

US101: Butte Creek Culvert Project

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

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

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

US101: Butte Creek Culvert Project

incorporate construction materials and manufactured products in excess of this amount into the Project. All foreign origin construction materials and manufactured products incorporated in the Project in excess of the amount indicated above shall be removed and replaced with domestic construction materials at the Contractor's expense.

The Contractor shall provide the Engineer with a Certificate of Materials Origin, on a form furnished by the Engineer, before incorporating any applicable construction materials 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.

Add the following subsection:

00165.15 AASHTOWare™ – Field-tested Materials and Nonfield-tested Materials will be tracked within AASHTOWare Project™ for this Project. The acceptance criteria for Materials in AASHTOWare Project™ can be viewed at the <https://www.oregon.gov/odot/Business/Pages/AASHTOWare-Project.aspx> (see 00110.05(e)). The most current version of AASHTOWare™ on the date of Advertisement is the version in effect for the Project.

00165.20 Materials Specifications and Test Method References - Replace this subsection, except for the subsection number and title, with the following:

References to materials specifications and test methods of ODOT, WAQTC, AASHTO, ASTM, other governmental agencies, or other recognized organizations mean those officially adopted and in current use by the agency or organization on the date of Advertisement.

If there are conflicting references, or if no reference is made to materials specifications, sampling and testing frequencies, or test method, the Engineer will resolve any discrepancies between these documents in the following orders of precedence:

Field-Tested Materials:

- Contract Change Orders;
- Special Provisions;
- ODOT Laboratory Manual of Test Procedures;
- MFTP;

US101: Butte Creek Culvert Project

- Standard Specifications; and
- AASHTOWare™

Nonfield-Tested Materials:

- Contract Change Orders;
- Special Provisions;
- ODOT Laboratory Manual of Test Procedures;
- Standard Specifications; and
- AASHTOWare™

Material test methods:

- ODOT;
- WAQTC;
- AASHTO;
- ASTM;
- Other recognized national organizations, such as ANSI, AWWA, IMSA, ISSA, and UL; and
- Industry standards in the location where the Work is being performed.

Sampling and testing frequencies:

- Contract Change Orders;
- Special Provisions;
- MFTP;
- Standard Specifications; and
- AASHTOWare™.

If the Contractor identifies conflicting references or if no reference is made, the Contractor shall immediately request a clarification from the Engineer.

00165.35(d) Certificate of Origin of Steel Materials - Replace this subsection with the following subsection:

00165.35(d) Certificate of Origin of Steel Materials, Construction Materials, and Manufactured Products - When a certificate of material origin is specified, complete the form furnished by the Engineer as required by 00160.20.

00165.35(e) Certificate of Origin of Construction Materials - Delete this subsection.

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

TABLE 00165-3		
Zone	Place of Fabrication	Reduction in Payment

US101: Butte Creek Culvert Project

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
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

US101: Butte Creek Culvert Project

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.

00170.08 Electronic Document Management - Replace this subsection with the following subsection:

00170.08 Electronic Data and Document Management – The requirements of this Subsection do not apply to claims. Claims must be submitted on paper documents according to Section 00199.

For additional Specifications applicable to AASHTOWare Project™ see 00170.09.

Following Notice to Proceed, the Contractor shall submit all data and documents for this Contract to the Agency in an electronic format using Doc Express®, or using AASHTOWare Project™ for data and documents as specified in 00170.09. No paper documents, faxes or other similar paper methods or media are permitted, unless otherwise allowed or directed by the Engineer. The Contractor shall be solely responsible for submitting data and documents to the Agency using Doc Express® or AASHTOWare Project™, as applicable, for the Contractor and for Subcontractors, Suppliers, vendors and other third parties. Only data and documents submitted by the Contractor to the Agency and recorded in Doc Express® or AASHTOWare Project™, as applicable, as received will be considered valid and received by the Agency.

Following Notice to Proceed, all data and documents for this Contract will be managed in Doc Express® or AASHTOWare Project™, as applicable, unless otherwise allowed or directed by the Engineer. Following Notice to Proceed, the Contractor shall use Doc Express® or AASHTOWare Project™, as applicable, to submit data and documents to the Agency, and the Agency will use Doc Express® or AASHTOWare Project™, as applicable, to submit, or make available, data and documents to the Contractor.

If authorized to do so, Subcontractors, Suppliers, vendors and other third parties may enter data and documents into AASHTOWare Project™, but such data and documents shall not be considered submitted to Agency until the Contractor reviews the data or document and completes the workflow transition to submit the data or document to the Agency within AASHTOWare. Required workflow transitions are defined in the ODOT AASHTOWare Project™ User Guide for Construction Contractors for specific data and documents that are required to be submitted to the Agency. Completion of required workflow transitions by the Contractor will constitute submittal to the Agency. See 00170.09.

Subcontractors, Suppliers, vendors and other third parties shall not be authorized to and shall not enter data or documents into Doc Express®.

The Contractor shall comply with naming conventions, drawer structure, and other Doc Express® instructions as specified in the ODOT Doc Express® User Guide for Construction Contractors, as may be revised from time to time and available from the Engineer.

US101: Butte Creek Culvert Project

Instructions for entry and submittal of data and documents using AASHTOWare Project™ are specified in 00170.09.

The Contractor shall provide all Subcontractors, Suppliers, vendors, and any other third parties receiving payment from the Contractor or any Subcontractor, Supplier, vendor, or any other third party, with read-only access to the Doc Express® drawer that contains payment documents from the Agency and the Contractor. The Contractor may provide Subcontractors, Suppliers, vendors, and any other third parties receiving payment from the Contractor or any Subcontractor, Supplier, vendor or other third party with read-only access to other Doc Express® drawers at the Contractor's discretion. The Contractor shall not grant write access in Doc Express® to Subcontractors, Suppliers, vendors or any other third parties or their respective officers, employees or agents. Additional access requirements and limitations for AASHTOWare Project™ are specified in 00170.09.

Data and documents submitted according to this Subsection, from the Agency to the Contractor and from the Contractor to the Agency, are official data and documents for the Contract and will be accepted as such by both parties.

By submitting data and documents that originate from the Contractor to the Agency using Doc Express® or AASHTOWare Project™, as applicable, the Contractor is certifying that the data and documents are true and accurate and that if the data or document was required to be signed, it has been signed by a person with appropriate authority. By submitting data and documents to the Agency using Doc Express® or AASHTOWare Project™, as applicable, that originate from a Subcontractor, Supplier, vendor, manufacturer or other third party, the Contractor is certifying that the data and documents are a true and complete copy of the data and documents the Contractor received, that if the data or document was required to be signed, it has been signed, and that the Contractor does not know, nor does it have reason to believe, that the data and documents are not true and accurate, are not complete, are not what was required, or were signed by a person without appropriate authority.

In the event of a conflict between this Subsection and the Standard Specifications or other Special Provisions, this Subsection shall control except for, as applicable, 00170.09 and 00199.30.

Costs associated with obtaining and maintaining access to Doc Express® and AASHTOWare Project™ and the use of Doc Express® and AASHTOWare Project™ are Incidental to Mobilization.

Failure to submit data and documents electronically, as required by 00170.08 and 00170.09, may result in payments being withheld according to 00195.50.

The Contractor shall be responsible for causing access to Doc Express® (or to notify the Agency for AASHTOWare Project™) to be disabled for any Entity or individual that is no longer assigned, employed or under contract in relation to the Project or whose access is to be disabled due to improper activity. The Contractor's obligation to disable access applies to its own officers, employees and agents and to all Subcontractors, Suppliers, vendors and other third parties and their respective officers, employees and agents.

The Agency reserves the right to suspend or disable, or cause to be suspended or disabled, the access to Doc Express®, or AASHTOWare Project™, or both, for any Entity or individual at any time.

US101: Butte Creek Culvert Project

Use and access for Doc Express® and AASHTOWare Project™ are provided “as is”. The Agency does not warrant that access to or functioning of Doc Express® or AASHTOWare Project™ will be error free, uninterrupted, or will meet the Contractor’s needs. The Agency is not responsible for any damage that may occur due to error, omission, lack of timeliness or other malfunction of Doc Express® or AASHTOWare Project™ or their supporting systems. The Agency disclaims all liability arising from interference or interruption, viruses, telephone faults, malicious damage by anyone, electronic system downtime, overloading of the Internet or sites or any cause beyond the control of the Agency. The Agency reserves the right to temporarily suspend or cause to be suspended access to Doc Express® or AASHTOWare Project™, or both, without notice, because of maintenance, repair or any other reason deemed necessary for the proper functioning of Doc Express® or AASHTOWare Project™ by the Agency, AASHTO, or Info Tech, Inc.

In no event shall the State of Oregon, the Oregon Transportation Commission or the Agency or their respective members, officers, agents and employees be liable for any claims, suits, actions, losses, liabilities, damages, costs or expenses, including but not limited to attorney fees, of whatsoever nature, resulting from or arising out of the use of Doc Express® or AASHTOWare Project™ by the Contractor or Subcontractors, Suppliers, vendors or other third parties at any level or their respective officers, employees or agents.

The Contractor’s indemnification, defense and hold harmless obligations under the Contract shall apply to the terms, conditions and requirements of 00170.08 and 00170.09 and to the use of Doc Express® and AASHTOWare Project™ and the acts, errors and omissions of the Contractor, Subcontractors, Suppliers, vendors and other third parties and their respective officers, employees and agents respecting access to and use of Doc Express® and AASHTOWare Project™.

The terms, conditions and requirements of 00170.08, 00170.09, and 00150.30 shall be included in all contracts with all Subcontractors, Suppliers, vendors and other third parties at all levels for which access to Doc Express® or AASHTOWare Project™ will or may be required.

(a) User Terms and Conditions - The Contractor shall comply with, shall require its officers, employees and agents to comply with, and shall require all Subcontractors, Suppliers, vendors and other third parties to comply with and to require their officers, employees and agents using or accessing Doc Express® or AASHTOWare Project™, or both, as applicable, to comply with 00170.08, 00170.09, and the following User Terms and Conditions, all as may be revised from time to time:

As an officer, employee or agent of the Contractor or any Subcontractor, Supplier, vendor or other third party, respecting my use of or access to Doc Express®, AASHTOWare Project™, or both, I agree to the following, all as may be revised from time to time:

- The terms, conditions and requirements of 00170.08;
- The terms, conditions and requirements of 00170.09;
- The Info Tech, Inc. Doc Express® Privacy Policy and Terms of Use and the Digital Millennium Copyright Act (DMCA) Policy, accessible from the Doc Express® registration site;

US101: Butte Creek Culvert Project

- The AASHTOWare Project™ Privacy Policy and Terms of Use and the Digital Millennium Copyright Act (DMCA) Policy, accessible from the AASHTOWare Project™ registration site;
- The ODOT Doc Express® User Guide for Construction Contractors available from the Engineer;
- The AASHTOWare Project™ Directory available from the Engineer;
- The ODOT AASHTOWare Project™ User Guide for Construction Contractors available from the Engineer; and
- The following Additional User Terms and Conditions:

My use of and access to Doc Express® or AASHTOWare Project™, or both, as applicable, are conditioned on my agreement to and my compliance with the foregoing and these Additional User Terms and Conditions.

I may have access to sensitive personnel, business, financial and/or security related information (“Confidential Information”) through use of Doc Express® or AASHTOWare Project™, and, except to the limited extent necessary to perform my duties, I will maintain its confidential status and will not share, publish or disseminate Confidential Information or other information obtained through Doc Express® or AASHTOWare Project™, without regard to how ODOT may treat any such Confidential Information or other information. All information is also subject to the Oregon Public Records law (see 00170.07(d)). In addition, if I know or have reason to believe any information was inadvertently or improperly included in Doc Express® or AASHTOWare Project™, I will immediately notify my employer for purposes of notification to the Contractor and the Contractor’s notification to ODOT.

I will not access any information, data or documents I am not authorized to use or access and I will not browse or otherwise use or access information, data or documents that exceed the minimum necessary to perform my duties.

If my authorized use of and access to Doc Express® or AASHTOWare Project™ includes entering data and documents (or “read-write” access) into Doc Express® or AASHTOWare Project™, I will not enter any data or documents into Doc Express® or AASHTOWare Project™ except those I am authorized to enter (or in the case of the Contractor, to enter or submit, or both) and are necessary to perform my duties.

I have no expectation of privacy, rights or ownership of anything I may access, create, store, send or receive within Doc Express® or AASHTOWare Project™, respecting any data or documents, including but not limited to Confidential Information of any individual or Entity. For audit or system security purposes, ODOT may monitor and record all activity conducted within Doc Express® and AASHTOWare Project™. This includes but is not limited to the login identification information, times, dates and duration of access, as well as resources, data, or documents accessed.

Unauthorized access or activities that could compromise the systems or Confidential Information are strictly prohibited and patterns of unauthorized or unusual activity may result in access being immediately disabled, and possible further investigation.

US101: Butte Creek Culvert Project

If a breach of these terms and conditions or a security incident occurs, I will immediately notify my employer for purposes of notification to the Contractor and the Contractor's notification to ODOT.

I will not share my password or other means of access with any other individual or Entity. Violation of this restriction or of any of these other Terms and Conditions may result in my access being immediately disabled.

I understand that my use of and access to Doc Express® or AASHTOWare Project™, or both, as applicable, are conditioned on my relationship to my employer and my employer's relationship to one or more of: ODOT, the Contractor, a Subcontractor, Supplier, vendor or other third party, and that if I am no longer so employed, my job position or duties no longer require my access to Doc Express® or AASHTOWare Project™, or my employer no longer has such relationship, I will immediately cease my use of and access to Doc Express® and AASHTOWare Project™ and will immediately notify my employer for purposes of notification to the Contractor and the Contractor's notification to ODOT.

(b) Electronic Submittal Requirements - Unless otherwise allowed or directed by the Engineer, all data and documents submitted to the Agency for this Contract that require a signature shall be signed by a person with appropriate authority by applying:

- An original handwritten signature to a document and scanning the document into PDF format;
- An electronic signature to a document and converting the document into PDF format;
- A third-party verifiable digital signature to a PDF document;
- A Doc Express® electronic signature when prompted during submission of the document into Doc Express®; or
- An AASHTOWare Project™ electronic signature when prompted during entry or submission of the data or document into AASHTOWare Project™.

Data and documents that require a signature, but do not have a signature according to 00170.08 or 00170.09, or were signed by a person without appropriate authority, will be considered as not received and of no effect. Notice requirements will not be satisfied and payments may be withheld for any affected Work items until the required data or documents with compliant signatures have been received by the Engineer.

Unless otherwise allowed or directed by the Engineer, all data and documents submitted to the Agency for this Contract that do not require a signature shall be submitted using Doc Express® or AASHTOWare Project™, as applicable.

Add the following subsection:

00170.09 AASHTOWare Project™ - The requirements of this Subsection do not apply to claims. Claims must be submitted on paper documents according to Section 00199.

This subsection applies to data and documents identified in the AASHTOWare Project™ Directory (AWD), as data or documents to be managed in AASHTOWare Project™, as may

US101: Butte Creek Culvert Project

be revised from time to time. The AWD is available from the Engineer and can be downloaded from the Agency's AASHTOWare Project™ website (see 00110.05(e)).

Following Notice to Proceed, the Contractor, Subcontractors, Suppliers, vendors, and any other third parties, shall use AASHTOWare Project™ to enter certain data and upload certain documents, as identified in the AWD, for submittal by the Contractor to the Agency. The Agency will use AASHTOWare Project™ to submit or make available certain data and documents, as identified in the AWD, to the Contractor.

The Contractor, Subcontractors, Suppliers, vendors, and any other third parties authorized to enter data and documents into AASHTOWare Project™, shall comply with naming conventions, processes and other AASHTOWare Project™ instructions as specified in the ODOT AASHTOWare Project™ User Guide for Construction Contractors, as may be revised from time to time and available from the Engineer.

Data and documents that are required to be submitted to the Agency using AASHTOWare Project™ are identified in the AWD. Data and documents identified in the AWD to be submitted using AASHTOWare Project™ that are not submitted as required will be considered as not received and of no effect.

Data or documents that are not identified in the AWD as required to be submitted using AASHTOWare Project™ shall be submitted according to 00170.08 using DocExpress®, unless otherwise specified, allowed or directed by the Engineer.

The Contractor shall coordinate and identify to the Engineer the Subcontractors, Suppliers, vendors, and any other third parties requiring access to AASHTOWare Project™ to enter or access data or documents. Once identified, the Agency will work with Subcontractors, Suppliers, vendors and third parties for access rights in AASHTOWare Project™ per the AWD.

See also 00170.08, including but not limited to user terms and conditions and signature requirements which also apply to AASHTOWare Project™.

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.

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.

US101: Butte Creek Culvert Project

00170.20 Public Works Bond – Delete this subsection.

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 Minimum Wage and Overtime Rates for Public Works Projects – Replace this subsection with the following subsection:

00170.65 Requirements for Public Works Projects:

(a) General - The provisions of ORS 279C.800 through ORS 279C.875 and OAR 839-25 are applicable to this Public Works Project ("Prevailing Wage Rate Provisions"). The Contractor, a Subcontractor or other person or Entity Contractor uses in performing all or part of the Contract who are required to comply with the Prevailing Wage Rate Provisions are collectively referred to as "Covered Employers" for the purposes of 00170.65. Covered Employers include employers of workers described in 00170.65(c)(1). "Covered Occupation" as used in 00170.65, refers to each occupation defined in the applicable Oregon Bureau of Labor and Industry ("BOLI") publication titled *Definitions of Covered Occupations for Public Works Contracts in Oregon*.

As required by ORS 279C.520, the Contractor shall comply with ORS 652.220 and shall not unlawfully discriminate against any of the Contractor's employees in the payment of wages or other compensation for work of comparable character on the basis of an employee's membership in a protected class. "Protected class" means a group of persons distinguished by race, color, religion, sex, sexual orientation, national origin, marital status, veteran status, disability, or age. The Contractor's compliance with this provision constitutes a material element of the Contract and failure to comply constitutes a material breach that entitles the Agency to exercise any remedies available under the Contract, including, but not limited to, termination for default.

As required by ORS 279C.520, the Contractor shall not prohibit any of the Contractor's employees from discussing the employee's rate of wage, salary, benefits or other compensation with another employee or another person and shall not retaliate against an employee who discusses the employee's rate of wage, salary, benefits or other compensation with another employee or another person.

(b) Public Works Bond - Before starting Work, Covered Employers shall each file with the Construction Contractors Board, and maintain in full force and effect, a separate public works bond, in the amount of \$30,000 unless otherwise exempt, as required by ORS 279C.830(2) and ORS 279C.836. The Contractor shall verify each Covered Employer has filed a public works bond before that employer begins work.

(c) Prevailing Wage Requirements - Each Covered Employer must pay its workers on the Project in each Covered Occupation not less than the prevailing rate of wage for each Covered Occupation as set by BOLI in the applicable version of its publication entitled *Prevailing Wage Rates for Public Works Contracts*.

US101: Butte Creek Culvert Project

If the Class of Project is Federal-aid, each Covered Employer must pay its workers on the Project in each Covered Occupation not less than the applicable BOLI prevailing wage rate or the federal prevailing wage rate required under the Davis Bacon Act (40 U.S.C. 3141 et seq.), whichever is higher.

The Contractor is responsible for investigating local labor conditions. The Agency does not imply that labor can be obtained at the minimum hourly wage rates specified in State or federal wage rate publications, and no increase in the Contract Amount will be made if wage rates paid are more than those listed.

The applicable Project Wage Rates and *Definitions of Covered Occupations for Public Works Contracts in Oregon* are included in the Special Provisions.

(1) Satellite Location Bespoke Work Subject to ORS 279C.800(G) - As required in ORS 279C.800(G) and OAR 839-025-0800, Covered Employers include employers of workers performing bespoke work at satellite locations when the applicable version of the BOLI publication entitled Prevailing Wage Rates for Public Works Contracts has expressly made a wage rate applicable to the satellite location bespoke work. Contractor must provide the Engineer with written notice of the satellite work that will be performed as part of its Consent to Subcontract. If the Covered Employer is not a Subcontractor, Contractor must provide the Engineer with a copy of its agreement with that Covered Employer prior to that Covered Employer performing any Work on the Project. The agreement must meet the requirements of 00170.65(f).

(2) Payroll and Certified Statements - As required in ORS 279C.845, every Covered Employer shall submit written certified statements to the Engineer on the form prescribed by the Commissioner of BOLI in OAR 839-025-0010 certifying compliance with wage payment requirements and accurately setting out the Contractor's or Subcontractor's weekly payroll records for each worker employed on the Project.

If the Class of Project is Federal-aid, in addition to providing the payroll information and certified statements required under ORS 279C.845, every Covered Employer shall submit written certified statements that also meet the requirements in FHWA Form 1273.

The Covered Employers shall preserve the certified statements for a period of 6 years from the date of completion of the Contract.

(3) Retainage for Noncompliance with 279C.845:

a. Agency - As required in ORS 279C.845(7) the Agency will retain 25% of any amount earned by the Contractor on the Project until the Contractor has filed the certified statements required in ORS 279C.845 and in FHWA Form 1273, if the Class of Project is Federal-aid. The Agency will pay to the Contractor the amount retained within 14 Days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.

b. Contractor - As required in ORS 279C.845(8) the Contractor shall retain 25% of any amount earned by a first-tier Subcontractor on the Project until the first-tier Subcontractor has filed with the Agency the certified statements required in

US101: Butte Creek Culvert Project

ORS 279C.845 and in FHWA Form 1273, if the Class of Project is Federal-aid. Before paying any amount retained, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 Days after the first-tier Subcontractor files the required certified statement, the Contractor shall pay the first-tier Subcontractor any amount retained.

(4) Posting Requirements - Every Covered Employer must post the prevailing wage rates and notices in accordance with OAR 839-025-0033.

(d) Overtime Requirements - As a condition of the Contract, the Contractor shall comply with the pertinent provisions of ORS 279C.520 and ORS 279C.540. If the Class of Project is Federal-aid, the Contractor shall comply with the overtime provision affording the greatest compensation required under FHWA Form 1273 and ORS 279C.540.

(1) Maximum Hours of Labor and Overtime Pay - According to ORS 279C.540, no person shall be employed to perform Work under this Contract for more than 10 hours in any 1 Day, or 40 hours in any 1 week, except in cases of necessity, emergency, or where public policy absolutely requires it. In such instances, the Contractor shall pay the employee at least time and a half pay:

- For all overtime in excess of 8 hours a day or 40 hours in any 1 week when the work week is 5 consecutive days, Monday through Friday; or
- For all overtime in excess of 10 hours a day or 40 hours in any 1 week when the work week is 4 consecutive days, Monday through Friday; and
- For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

For additional information on requirements for overtime and establishing a work schedule see OAR 839-025-0050 and OAR 839-025-0034.

(2) Notice of Hours of Labor - The Contractor shall give written notice to employees of the number of hours per day and days per week the employees may be required to work. Provide the notice either at the time of hire or before commencement of work on this Contract, or by posting a notice in a location frequented by employees.

(3) Exception - The maximum hours of labor and overtime requirements under ORS 279C.540 will not apply to the Contractor's Work under this Contract if the Contractor is a party to a collective bargaining agreement in effect with any labor organization. For a collective bargaining agreement to be in effect it shall be enforceable within the geographic area of the Project, and its terms shall extend to workers who are working on the Project (see OAR 839-025-0054).

(e) State Time Limitation on Claim for Overtime - According to ORS 279C.545, any worker employed by the Contractor is foreclosed from the right to collect any overtime provided in ORS 279C.540 unless a claim for payment is filed with the Contractor within 90 Days from the completion of the Contract, provided the Contractor posted and maintained a circular as specified in this provision. Accordingly, the Contractor shall:

- Cause a circular, clearly printed in boldfaced 12-point type and containing a copy of ORS 279C.545, to be posted in a prominent place alongside the door of the

US101: Butte Creek Culvert Project

timekeeper's office or in a similar place that is readily available and freely visible to any or all workers employed to perform Work; and

- Maintain such circular continuously posted from the inception to the completion of the Contract on which workers are or have been employed.

(f) Required Terms for Agreements with Covered Employers - Contractor must have agreements with all Covered Employers. For each Covered Employer that is not a Subcontractor, the Contractor's agreement must include:

(1) A clause or condition that if the Contractor fails, neglects, or refuses to make payment to the Covered Employer, the Covered Employer may file a complaint with the Construction Contractors Board, unless payment is subject to a good-faith dispute as defined in ORS 279C.580.

(2) A provision requiring the Covered Employer to have a public works bond filed with the Construction Contractors Board before starting Work on the Project, unless exempt.

(3) A provision that requires the Covered Employer's workers on the Project to be paid not less than the specified minimum hourly rate of wage.

(4) A provision that requires the Covered Employer to be registered as a vendor in OregonBuys, the on-line electronic Automated Oregon Procurement System administered by the State's Department of Administrative Services; and

(5) A clause that requires the Covered Employer to include (1) – (4) in each of the Covered Employer's agreements with other Covered Employers of Workers on the Project that are also subject to the requirements of ORS 279C.800 through ORS 279C.870.

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:

US101: Butte Creek Culvert 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)
Pollution Liability	\$1,000,000	\$2,000,000

- With Asbestos Liability Endorsement or separate coverage

Commercial Automobile Liability with Pollution Coverage	\$2,000,000	(aggregate limit not required)
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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:

US101: Butte Creek Culvert Project

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.

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.

US101: Butte Creek Culvert Project

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 Services Agreement - 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:

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.

00180.20(e)(3) Submittals - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide the Engineer with an executed copy of the trucking services agreement not later than 2 Days after the trucking services provider for hauling materials has started work. The Contractor shall make certain that the provider of approved trucking services submits payrolls required under Section 00170, complies with applicable Contract provisions, including, without limitation, 00170.07, and complies with applicable trucking services agreement provisions. The work or service provider will not be considered a Subcontractor under the Contract, but the work or services will be considered to have been performed by the Contractor's own organization for the purposes of determining compliance with 00180.20(a). If the trucking services are provided by an owner/operator attach a copy of the following data to the trucking services agreement before the time the services are performed and include without limitation for each owner/operator:

- Driver's name;
- Present driver license upon request;
- Vehicle identification number;
- Present vehicle registration upon request;
- Motor vehicle license plate number;
- Motor Carrier account number;
- Present ODOT Motor Carrier 1A Permit upon request; and
- Name of owner/operator from the side of the truck.

Each truck shall have the name of the owner/operator clearly displayed on the side of the truck.

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

US101: Butte Creek Culvert Project

- 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.)

00180.40(b) On-Site Work – Replace the bullet that begins “Filed with the Construction Contractors...” with the following bullet:

- Filed with the Construction Contractors Board the public works bond as required in 00170.65(b);

Add the following subsection:

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

Limitations	Subsection
Cooperation with Utilities	00150.50
Contract Time	00180.50(h)
Closed Lanes	00220.40(e)(1)
Regulated Work Areas	00290.34(a)
Maintenance Under Traffic	00620.43
Opening Sections to Traffic.....	00744.51

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

00180.41 Project Work Schedules - After the paragraph that begins "One of the following Type..." add the following paragraph:

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

Add the following subsection:

00180.50(h) Contract Time - There are two Contract Times on this Project as follows:

- (1) The Contractor shall complete all Work to be done under the Contract required to complete all in water work not later than September 15, 2028.
- (2) The Contractor shall complete all Work to be done under the Contract, except for (seeding establishment) (and) (plant establishment), not later than October 31, 2028.

00180.85(b)(2) Multiple Contract Times - Add the following paragraph and bullet list to the end of this subsection:

The Agency determined percentages of the value of Work required to be complete by the Contract Times listed under 00180.50(h) are as follows:

US101: Butte Creek Culvert Project

- For Contract Time 00180.50(h)(1) the Agency determined percentage of Work is 80 percent.
- For Contract Time 00180.50(h)(2) the Agency determined percentage of Work is 100 percent.

Add the following subsection:

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

It is impractical to determine the actual damages the Agency will sustain in the event Traffic Lanes are closed beyond the limits listed in 00220.40(e) or 00220.40(f). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$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) or 00220.40(f).

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

Add the following subsection:

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

It is impractical to determine the actual damages the Agency will sustain in the event traffic is stopped or held longer than the 20-minute limit listed in 00220.02. Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 20 minutes, or for a portion of 20 minutes, for stopping or holding traffic longer than 20 minutes.

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

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

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

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

If the scales require manual entry of gross weight information, the Agency may periodically have a representative weigh witness at the scales to observe the weighing procedures. The Contractor shall inform the Engineer of their intent to use a scale without an automatic printer at least 3 working days before weighing begins or before the Contractor changes to a scale that does not have an automatic printer. The Contractor shall pay costs for the weigh witness.

US101: Butte Creek Culvert Project

The hourly cost of the weigh witness will be as stated in the Special Provisions. In addition, the Engineer may periodically check the weight for a load of Materials by directing the haul vehicle to reweigh on a different scale that has been inspected and certified according to 00190.20(b) and 00190.20(d).

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

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

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

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

SECTION 00195 - PAYMENT

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

Add the following subsection:

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

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

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

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

The MFP for a given month is the average rack price obtained from the Oil Price Information Service (OPIS) listing dated the first Friday 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 Friday of any month for any reason, the Agency may use the average rack price posted by OPIS immediately before or after the first Friday 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.

US101: Butte Creek Culvert Project

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

- If the MFP is within $\pm 10\%$ of the Base, there will be no adjustment.
- If the MFP is more than 110% of the Base, then:

$$\text{Adjustment Factor} = (\text{MFP}) - (1.10 \times \text{Base})$$

- If the MFP is less than 90% of the Base, then:

Adjustment Factor = (MFP) - (0.90 x 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
Toe Trench Excavation	0.33 Gal/CuYd
General Excavation	0.33 Gal/CuYd
Stone Embankment	0.33 Gal/CuYd
24 Inch Subgrade Stabilization	0.33 Gal/SqYd
Loose Riprap, Class 50	0.33 Gal/CuYd
Keyed Riprap, Class 700	0.33 Gal/CuYd
6 Inch Drain Pipe	10.00 Gal/Foot
12 Inch Culvert Pipe, 5 Ft Depth	5.00 Gal/Foot
Cold Plane Pavement Removal, 2 Inches Deep	0.45 Gal/SqYd
Aggregate Base	0.69 Gal/Ton
Aggregate Shoulders	0.69 Gal/Ton
Level 3, 1/2 Inch ACP Mixture	2.93 Gal/Ton
Level 3, 1/2 Inch ACP Mixture in Temporary	2.93 Gal/Ton

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

Bridge No. 24348 19 Gal/\$1,000

Item
Shoring, Cribbing, and Cofferdams
Structure Excavation
Granular Structure Backfill
Furnish Pile Driving Equipment
Furnish PP 18 x 0.5 Steel Piles
Drive PP 18 x 0.5 Steel Piles
Pile Load Test (Dynamic)
Reinforced Pile Tips
PP 18 x 0.5 Steel Pile Splices
Reinforcement, ASTM A1035 CM Grade 100
Deck Concrete, Class HPC4500
General Structure Concrete, Class 3300

US101: Butte Creek Culvert Project

General Structure Concrete, Class 4000
Surface Texturing
Reinforced Concrete Bridge Approach Slabs
BT 60 Precast Prestressed Girders
3 Tube Curb Mount Rail

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 more than 10% or more from the Base. This adjustment will be the product of the monthly fuel adjustment factor and the estimated monthly fuel used. The monthly fuel used will be determined by multiplying the quantities of Work accomplished during the month for subject Pay Items, by the appropriate fuel factors.

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

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

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

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

PARTICIPATE	PAY ITEM DESCRIPTION	COST BASIS (CB)
☐	Furnish PP 18 x 0.5 Steel Piles	CB 90.00%
☐	Reinforced Pile Tips	CB 90.00%
☐	3 Tube Curb Mount Rail	CB 50.00%
☐	Guardrail Anchors, Type 1 Modified	CB 35.00%
☐	Guardrail End Pieces, Type B	CB 35.00%
☐	Guardrail Transition	CB 35.00%
☐	Guardrail Terminals, Non-Flared	CB 35.00%
☐	Midwest Guardrail System, Type 2A	CB 35.00%
☐	Midwest Guardrail System, Type 3	CB 35.00%
☐	Perforated Steel Square Tube Slip Base Sign Supports	CB 20.00%
☐	Perforated Steel Square Tube Anchor Sign Supports	CB 20.00%

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

US101: Butte Creek Culvert Project

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(b) Retainage – Replace the paragraph that begins “As provided in...” with the following paragraph:

As provided in 00170.65(c)(3) in addition to any retainage, a withholding of 25% of amounts earned will be withheld and released according to ORS 279C.845 when the Contractor fails to file the certified statements required in ORS 279C.845, FHWA Form 1273, and 00170.65.

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 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

US101: Butte Creek Culvert Project

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 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;

US101: Butte Creek Culvert Project

- 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

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 modified as follows:

00210.90 Payment - Replace the paragraph that begins "No separate or additional..." with the following paragraph:

No separate or additional payment will be made for any costs associated with obtaining and maintaining access to Doc Express® and AASHTOWare Project™ or the use of Doc Express® and AASHTOWare Project™.

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 bullet(s) to the end of the bullet list:

00220.02(b) Temporary Pedestrian Accessible Route Plan - Replace the title of this subsection with "Temporary Pedestrian Accessible Route"

Replace the paragraph that begins "For the safety and accessibility ..." with the following paragraph:

For the safety and accessibility of pedestrians, provide and maintain TPAR for pedestrian pathways impacted by construction or construction staging, and the following:

Replace the bullet that begins "TPAR shall meet ..." with the following bullet:

- Meet the requirements of Part 6 of the MUTCD.

Replace the bullet that begins "Mount signs between the panels..." with the following bullet:

- Mount signs between the panels of a Type II barricade, on a PCD, or on a single-post temporary sign support, as shown. Place signs facing pedestrian traffic.

Add the following bullet(s) to the end of the bullet list:

- Maintain access to bus stops and Pedestrian Accessible Routes.

US101: Butte Creek Culvert Project

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

Traffic Lanes may be closed on the Oregon Coast Highway US101 when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

Single Lane Closures - One Traffic Lane on the Oregon Coast Highway (US101) may be closed during the following times:

- Nightly, Sunday night through Friday morning, between 5:00 p.m. and 9:00 a.m.

00220.40(e)(2) Opened Lanes - Replace the paragraph that begins "Keep all Traffic Lanes and ..." with the following paragraph:

Keep all Traffic Lanes and pedestrian facilities open during the following periods. Remove all barricades and objects from the Roadway during the periods that Traffic Lanes are to remain open.

00220.40(e)(2)(a) Holidays - Replace the paragraph that begins "When a holiday falls ..." with the following paragraph:

When a holiday falls on Sunday, the following Monday is recognized as a legal holiday. When a holiday falls on Saturday, the preceding Friday is recognized as a legal holiday.

Add the following subsection:

00220.45 Load Restrictions on Bridges - For Structure(s) No.(s) 244348, limit the combined weight of construction vehicles, Equipment, and daily Material usage to 65,000 pounds for every 1,000 square feet of surface area plus the weight of long term storage of Materials to 25,000 pounds for every 100 square feet of surface area of the Bridge or a total of 200,000 pounds for each span of the Bridge, whichever is less.

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

00220.60(a)(2) Agency Responsibility - Replace the paragraph that begins "The Agency is responsible ..." with the following paragraph:

The Agency is responsible to do the following at Agency expense:

00220.60(b) During Suspensions - Replace the paragraph that begins "During suspensions of the Work ..." with the following paragraph:

During suspensions of the Work, maintain Surfacing that the Contractor is responsible for under 00220.60(a)(1), and maintain Work Zone traffic control according to the Specifications and the following:

00220.70 Opening to Traffic - Replace the paragraph that begins "When it is in the public interest, the ..." with the following paragraph:

US101: Butte Creek Culvert Project

When it is in the public interest, the Engineer may order any portion of the Work opened to traffic. If the portion opened to traffic has been finished in an acceptable manner, it will be designated as "accepted for traffic", and the Contractor will be relieved of maintaining it for legal, Public Traffic. If the portion of the Work to be opened to traffic has not been finished in an acceptable manner, maintain that portion of the Work under traffic in a condition serviceable and adequate for traffic until it is finished in an acceptable manner, except as specified in 00220.60(b).

Replace the paragraph that begins "Maintain portions of the Work designated ..." with the following paragraph:

Maintain portions of the Work designated "accepted for traffic" if so ordered. Maintain portions of the Work opened to traffic but not "accepted for traffic" at no additional compensation, except watering ordered to protect the Work or to alleviate dust will be paid for according to Section 00340.

Replace the paragraph that begins "If the Contractor delays the completion ..." with the following paragraph:

If the Contractor delays the completion of Shoulders, sidewalks, curb ramps, drainage Structures, or other feature of the Work, the Engineer may order all or any portion of the Work to be opened to traffic. In this case, the Contractor is responsible for maintenance as described in 00220.60(a)(1), during the period the Work is opened to traffic, until Final Acceptance. Conduct the remaining operations to cause the least obstruction to traffic, and pay all additional costs caused by the presence of traffic.

SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

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

00221.05 Regulations and Codes - Replace this subsection with the following subsection:

Provide all electrical Equipment, Materials, and Work conforming to NEC requirements and all other laws that apply.

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.

US101: Butte Creek Culvert Project

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

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

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

Meet all requirements of the Contract documents and comply with the Project transportation management plan (TMP) if requesting a Contractor-modified Agency TCP, or a Contractor developed TCP. 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, submit any additional modifications 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:

US101: Butte Creek Culvert Project

(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.

00221.10 General - Replace the paragraph that begins “All Work Zone TCD shall...” with the following paragraph:

Provide Work Zone TCD complying with the crashworthiness requirements of the *National Cooperative Highway Research Program (NCHRP) Report 350* or with the *AASHTO Manual for Assessing Safety Hardware (MASH)*.

00221.20 Safety Apparel - Replace the paragraph that begins “Workers, except flaggers, working ...” with the following paragraph:

Workers, except flaggers, working within Highway Right of Way and exposed to traffic or construction Equipment are required to wear high visibility safety apparel that meets the Performance Class requirements of the most current version of ANSI/ISEA 107, *American National Standard for High Visibility Safety Apparel and Headwear Devices*. Wear safety apparel that at least meets the following minimum requirements:

00221.40 General - Replace the paragraph that begins “Existing operational TCD’s shall remain...” with the following paragraph:

Maintain existing TCD’s in operation throughout the Contract or until replaced by new, permanent TCD as appropriate.

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

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.

NUMBER OF TRAFFIC CONTROL PLAN SHEETS: 3TM800 Tables, Abrupt Edge and PCMS Details

TM820.....Temporary Barricades

TM821, TM822.....Temporary Sign Supports

TM830.....Temporary Concrete Barrier & Rumble Strip Details

TM840.....Closure Details

TM841.....Intersection Work Zone Details

TM850 2 Lane, 2-Way Roadways
TM851, TM854, Non-Freeway Multi-Lane Sections

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

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

00222.10 Temporary Signs - Replace the paragraph that begins "Furnish temporary signs meeting ..." with the following paragraph:

Furnish temporary signs meeting the requirements of the "Acceptable" category shown in the *ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features* handbook, available from the ATSSA website. Use Materials and fabricate signs according to Section 00940, Section 02910 and the following:

00222.11(b) Portable Sign Supports - Replace the paragraph that begins "Use portable sign supports ..." with the following paragraph:

Use portable sign supports from the QPL and according to the following:

00222.12(b) Permanent Signs - Replace the paragraph that begins "Sign covers for permanent signs ..." with the following paragraph:

Provide sign covers for permanent signs according to Section 00941.

00222.13 Sign Flags - Replace the paragraph that begins "Sign flags shall be ..." with the following paragraph:

Provide sign flags that are:

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, 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.

US101: Butte Creek Culvert Project

- 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.
- Install a 54-inch "TRUCKS LEAVING HIGHWAY XXXX FT" sign, when construction vehicles are leaving a Roadway, in advance of each entrance point to the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings.
- Install a 54-inch "TRUCKS ENTERING HIGHWAY XXXX FT" sign, when construction vehicles are entering a Roadway, in advance of each exit point from the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings.
- Install a "PROJECT IDENTIFICATION" (CG20-8) sign with an "ODOT" logo rider on the Oregon Coast Highway. Place the sign according to sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Supplemental Drawings, in advance of the "ROAD WORK AHEAD" sign at each end of the Project, facing incoming traffic. The Engineer will determine the sign legend.
- Install "ROAD WORK AHEAD" (W20-1-48) signs with a 36 by 24-inch "FINES DOUBLE" (R2-6aP) rider on the Oregon Coast 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.
- 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.
- When construction requires bicycles to use the Traffic Lanes on Structures, install a "Bicycle ON ROADWAY" (CW11-1) symbol sign according to "Sign Spacing A", from the "TRAFFIC CONTROL DEVICES SPACING TABLE" shown on the Standard Drawings, in advance of the Structure or the initial point where the bicycle facility is impacted by construction. Keep the signs in place until completion of the 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.

00222.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

US101: Butte Creek Culvert Project

Payment will be payment in full for furnishing, installing, moving, operating, maintaining, inspecting, and removing the Materials and TCD, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified, except as covered in 00221.90(b).

Add the following to the end of this subsection:

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

SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

Comply with Section 00223 of the Standard Specifications modified as follows:

00223.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

In addition to the requirements of Section 00221, this Work consists of providing flaggers, traffic control supervisors, and providing, operating, and maintaining associated Work Zone traffic control vehicles.

00223.22 Flagger Station Lighting - Replace the paragraph that begins "Use flagger station lighting ..." with the following paragraph:

Use flagger station lighting from the QPL and according to the following:

00223.23 Automated Flagger Assistance Device - Replace the paragraph that begins "Furnish an automated flagger ..." with the following paragraph:

Provide an automated flagger assistance device (AFAD) from the QPL. Submit the following information for approval for the use of an AFAD to the Engineer, according to 00150.37, a minimum of 21 Calendar Days in advance of using an AFAD. The Engineer will respond within 14 Calendar Days after receipt of the submittal.

00223.26 Pedestrian Transport Vehicle - Replace the bullet that begins "A roof or post-mounted rotating ..." with the following bullet:

- A roof or post-mounted rotating amber light or strobe light that is visible for 360 degrees. Provide a light that is visible and functioning at all times while operating within the Project limits.

00223.31(a) Traffic Control Supervisor - Replace the paragraph that begins "When the Schedule of Items ..." with the following paragraph:

When the Schedule of Items includes an item for a TCS, provide a TCS who meets the requirements of 00223.30. Do not designate the Project superintendent as the TCS. The TCS is required to possess a current ODOT "Oregon Certified Traffic Control Supervisor" card. A TCS with a current card from another state's transportation department, or from the American

US101: Butte Creek Culvert Project

Traffic Safety Services Association, may obtain an Oregon Certified TCS card upon successful completion of ODOT's Recertification Class.

Replace the paragraph that begins "Before beginning Work ..." with the following paragraph:

Before beginning Work on the Project, the TCS is required to:

Replace the bullet that begins "File with the Engineer and ..." with the following bullet:

- File with the Engineer and local police, their name and a telephone number where the TCS can be contacted at all times.

Replace the bullet that begins "If the Contractor requests to ..." with the following bullet:

- If the Contractor requests to use a modified Agency TCP or a TCP developed by the Contractor, ensure stamped Working Drawings showing the revisions are submitted according to 00221.06 and 00150.35.

Replace the paragraph that begins "The TCS shall not act as ..." with the following paragraph:

The TCS cannot perform the duties of a flagger or pilot car operator, except in the event of an emergency. The TCS may relieve the flagger or pilot car operator for a period of less than 15 minutes, not to exceed 1 hour per construction work shift.

Replace the paragraph that begins "Make arrangements so that the ..." with the following paragraph:

Make arrangements so that the TCS is available every Day, on call at all times, and available upon the Engineer's request at other than normal working hours.

Replace the paragraph that begins "The TCS shall report to the ..." with the following paragraph:

The TCS is required to report to the Project Site within 1 hour after being notified in the event of a Work Zone incident during non-work periods. Have appropriate personnel, Equipment, and Material available at all times to expeditiously correct any deficiency in the TCM for the Project.

Replace the paragraph that begins "Notify the Engineer of an alternate ..." with the following paragraph:

Notify the Engineer of an alternate TCS who can assume the duties of the assigned TCS in the event of that person's inability to fulfill the duties of the position. Provide an alternate TCS adequately trained and certified according to 00223.30 and 00223.31. Notify the Engineer at least 12 hours before designating the TCS for the following 12-hour period. Make succeeding notifications within 24 hours every time a subsequent TCS is appointed to the Project.

00223.31(b) Traffic Control Inspection Without TCS - Replace the paragraph that begins "When the Schedule of Items does ..." with the following paragraph:

US101: Butte Creek Culvert Project

When the Schedule of Items does not include an item for a TCS, or when TCS is not on-site for a work shift, designate a trained person who is on the Project Site during work hours and on call at all other times, and who:

Replace the bullet that begins "Notifies the Engineer of any ..." with the following bullet:

- Notifies the Engineer of any corrective measures made to the TCP if the TCP is not functioning as required, or to accommodate site conditions. Follow the TCP and do not implement changes to the TCP before revisions are approved by the Engineer.

Replace the bullet that begins "Shall report to the Project ..." with the following bullet:

- Reports to the Project Site within 1 hour after being notified in the event of a Work Zone incident during non-work periods.

Replace the bullet that begins "Designate an area for ..." with the following bullet:

- Designates an area for pedestrians to wait for, load and unload the transport vehicle.

00223.32 Automated Flagger Assistance Device Operator - Replace this subsection, except for the subsection number and title, with the following:

Use a certified flagger who has been trained in the operation of the AFAD.

The AFAD operator duties include:

- Attending the AFAD at all times during the operation of the device.
- Not flagging traffic and operating an AFAD at the same time.
- Operating a single AFAD. Each AFAD is required to have a separate AFAD operator.

00223.40 Flaggers - Replace this subsection, except for the subsection number and title, with the following:

Locate flaggers far enough in advance of the Work Area to permit adequate time for the motorist to respond to the flagger's instructions. All flaggers, including advance flaggers, are required to use a STOP/SLOW paddle. Do not use roll-up STOP/SLOW paddles for non-emergency flagging operations.

During advance flagging operations, the advance flagger is required to only display the "SLOW" face of the paddle. Cover the "STOP" face of the paddle with a sign cover according to 00222.12(a).

Position flaggers, as directed, at locations where traffic can enter the Highway within the limits of the Work Zone.

Direct vehicles entering the Highway to follow the pilot car line.

Direct pedestrians to wait for flagger instructions. Stop and hold motor vehicle traffic to allow pedestrians to enter the TPAR or exit the TPAR. Ensure pedestrians are clear of all Traffic Lanes before flaggers release motor vehicle traffic.

US101: Butte Creek Culvert Project

Direct pedestrians to use the pedestrian transport vehicle to pass through or around the Work Zone. Direct pedestrians to wait for the pedestrian transport vehicle in designated areas identified under 00223.31.

If a TPAR is designed and installed with a width less than 5 feet, and 5-foot-by-5-foot passing spaces at 200-foot intervals are not provided, inform pedestrians of the narrowed TPAR. Before allowing pedestrians in wheelchairs or similar devices to use the TPAR, direct the flagger at the opposite end of the TPAR to stop and hold opposing pedestrian traffic until the pedestrian in the wheelchair has reached the other end of the narrowed TPAR.

Provide flaggers at flagging stations continuously or until the Engineer determines flagging is no longer required.

During active construction activities, provide a dedicated flagger station and flagger to escort bicycle and pedestrian traffic through the affected Work Area.

00223.43 Automated Flagger Assistance Device - Replace the bullet that begins "Provide illumination when using ..." with the following bullet:

- Provide illumination when using an AFAD during nighttime hours. Provide AFAD illumination meeting the following requirements:

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:

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

00223.90 Payment - Replace the paragraph that begins "Item (c) includes furnishing..." with the following paragraph:

Item (c) includes providing, operating, moving, and removing the flagger station lighting. No separate or additional payment will be made for backup unit in event it is used or not.

Replace the paragraph that begins "Item (f) includes furnishing..." with the following paragraph:

Item (f) includes providing, operating, maintaining, repairing, replacing moving and removing each AFAD device, regardless of size or type. No separate or additional payment will be made for AFAD replacement, repair, or for AFAD illumination. The AFAD operator will be paid for as a flagger.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

US101: Butte Creek Culvert Project

Payment will be payment in full for furnishing, installing, moving, operating, maintaining, inspecting, and removing the Materials and TCD, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified, except as covered in 00221.90(b).

SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications modified as follows:

00224.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

In addition to requirements of Section 00221, this Work consists of providing, installing, moving, maintaining, inspecting, and removing channelizing devices including, but not limited to, tubular markers, conical markers, surface mounted tubular markers, plastic drums, and delineators throughout the Project area as shown or specified.

00224.14 Delineators - Replace the paragraph that begins "Use new delineators from ..." with the following paragraph:

Use new delineators from the QPL or salvaged reflectorized delineators (W-1) or (Y-1), as appropriate, and according to the requirements of Section 00840 and the following:

00224.90 Payment - Replace the paragraph that begins "Item (a) includes ..." with the following paragraph:

Item (a) includes providing and installing the complete assembly of each device in its initial location and for removing the device from the surface.

Replace the paragraph that begins "Item (b) includes ..." with the following paragraph:

Item (b) includes providing new or refurbished devices to replace damaged or missing devices.

Replace the paragraph that begins "In item (e), the type ..." with the following paragraph:

In item (e), the type of barricade is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing, installing, moving, operating, maintaining, inspecting, and removing the Materials and TCD, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified, except as covered in 00221.90(b).

SECTION 00225 - TEMPORARY PAVEMENT MARKINGS

Comply with Section 00225 of the Standard Specifications modified as follows:

00225.40 Temporary Pavement Markers - Replace the paragraph that begins "Temporary pavement markers..." with the following paragraph:

Maintain temporary pavement markers in place until the permanent markings are complete. Replace damaged or missing markers when directed by the Engineer. On the final Pavement wearing Course and along final alignment, place permanent markings a maximum of 28 Calendar Days after placing temporary pavement markers, or as directed.

00225.45 Pavement Marking Removal - Replace the bullet that begins "Do not use grinding to ..." with the following bullet:

- Do not use grinding to remove stripes, durable markings, legends, or bars from the wearing Course or existing surfaces, unless the area is paved over, obliterated, or the pavement markings are replaced to match the original striping configuration.

00225.60 Temporary Traffic Pavement Markings - Replace the paragraph that begins "Temporary pavement markings ..." with the following paragraph:

Maintain temporary pavement markings in place until the permanent markings are complete. Replace missing or damaged temporary markings when directed by the Engineer. On the final Pavement wearing Course and along final alignment, place permanent markings a maximum of 28 Calendar Days after placing temporary pavement markings, or as directed.

Replace the paragraph that begins "If permanent pavement ..." with the following paragraph:

If permanent pavement markings are not placed within 28 Calendar Days after placing temporary pavement markings, replace missing or damaged temporary pavement markings on wearing Course and along final alignment at no additional cost to the Agency, unless otherwise directed.

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:

00226.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

In addition to the requirements of Section 00221, this Work consists of providing, installing, moving, operating, maintaining, and removing guardrail, barrier, and impact attenuators for temporary traffic control, as shown and directed.

00226.11(a)(2) Temporary Concrete Barrier - Replace the paragraph that begins "The concrete barrier shall ..." with the following paragraph:

Provide concrete barrier with functioning scuppers, unless otherwise approved.

00226.12 Temporary Impact Attenuators - Replace this subsection, except for the subsection number and title, with the following:

Provide temporary impact attenuators from the QPL and as shown on the Standard Drawings.

00226.23 Truck Mounted Attenuator - Replace the title of this subsection with "**Temporary Impact Attenuator, Truck Mounted**".

Replace the paragraph that begins "The support vehicle ..." with the following paragraph:

Provide a support vehicle for a TL-2 rated TMA with a minimum weight of 9,900 pounds.
Provide a support vehicle for a TL-3 rated TMA with a minimum weight of 22,000 pounds.

Replace the paragraph that begins "If used in a mobile ..." with the following paragraph:

If a TMA support vehicle is used in a mobile operation, maintain a consistent distance from the mobile operation, as shown in Table 00226-1, or as directed.

00226.41(c) Glare Shields - Replace the bullet that begins "Firmly attach the base plate ..." with the following bullet:

- Firmly attach the base plate anchor bolts to the Temporary Barrier to withstand a 1,000-pound vertical pull and to prevent horizontal and rotational displacement. The maximum spacing between anchor bolts on modular units is 30 inches.

Replace the bullet that begins "Modular or single element ..." with the following bullet:

- Use modular or single element glare shields from the same manufacture and of like appearance throughout the entire installation when installed in a continuous run.

US101: Butte Creek Culvert Project

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:

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

00226.63 Truck Mounted Attenuators - Replace this subsection with the following subsection:

00226.63 Temporary Impact Attenuator, Truck Mounted - Repair damage to support vehicles that TMAs are mounted on at no additional cost to the Agency.

00226.80(b)(2) Temporary Barrier - Add the following to the end this subsection:

The quantities will be limited to those shown in Table 00226-1. The estimated quantity of Temporary Barrier is:

TABLE 00226-1

Stage/Phase	Location (STA to STA)	Temporary Barrier (foot)	Temporary Barrier, Minimum Deflection (foot)
Stage 1	“L” 41+00 – “L” 50+00		900’
Stage 2 (Left Side)	“D” 109+00 – “D” 118+00		912.5’
Stage 2 (Right Side)	“D” 110+50 – “D” 118+00		750’
Total Quantity			2562.5’

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.

Replace the paragraph that begins "In items (g) and (h) ..." with the following paragraph:

In items (g) and (h), the type of attenuator is inserted in the blank.

Replace the paragraph that begins "In item (i), the ..." with the following paragraph:

US101: Butte Creek Culvert Project

In item (i), the words "Sand Module" or the type of attenuator is inserted in the blank.

SECTION 00230 – TEMPORARY ROADBED AND SURFACING

Section 00230 is not a Standard Specification and is included in this Project by Special Provision.

Description

00230.00 Scope - This Work consists of constructing, maintaining, and removing temporary Roadbeds and Surfacing, as shown or directed.

Materials

00230.10 Materials - Furnish Materials meeting the following requirements:

Stone Embankment	00330.16
Aggregate Base and Shoulder Aggregate	00640.10
Commercial Asphalt Concrete Pavement (CACP). ..	0740.10
Emulsified Asphalt Tack Coat	00730.11
Geotextile	02320

00230.11 Earthwork - Furnish Materials required to construct the Roadbed according to Section 00330 and as shown.

Equipment

00230.20 Equipment – Furnish Equipment meeting the requirements of 00620.20.

Construction

00230.40 Earthwork - Construct temporary embankments and excavation outside the permanent Roadbed according to the applicable parts of Section 00330, except density testing to verify compaction will not be required. Compact the embankment material according to 00330.43(c). Ensure that Earthwork that remains in place as permanent Roadbed meets all requirements of Section 00330.

00230.41 Geotextile - Place embankment geotextile according to Section 00350.

00230.42 Stone Embankment - Place and compact Stone Embankment according to the applicable parts of Section 00330.

00230.43 Aggregate Base and Shoulder Aggregate Base - Place and compact Aggregate Base according to the applicable parts of Section 00640.

US101: Butte Creek Culvert Project

00230.44 Commercial Asphalt Concrete Pavement - Place CACP according to Section 00740.

00230.45 Emulsified Asphalt Tack Coat - Apply Emulsified Asphalt according to the applicable parts of Section 00730.

00230.46 Cold Plane Pavement Removal – Perform cold plane pavement removal according to the applicable parts of Section 00620.

Maintenance

00230.60 Surface Maintenance - Maintain temporary surfaces according to 00220.60.

Finishing and Cleaning Up

00230.70 General - When temporary surfaces are no longer needed, do the following:

- Remove all related materials.
- Restore the area the temporary Surfacing and associated Roadbed occupied to the original ground contours, or as directed.
- Apply permanent seeding to the area occupied by the temporary Surfacing and associated Roadbed, if required, according to Section 01030.
- Dispose of excess materials according to 00330.41(a)(4).

Measurement

00230.80 Measurement - No measurement of quantities will be made for Work performed under this Section. It is estimated that the following approximate quantities of Materials will be required:

Material	Amount
Construct Temporary Roadbed and Surfacing:	
Embankment.....	310 cu. yd.
Excavation	1510 cu. yd.
Subgrade Geotextile	4500 sq. yd.
Stone Embankment	1920 cu. yd.
Aggregate Base	1940 ton
Shoulder Aggregate	70 ton
Cold Plane Pavement Removal, 2 inches deep.	330 sq. yd.
Commercial Asphalt Concrete Mixture	1230 ton
Emulsified Asphalt Tack Coat	0.2 ton
Remove Temporary Roadbed and Surfacing:	
Embankment.....	1510 cu.yd.
Excavation	3790 cu.yd.

US101: Butte Creek Culvert Project

Quantities include only those quantities placed or removed outside the permanent Roadbed Neat Line.

Permanent seeding will be measured according to 01030.80.

Payment

00230.90 Payment - The accepted quantities of Work performed under this Section, except for permanent seeding Work, will be paid for at the Contract lump sum amount for the item "Construct and Remove Temporary Roadbed and Surfacing".

Payment will be payment in full for constructing, maintaining, and removing Roadbeds and Surfacing, and for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

Permanent seeding will be paid for according to 01030.90.

SECTION 00231 - TEMPORARY ACCESS ROAD

Section 00231 is not a Standard Specification and is included in this Project by Special Provision.

Description

00231.00 Scope - This Work consists of constructing, maintaining, and removing temporary, unpaved access roads for the use of Contractor and Agency Equipment and personnel as needed, shown, or directed.

Materials

00231.11 Geotextile - Furnish subgrade geotextile, embankment geotextile, or riprap geotextile, at the Contractor's option that meets the requirements of Section 02320, with documentation according to 02320.10(c).

00231.12 Geogrid - Furnish subgrade reinforcement geogrid, if used, that meets the requirements of Section 02320.

00231.13 Road Material - Furnish crushed Aggregate Base, stone embankment, or other suitable Granular Material capable of supporting the weight of Equipment intended to use the temporary access road.

Construction

00231.41 Clearing - Clearing brush and vegetation for temporary access roads is allowed in the areas shown or where directed. Preserve and protect trees as shown or directed.

US101: Butte Creek Culvert Project

00231.42 Temporary Access Road - Construct temporary access roads to the width, grade, profile, and depth of base sufficient to support the weight of Equipment using the road. Install geotextile or geogrid prior to placement of road material.

00231.43 Not for Public Traffic - Do not direct or allow Public Traffic to use temporary access roads constructed according to this Section.

00231.44 Verification of Subgrade - In areas where permanent earthwork construction is required on ground that has been occupied by a temporary access road, rework or replace unstable Materials to avoid and correct, according to 00330.40(c), excessive stress or strain that could be detrimental to the Subgrade.

00231.45 Verification of Original Ground - Take pictures before and after the construction of the temporary access road. Furnish pictures to the Engineer taken before the temporary access road Work has commenced and taken after the temporary access road has been removed and the area restored. If corrective action is necessary, perform the correction at no additional cost to the Agency

Maintenance

00231.60 Surface Maintenance - Maintain temporary access roads so that the road surfaces remain firm, smooth, free of ruts or standing water, and are graded to prevent concentrations of runoff water. Promptly remove accumulations of mud or debris.

Finishing and Cleaning Up

00231.70 General - When a temporary access road is no longer needed, do the following:

- Remove all Materials.
- Restore areas occupied by the temporary access road to the original ground contours or as directed.
- Perform scarification to compacted areas that is slated for revegetation as directed by the Engineer.
- Apply permanent seeding to the area occupied by the temporary access road according to Section 01030.
- Dispose of excess materials according to 00330.41(a)(5).

Measurement

00231.80 Measurement - Except for permanent seeding, no measurement of quantities will be made for Work performed under this Section.

Permanent seeding will be measured according to 01030.80.

Payment

US101: Butte Creek Culvert Project

00231.90 Payment - The accepted quantities of Work performed under this Section, except for permanent seeding work, will be paid for at the Contract Lump Sum amount for the item "Construct and Remove Temporary Access Road".

Payment will be payment in full for furnishing and placing 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 removing and disposing of temporary access road materials, or for scarification to mitigate compaction, or for restoring the areas to original ground contours.

Permanent seeding Work will be paid for according to 01030.90.

SECTION 00236 - AGENCY PROVIDED DISPOSAL SITES

Section 00236, is not a Standard Specification and is included in this Project by Special Provision.

Description

00236.00 Scope - This Work consists of utilizing Agency provided prospective or mandatory disposal sites as the Contractor elects or as required for the construction of the Contract.

00236.01 Prospective Disposal Site Specific Requirements - The following prospective disposal site for Shoulder Soil, contaminated grubbing materials, and excess materials from earthwork, as long as the material does not contain hazardous substances, that may warrant investigation and consideration for use by the Contractor on this Project is as follows:

(a) Prospective Disposal Site, Md1:

- **Location** - Approximately 0.67 miles north-northeast of Neskowin, OR on US101 in the NE1/4 of Section 25, T. 5 S, R. 11 W W.M.
- **Access** – Adjacent west of MP 96.94 of US101
- **Disposal Quantity Limit** - 2,250 cubic yards.
- **Available Area for Material Disposal of Waste Material:**
 - **Existing** – 0 acres
 - **Development** – 0.25 acres

If the Contractor elects not to utilize the above listed disposal site(s) and unless otherwise specifically allowed and subject to the requirements of 00280.05, dispose of materials, classed as waste materials in 00330.41(a)(3) and 00330.41(a)(4), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

US101: Butte Creek Culvert Project

00236.03 Laws - Conduct operations within the disposal site according to all applicable State, county, and federal laws including mining and fire laws. Provide, operate, and maintain wildland firefighting equipment appropriate for the current fire levels on-site at all times during all disposal site operations.

00236.04 Permits - Copies of the Plans, permits, agreements and the disposal site narrative(s) are available for inspection at the Project Manager's office. Conform all operations within the disposal site(s) to the stipulations and conditions of these documents and to all of the requirements of the Contract.

Subsection	Site Name	Documents
00236.01(a)	Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45)	see 00294.40 (e) Contaminated Soil Excavation and Shoulder Soil

00236.05 Pre-Work Meeting - Before occupying a disposal site, attend a pre-work meeting at the disposal site with the Engineer and the following owners or representatives:

Subsection	Site Name	Contact Names for pre-work meeting
00236.01(a)	Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45)	ODOT Geologist, Michael Tardif ODOT Region Environmental Coordinator, Corissa Anderson-Horvath

00236.06 Site Occupancy - Coordinate disposal site occupancy with the Engineer. The disposal site items listed in Table 00236-1 below are as shown. Do not operate beyond the disposal site Project boundary or in no Work area(s) as shown unless otherwise directed, in writing.

Table 00236-1

Subsection	Site Name	Site items shown and staked
00236.01(a)	Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45)	designated fill site

00236.07 Site Development - If proposing changes to a disposal site development plan, submit a site development plan as an unstamped Working Drawing according to 00150.35. Do not begin Work in a disposal site until the site development plan has been approved, in writing, by the Engineer.

Develop a site-specific Erosion and Sediment Control Plan for each disposal site according to 00280.04 and submit it to the Engineer at or before the pre-work meeting. Construct stormwater control berm(s) as shown and as needed to control runoff. Do not allow any materials, including sediments, or Aggregate to enter into waterways or Wetlands.

Develop a site-specific Pollution Control Plan for each disposal site according to 00290.30(b), and submit it to the Engineer at or before the pre-work meeting. Include the following requirements in the Pollution Control Plan:

US101: Butte Creek Culvert Project

- Do not discharge waste or by-product if it contains any substance in concentrations that could contaminate Soils or result in harm to fish, wildlife, or water sources.
- Store all potentially hazardous materials and solid waste in a manner that prevents seepage into the ground or groundwater sources. Lined sumps or pits are allowable options for storage. If pits or sumps are used, construct adequate berms or provide other measures to prevent breaching of the pits or sumps.
- For Materials capable of causing water pollution if discharged, locate storage facilities in an area that prevents spillage into waterways or Wetlands.

Construction

00236.40 General - Steam clean of all debris (soil, dirt, plant parts, and vegetative matter) all vehicles and Equipment, prior to entering the site for the first time, and each subsequent time if the vehicle has left the Roadway outside the construction Project limits, before being brought back to the site. Notify the Engineer before moving each vehicle onto the site. Certify, in writing, that the Equipment has been steam cleaned.

00236.41 Restrictions and Protection of Resources - Comply with the following for all operations within the disposal site:

- Protect cultural resources according to 00290.50.
- Protect migratory birds according to 00290.36(a).
- Clear trees and shrubs and strip and stockpile soil overburden between September 1 and March 1.
- Do not utilize, contaminate, or disperse material from existing stockpiles. If existing stockpiles interfere with the Contractor's operations, move the stockpiles to other locations within the disposal site area as directed, at no additional cost to the Agency.

00236.42 Site Setup - Before proceeding with Work in the disposal site, the following apply:

(a) Access:

- For disposal site Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45) (00236.01a)) perform erosion control as shown and according to Section 00280. Maintain a 10-foot buffer between the toe of the disposed of material slopes and erosion control elements.

(b) Clearing and Grubbing – Clear and grub all trees within the disposal area according to Section 00320.

00236.44 Site Operations - The following apply during disposal site operations:

- Construct slopes, benches, top, and floor of the disposal area as shown.
- Track-walk all slopes with a grade at or flatter than 1V:2H so that track impressions run parallel to slope contours. Maintain at least 1 3/8-inch tall track grousers.
- For disposal site Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45) (00236.01a)) place material in Lifts according to 00330.42(c).

US101: Butte Creek Culvert Project

- To control dust, apply water to disposal site access, haul road(s), and disposal operations.
- Place only material that is identified as acceptable for this site in the disposal area as shown. Maintain a minimum 10-foot wide buffer strip between the toe of the disposal area and the property boundary. Smooth and contour the disposal area to form side slopes no steeper than 1V:2H.
- For disposal site Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45) (00236.01(a)) if the Contractor chooses to utilize this disposal site, maintain the condition of US101, Edelman Wy., and Neskowin Crest Dr. at all times. Provide traffic control related to ingress and egress movements in a manner that allows a safe work zone and safe passage of vehicles.

00236.45 Site Clean-up - The following apply at the completion of operations:

- Leave no loose material on the site exceeding 1 foot diameter, except as noted below.
- For disposal site Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45) (00236.01(a)) a maximum of 100 cubic yards of oversize material with a maximum dimension of 1 foot may be may be incorporated into the fill at the disposal site.

00236.46 Seeding:

- For disposal site Md1 (Sta. "Md" 400+07 to Sta. "Md" 402+45) (00236.01(a)) in addition to other areas with soil cover within the site disturbed by the Contractor's operations, apply seed and mulch according to Section 01030.

00236.47 Site Vacating - Before vacating the disposal site the following apply:

- Remove all structures, noncombustible debris, and Equipment from the disposal site, even if it was pre-existing, except for grass and small shrubs incorporated into the overburden.
- Remove solid waste and hazardous material from the site and dispose of properly. Provide documentary evidence of proper disposal and verify the amount of material removed.
- If a spill or dumping has occurred, or is suspected to have occurred, clean up contaminated materials according to Section 00290. After clean up, the Engineer may, sample and test materials at the spill or dumping locations to verify the cleanup has been completed. If the Engineer's verification testing demonstrates remaining contamination, perform additional clean up until the requirements of Section 00290 including 00290.20(g) are met.
- Attend a post-work meeting at the disposal site to evaluate disposal site rehabilitation work with the Engineer and attendees listed under 00236.05.

Measurement

00236.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

Payment

US101: Butte Creek Culvert Project

00236.90 Payment - No separate or additional payment will be made for Work performed under this Section.

SECTION 00240 - TEMPORARY DRAINAGE FACILITIES

Comply with Section 00240 of the Standard Specifications modified as follows:

00240.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing, placing, maintaining, and removing temporary drainage facilities, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 00245 - TEMPORARY WATER MANAGEMENT

Section 00245 is not a Standard Specification and is included in this Project by Special Provision.

Description

00245.00 Scope - This Work consists of providing, installing, operating, maintaining, and removing temporary water management facilities in regulated Work areas.

00245.01 Abbreviations:

TWM - Temporary Water Management
TWMF - Temporary Water Management Facility
TWMP - Temporary Water Management Plan

00245.02 Definitions:

Temporary Water Management Facility - A TWMP that conveys water around or through Work areas, removes water from Work areas, and treats and discharges water at locations outside Work areas.

00245.03 Temporary Water Management Plan - The Agency TWMP is a concept plan. 28 Calendar Days before beginning Work in regulated Work areas, submit stamped Working Drawings of a Contractor-developed TWMP, according to 00150.35, based on either the Agency's concept plan or an independent plan that meets water quality and environmental guideline requirements and does not negatively affect neighboring properties or water rights.

US101: Butte Creek Culvert Project

Include the following minimum information in the TWMP:

- The sequence and schedule for dewatering and re-watering, including when to contact the Engineer prior to dewatering and re-watering.
- How the Work area is isolated from the active stream flow upstream, through, and downstream.
- How the stream flow is routed and conveyed around or through the isolated Work area.
- How fish passage is provided around the Work area, if required.
- How a safe landing zone for fish will be provided at the outlet of all bypass pipes.
- How the isolated Work area is de-watered.
- How the pumped water is treated, if necessary, before it is discharged downstream.
- Description of all construction stages, including appropriate contact points for each stage.
- A list of on-site backup Materials and Equipment.
- Provide the name of the TWM Subcontractor (if applicable) and Contractor's superintendent, and their 24-hour contact phone number 10 Days before the pre-Work meeting. If changes in the appointment of the TWM Subcontractor or Contractor's superintendent occur during the term of the Contract, provide written notice to the Engineer within 5 Calendar Days of the change.
- Calculations of water withdraw pump's capacity.
- Details of the proposed water intake screen used to isolate in-water Work area and how it meets the requirements of 00290.34(c)(3).
- Details on the removal of the TWM Materials, including the filling and abandoning of pipes.

Any change to the TWMP during construction requires approval prior to implementation.

Obtain the Engineer's written approval before beginning Work in in-water Work areas.

00245.04 Pre-Work Meeting - Before beginning any TWM Work, attend a pre-work meeting at the Project Site with the Engineer no more than 8 Calendar Days prior to implementation of TWM. Required meeting attendees include:

- Engineer
- Contractor
- TWM Subcontractor (if applicable)
- Agency Environmental Coordinator or their appointed representative

The pre-Work meeting agenda typically includes the method of TWM, the TWMP, fish salvage plan and strategy, describe environmental risks, turbidity monitoring, energy dissipation, dewatering and re-watering plan and strategy, site clean-up expectations, and the circumstances when contacting the Engineer is required.

Materials

00245.10 Materials - Furnish Materials meeting the following requirements:

US101: Butte Creek Culvert Project

Concrete Barrier	00820.11
Pipe	00445.11
Plastic Sheetting	00280.14(a)
Temporary Sediment Trap.....	00280.16(h)
Riprap	00390.11
Sandbags	00280.15(a)
Water Intake Screening.....	00290.34(c)
Controlled Low-Strength Materials (CLSM).....	00442.10
Riprap Geotextile, Type 1	02320

Provide pumps that are:

- Self-priming.
- Equipped with a variable speed governor.
- Equipped with a power source.
- Able to pump water that contains soft and hard solid.

00245.20 Emergency Materials – Provide and stockpile emergency materials during the installation of the TWMP.

Provide and stockpile the following emergency Materials on the Project site:

Item	Quantity
Plastic Sheetting.....	200 Square Yard
Sandbags	1000 Each

The emergency materials are in addition to the other TWMP materials required to implement and maintain the TWMP.

Construction

00245.40 Fish Removal - Qualified Agency, ODFW, or ODOT consultant biologists will remove fish and other aquatic organisms from the isolation Work areas. Coordinate fish removal with the Engineer at least 28 Calendar Days before beginning Work in regulated Work areas. Allow access into the isolation Work areas before, during and after installation of the TWMP to perform the specified tasks as follows:

- **Before Installation of TWMP** - Before any in-water Work, including installing TWMP, qualified personnel will remove fish and other native aquatic organisms from within the proposed isolated Work area.
- **After Installation of TWMP** - After installing TWMP and the reduction of the water level through the isolated Work area has begun, qualified personnel will remove all fish and aquatic organisms as the water level is reduced. Do not completely de-water the isolation area until all fish and aquatic organisms have been removed.

US101: Butte Creek Culvert Project

00245.41 Installation - During installation of the temporary water management facility, maintain a downstream water flow rate of at least 50 percent of the upstream water flow rate.

00245.42 Operation - Operate temporary water management as follows:

- Protect fish and fish habitat according to 00290.34.
- Maintain and control water flow downstream of the isolated Work area for the duration of the diversion to prevent downstream de-watering.
- Clean, maintain and repair water intake screening to ensure adequate flows and protection of aquatic organisms.
- In the event of containment failure immediately notify the Engineer so arrangements can be made to remove fish and aquatic organisms from the isolation Work areas prior to the continuation of Work within the ordinary high water limits.

Maintenance

00245.60 Maintenance - Monitor water turbidity according to 00290.30(a)(8).

Finishing and Cleaning Up

00245.70 Removal - Prior to removal of the TWMF, obtain approval from the Engineer after completion of all Work within ordinary high water limits. Remove the TWMF and re-water and restore the stream flow. Maintain downstream water flow during removal of the facility. Staged or metered re-watering may be required as determined by the Engineer. Fill and abandon any TWMF pipe that remains underneath the Roadbed according to 00490.43.

Measurement

00245.80 Measurement - No measurement of quantities will be made for temporary water management facilities.

The estimated quantities of Materials required for the temporary water management facility are:

Temporary Water Management Facility at Station "L" 45+80 :

Pipe	1085 Feet
Plastic Sheetting	120 Square Yard
Temporary Fish Landing Pool.....	2 Each
Temporary Sediment Trap.....	3 Each
Loose Riprap	80 Cubic Yard
Abandoning Pipe.....	1 Each
Sandbags.....	1500 Each
Riprap Geotextile (Type 1)	150 Square Yard

Turbidity monitoring will be measured according to 00290.80.

Payment

US101: Butte Creek Culvert Project

00245.90 Payment - The accepted quantities of temporary water management facilities will be paid for at the Contract lump sum amount for the item "Temporary Water Management Facility at Station _____".

The location of the facility is inserted in the blank.

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

Turbidity monitoring will be paid for according to 00290.90.

No separate or additional payment will be made for abandoning pipes.

No separate or additional payment will be made for emergency materials.

No separate or additional payment will be made for TWMP, maintaining, operating, monitoring, moving, or removing the facility.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications modified as follows:

00280.00 Scope - Replace the paragraph that begins "This Work also consists of providing temporary ..." with the following 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.

US101: Butte Creek Culvert Project

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

The area of ground disturbance on Agency owned land is 1.5 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.

00280.01 Abbreviations - Replace this subsection with the following subsection:

00280.01 Abbreviations and Definitions:

- BMP** - Best Management Practices
- EMP** - Environmental Management Plan
- ESC** - Erosion and Sediment Controls
- ESCP** - Erosion and Sediment Control Plan
- ESCM** - Erosion and Sediment Control Manager

Effective Functioning - Preventing Erosion, controlling Runoff, or controlling Sediment in each location where an ESC is needed so Erosion-related impacts of site construction are mitigated as required.

Erosion - The wearing away of the land surface by water, wind, ice, gravity or other geological agents.

Perimeter Controls - Perimeter Controls include sediment fences, ditches, filter berms in flatter areas, and other methods for preventing Sediment and other construction-generated pollutants from leaving the construction site.

Permanent Stabilization - Maintenance-free measures or methods necessary to prevent Erosion or Sediments from leaving the Project Site.

Runoff - That portion of precipitation that flows from drainage area on the land surface, in open channels or in stormwater conveyance systems.

Sediment - Fragmented material originated from weathering and Erosion of Rock and unconsolidated deposits. Sediment also includes fragmented materials from man-made materials. The material is transported by, suspended in, or deposited by water.

Temporary Stabilization - Covering soil or other measures to prevent Erosion until Permanent Stabilization measures are in place and established.

00280.02 Definitions - Replace this subsection with the following subsection:

00280.02 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.

US101: Butte Creek Culvert Project

00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands - Replace the bullet that begins "Information required under 1200-CA..." with the following bullet:

- Information required under 1200-CA permit, if applicable.

Replace the bullet that begins "When using a Contractor developed ..." with the following bullet:

- When using a Contractor developed ESCP, develop, provide, and stamp the ESCP by a professional with one of the following credentials. Include their name and credentials in the ESCP.

Replace the paragraph that begins "Ensure that the Contractor's construction ESCP ..." with the following paragraph:

Ensure that the Contractor's construction ESCP and implementation schedules are prepared by an individual who meets qualifications of 00280.30. Provide a signed copy of the ESCP with individual's name, title, state certifications, and employing firm if different than Contractor's firm.

Add the following paragraphs to the end of this subsection:

When required on the Project fill in the required information listed on the ESCP cover sheet prior to the 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.

Replace the bullet that begins "**Rock** – Class 50..." with the following bullet:

- Class 50 riprap according to Section 00390.

00280.14(e) Slope and Channel Liner Matting - Replace the bullet that begins "Type A – Slope..." with the following bullets:

US101: Butte Creek Culvert Project

- **Type A: Hydraulically-Applied** - Hydraulically-applied material composed of long strand, thermally processed wood fibers, crimped, interlocking fibers and performance enhancing additives meeting the following criteria:
 - Flexural rigidity when wet, and equal to or greater than 5 oz-yd.
 - Permissible shear stress 1.0 lbs/sqft or greater
 - Thermally processed wood fibers – 73%
 - Crosslinked hydro-colloid tackifiers and activators – 10% + 1%
 - Crimped, interlocking fibers - 5% + 1%
 - Moisture content – 12% + 3%
 - Fully Biodegradable
 - A cure time of less than 2 hours during wet weather.

00280.15(a) Check Dams - Replace the bullet that begins "**Type 5: Prefabricated System** - Prefabricated ..." with the following bullet:

- **Type 5: Prefabricated System** - Prefabricated check dam system according to the manufacturer's recommendations and on the QPL. Field fabricated systems are not acceptable.

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 12 inches.

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

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

Replace the bullet that begins "**Prefabricated Construction Entrance ...**" with the following bullet:

- **Prefabricated Construction Entrance** - Provide reusable prefabricated construction entrance mats (track out mats) with the following characteristics:

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).

Replace the bullet that begins "**Type 6: Aggregate Barrier...**" with the following bullet:

US101: Butte Creek Culvert Project

- **Type 6: Aggregate Barrier** - Clean, well-graded, angular Aggregate with maximum size between 4 inches and 1 inch, meeting the requirements of 00330.16, except no more than 5 percent of the material (by weight) passing the No. 40 sieve.

00280.16(i) Concrete Washout - Replace the paragraph that begins "Furnish impermeable, spill resistant ..." with the following paragraph:

Provide impermeable, spill resistant, leak proof concrete washout basin of sufficient size and quantity to retain all concrete wash water and concrete waste developed during construction, meeting the following requirements:

00280.16(k) Active Treatment System - Add the following sentence to the end of this subsection:

Obtain approval of the active treatment system from DEQ prior to use.

00280.30 Erosion and Sediment Control Manager - Add the following bullet to the beginning of the bullet list under "The ESCM duties include:"

- Be present at the Project Site during all ground disturbing activities.

Replace the bullet that begins "Monitor rainfall, snow melt and runoff ..." with the following bullet:

- Visually monitor rainfall, snow melt and runoff at the Project Site.

Replace the bullet that begins "Monitor water quality in receiving streams in ..." with the following bullet:

- Visually monitor water quality in receiving streams in the vicinity of the Project Site.

Replace the bullet that begins "Monitor water in sediment traps receiving ..." with the following bullet:

- Monitor the pH of the water in sediment traps receiving runoff from soils amended with cementitious material for acidity or alkalinity.

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

- Monitor locations identified in Section 00294 for compliance.

00280.41(a) Disturbance Limits - Replace this subsection, except for the subsection number and title, with the following:

Prior to any ground disturbing activity, delineate all construction site clearing limits with high visibility markings and do not disturb areas outside the clearing limits. Prior to beginning construction activities, delineate and protect riparian areas including trees, root zones and vegetation to be preserved and delineate and protect vegetated buffer zones according to

US101: Butte Creek Culvert Project

00280.41(e). Protect post-construction stormwater facilities, unless used during construction as sediment trap, then repair according to 00280.46(h).

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(d) Disturbance Restrictions - Replace this subsection, except for the subsection number and title, with the following:

Limit the amount of disturbed areas to what can be effectively controlled.

00280.41(f) Hauling Material - Replace this subsection, except for the subsection number and title, with the following:

Cover loads carrying soil or sediment that may generate dust. Haul saturated loads in watertight beds or drain saturated loads prior to leaving the Project Site.

00280.41(g) Underground Injection Controls (UIC) - Replace this subsection, except for the subsection number and title, with the following:

Do not allow storm water from work area to enter Underground Injection Control (UIC) inlets, UIC catch basins or UIC wells.

00280.44(d) Temporary and Permanent Mulching and Seeding - Replace the bullet that begins "Mulching - Evenly apply ..." with the following bullet:

- **Mulching** - Evenly apply dry mulch and tackifier materials according to Section 01030. In areas not accessible to heavy Equipment, mulch by hand or by other approved methods. Areas not prepared according to 01040.48(d) require a greater rate of application to obtain complete coverage, at no additional cost to the Agency.

00280.48 Emergency Materials - Add the following paragraphs after the paragraph that begins "Provide, stockpile, and protect...":

Furnish and stockpile the following emergency Materials on the Project Site:

Item	Quantity
STRAW BALE.....	5 EACH
SEDIMENT BARRIER TYPE 4	50 EACH
PLASTIC SHEETING.....	100 SQYD

US101: Butte Creek Culvert Project

When emergency materials are used, restock emergency materials within 48 hours of use.

00280.61 Ineffective Controls - Replace this subsection, except for the subsection number and title, with the following:

If an ESC device does not meet Effective Functioning, repair, replace, or provide additional devices. Provide devices repaired, replaced, or added due to improper installation, insufficient maintenance, or damage from Contractor operations at no additional cost to the Agency.

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 - Replace this subsection, except for the subsection number and title, with the following:

Provide and install a temporary rain gauge at the Project Site. Upon approval, storm event information may be derived from weather stations that are representative of precipitation levels at the site.

The closest on-line rain gauge is located at:
<https://forecast.weather.gov/MapClick.php?lon=-123.97758007049558&lat=45.10695244550203>

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.
- 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.
- All corrective action documentation and photographs to Agency within 24 hours of completion of corrective actions.

US101: Butte Creek Culvert Project

00280.90 Payment - Replace the paragraph that begins "In item (f), the word ..." with the following paragraph:

In item (f), the word "Hydromulch", "Straw", or "Compost" is inserted in the blank.

Replace the paragraph that begins "In items (g), the ..." with the following paragraph:

In item (g), the type is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

00280.91 Payment – Replace the paragraph that begins "In items (a), (f), (g)..." with the following paragraph:

In items (a), (f), (g), (j), and (k), the type is inserted in the blank.

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.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00290 - ENVIRONMENTAL PROTECTION

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

00290.00 Scope - Replace the paragraph that begins "If any provision of the Specifications ..." with the following paragraph:

If any provision of the Specifications appears to conflict with one or more Laws, the more stringent requirement applies, unless the Engineer directs otherwise in situations where the Specifications are more stringent.

00290.10 Staging and Disposal Sites - Replace the paragraph that begins "Locate staging areas..." with the following paragraph:

US101: Butte Creek Culvert Project

Locate staging areas and disposal sites in previously improved or disturbed sites, including existing Roadways, pullouts, turnouts, parking lots, and storage yards that have been compacted, and graveled or paved, unless otherwise specified in Section 00236 or approved, in writing, by the Engineer.

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.

00290.20(c)(3)d. Concrete and Masonry - Replace the paragraph that begins "If the Engineer provides written ..." with the following paragraph:

If the Engineer provides written approval, concrete may be reused as Aggregate as directed.

00290.20(c)(3)f. Off-Site Disposal - Replace the paragraph that begins "Subject to local zoning codes ..." with the following paragraph:

Subject to local zoning codes and the requirements of 00280.05, materials that meet the definition of clean fill may be placed on other properties in a manner consistent with environmental requirements, and with the written permission of the property owner. Provide the Engineer a copy of the signed agreement with the owner before placing the clean fill material. Do not place the clean fill material at locations that are visible from a public Highway, road, or street unless the site is zoned and licensed for landfill.

00290.20(d) Hazardous Waste Management - Replace the bullet that begins "Fill in the Comments section with ..." with the following bullet:

- Fill in the Comments section with the following statement:
"[Contractor name] is responsible for the following: All hazardous waste management on-site for the duration of this construction Project, for delivery of the waste to a permitted recycling or disposal facility, and for all forms and fees associated with the hazardous waste management including cancellation of the RCRA site identification number at the end of the Project. ODOT is the owner of the waste and maintains long-term responsibility for the waste as required by RCRA, excluding all wastes generated solely from materials brought to the site by the Contractor that remain the property of the Contractor."

Replace the bullet that begins "All employees involved in the handling ..." with the following bullet:

- The Contractor is responsible to ensure that all employees involved in the handling and waste management of CEG hazardous waste comply with the federal and State Laws for hazardous waste management. Train all employees involved in the handling of SQG and LQG hazardous waste according to federal and State Laws. For LQG hazardous waste projects, keep employee training records on-site and readily available.

Replace the bullet that begins "If hazardous waste is treated on-site ..." with the following bullet:

- If hazardous waste is treated on-site, obtain approval from DEQ and the Engineer for each specific treatment or recycling process, treat wastes within accumulation tanks or

US101: Butte Creek Culvert Project

closed containers that meet RCRA requirements, conduct treatment within the storage time for the applicable generator category, maintain current copies of all required notifications and waste analysis plans readily available on-site and request DEQ technical assistance prior to starting any on-site recycling or treatment.

00290.20(f) Unexpected Contamination - Replace the paragraph that begins "The Engineer will attempt to resolve ..." with the following paragraph:

The Engineer will attempt to resolve the unanticipated situation expeditiously according to 00140.40. Delays to Work due to the discovery of unexpected contamination may be considered for exclusion from Contract Time according to 00180.50(e).

00290.20(g) Spills and Releases - Replace the bullet that begins "Provide a written report to the Engineer ..." with the following bullet:

- Provide a written report to the Engineer, using the DEQ Spill/Release Report form, within 10 Calendar Days of completing spill response, but no more than 30 Calendar Days after the initial event. If the spill was reported to DEQ, submit the report to DEQ concurrently. Include a description of how to prevent future releases.

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.

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.

US101: Butte Creek Culvert Project

- 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(a)(8) Meter Turbidity Monitoring - In addition to the requirements of 00280.62(c) to monitor the receiving stream to identify water quality issues, during Work in waters of the State or U.S., implement best management practices (BMPs) to minimize turbidity, and monitor turbidity using a turbidity meter that has been maintained and calibrated according to the manufacturer's specifications and according to the following:

- Measure upcurrent and downcurrent turbidity at two-hour intervals and perform work based on turbidity measurements according to the following:
 - Take upcurrent samples at a location representative of background turbidity approximately 100 feet from the work area.
 - Take downcurrent samples at a location approximately 100 feet from the work area at approximately mid-depth of the water body and within any visible turbidity plume.
 - If the downcurrent reading is less than 5 nephelometric turbidity units (NTU) higher than the upcurrent reading, continue to Work and take readings every two hours.
 - If the downcurrent reading is greater than or equal to 5 and less than 30 NTU higher than the upcurrent reading, modify work procedures and repair or upgrade BMPs, continue Work, and continue to take readings every two hours. If after four hours the downcurrent reading is still greater than or equal to 5 NTU higher than the upcurrent reading, stop all work in water and repair or upgrade BMPs. Resume work in water only after the downcurrent reading is less than 5 NTU above the upcurrent reading.
 - If the downcurrent reading is greater than or equal to 30 and less than 50 NTU higher than the upcurrent reading, modify work procedures, repair or upgrade BMPs and continue Work. If, at the subsequent two-hour reading, the downcurrent reading is still more than 30 NTU higher than the upcurrent reading, stop all work in water and repair or upgrade BMPs. Resume work in water only after the downcurrent reading is less than 5 NTU above the upcurrent NTU reading.

US101: Butte Creek Culvert Project

- If the downcurrent reading is 50 NTU or more higher than the upcurrent reading, stop all work in water, repair or upgrade BMPs, and inform the Engineer. Resume work in water only after the downcurrent reading is less than 5 NTU above the upcurrent NTU, as determined by continued readings made no more than two hours apart.
- Document all turbidity monitoring observations on form 734-2755, "Turbidity Monitoring Report", or another form approved by the Engineer. Submit reports to the Engineer weekly during work in water and keep copies of the reports at the Project Site.
- Meter turbidity monitoring may be temporarily suspended if all of the following conditions are met:
 - Temporary water management and work area isolation measures have been installed and are functioning as designed.
 - The Engineer, after consultation with DEQ, has authorized the suspension of turbidity monitoring. The Engineer will provide information to be documented on the turbidity monitoring form, including the date of the DEQ authorization and the name of the DEQ employee providing the authorization.
- Resume the turbidity monitoring protocol if Work during a temporary suspension of meter turbidity monitoring causes a release of a visible turbidity plume.

00290.32 Noise Control - Replace the bullet that begins "Notify nearby residents whenever extremely ..." with the following bullet:

- Notify nearby residents whenever extremely noisy Work is planned to occur.

00290.34 Protection of Fish and Fish Habitat - Add the following paragraph:

Meet with the Agency Biologist, Resource Representative, Engineer, and inspector on site, before moving equipment on-site or beginning any work, to ensure that all parties understand the locations of sensitive biological sites and the measures that are required to be taken to protect them.

00290.34(a) Regulated Work Areas - Add the following to the end of this subsection:

The regulated work area is the area at or below the ordinary high water (OHW) elevation shown on the plans.

Perform work within the regulated work area only during the in-water work period. The in-water work period is from July 1 to September 15_.

Do not exceed 1,347 cubic yards total volume of material filled or discharged into waters of the State and waters of the U.S..

Do not exceed 1,814 cubic yards total volume of material excavated from the waters of the State and waters of the U.S..

Submit a schedule to complete all work within the regulated work area within the in-water work period at least 10 Days prior to the preconstruction conference.

US101: Butte Creek Culvert Project

00290.34(b) Prohibited Operations - Add the following to the end of this subsection:

- Install steel piles greater than 24 inches in diameter or H-pile larger than designation HP 24 within the regulated work area.

Add the following subsection:

00290.34(c) Aquatic Species Protection Measures Required by Environmental Permits:

(1) General Requirements:

- Do not install fish ladders (for example: pool and weirs, vertical slots, fishways) or fish trapping systems.
- Do not apply surface fertilizer within 50 feet of any stream channel.

Use heavy equipment as follows:

- Choose equipment that has the least adverse effects on the environment (for example: minimally sized, low ground pressure).
- Secure absorbent material around all stationary power equipment (for example: generators, cranes, drilling equipment) operated within 150 feet of wetlands, waters of the State, waters of the U. S., drainage ditches, or water quality facilities to prevent leaks, unless suitable containment is provided to prevent spills from entering waters of the State or waters of the U.S.
- Do not cross directly through a stream for construction access, unless shown or approved. If shown or approved, cross perpendicular to the stream and do not block stream flow. When a crossing is no longer needed, completely remove the crossing and restore the soils and vegetation to the original condition.
- Store fuel and maintain all equipment in staging areas that are at least 150 feet away from any waters of the State, waters of the U.S., or storm inlet or on an impervious surface that is isolated from any waters of the State, waters of the U.S., or storm inlet.
- If temporary access roads are needed within 150 feet of any body of water, use existing routes unless new routes are shown or approved.
- Before beginning work on temporary access routes that are not shown, submit a proposal to the Engineer for approval.

(2) Work Area Isolation - Provide work isolation according to Section 00245. Provide safe passage around or through the isolated work area for adult and juvenile migratory fish unless passage did not previously exist.

(3) Water Intake Screening - Install, operate, and maintain fish screens on each water intake used for project construction, including pumps used to isolate an in-water work area. When drawing or pumping water from any stream, protect fish by equipping intakes with screens having a minimum 27 percent open area and meeting the following requirements:

- Furnish perforated plate openings 3/32 inch or smaller.

US101: Butte Creek Culvert Project

- Furnish mesh or woven wire screen openings 3/32 inch or smaller in the narrowest direction.
- Furnish profile bar screen or wedge wire openings 1/16 inch or smaller in the narrow direction.

Choose size and position of screens to meet the following criteria in Table 00290-1:

Table 00290-1

Type	Approach Velocity ¹ (Ft./Sec.)	Sweeping Velocity ² (Ft./Sec.)	Wetted Area of Screen (Sq. Ft.)	Comments
Ditch Screen	≤ 0.4	Exceed approach velocity	Divide max. water flow rate (cfs) by 0.4 fps	If screen is longer than 4 feet, angle 45° or less to stream flow
Screen with proven self-cleaning system	≤ 0.4	–	Divide max. water flow rate (cfs) by 0.4 fps	–
Screen with no cleaning system other than manual	≤ 0.2	–	Divide max. water flow rate (cfs) by 0.2 fps	Pump rate 1 cfs or less
¹ Velocity perpendicular to screen face at a distance of approximately 3 inches ² Velocity parallel to screen				

Furnish ditch screens with a bypass system to transport fish safely and rapidly back to the stream.

(4) Site Restoration - Restore damaged streambanks to a natural slope, pattern, and profile suitable for establishment of permanent woody vegetation unless precluded by pre-project conditions (for example: natural rock substrate):

- Replant all damaged streambanks before the first April 15 following construction.
- If use of large wood, native topsoil, or native channel material is required for the site restoration according to the roadside development plans, stockpile all large wood, native vegetation, weed-free topsoil, and native channel material displaced by construction. Cut trees or large wood and trees into pieces of no less than 20 feet in length, or as shown on the roadside development plans or as directed. Stockpiled native wood and vegetation remain the property of the Agency.

US101: Butte Creek Culvert Project

- Stabilize all disturbed soils, including obliteration of temporary access roads, following any break in work unless construction will resume in 4 Calendar Days.

(5) 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.

(6) Hydro-Acoustic - Unless otherwise shown or approved, steel piling may be installed below the ordinary high water as follows:

- Minimize the number and diameter of pilings, as feasible.
- Repairs, upgrades, and replacement of existing pilings consistent with these conditions are allowed. In addition, up to 5 single pilings or 1 dolphin consisting of 3 to 5 pilings may be added to an existing facility.
- Whenever feasible, use vibratory hammer for piling installation. Otherwise, use the smallest drop or impact hammer necessary to complete the job, and set the drop height to the minimum necessary to drive the piling.
- For all pile installed or removed, maintain a pile installation and removal log and submit the log when the related work is completed. Include types, sizes, locations, installation or removal methods, and dates in the log.
- When using an impact hammer to drive or proof steel piling within a body of water, or as directed, use one of the following sound attenuation devices to effectively dampen sound:
 - Completely isolate the pile from the waters of the State and waters of the U.S. by dewatering the area around the pile according to Section 00245.
 - If water velocity is 1.6 feet per second or less, surround the pile being driven with a bubble curtain that distributes small air bubbles around 100 percent of the piling perimeter for the full depth of the water column and is in accordance to the guidance in the Appendix of The ODOT-FHWA Federal Aid Highway Program Programmatic User's Guide titled *NMFS and USFWS Impact Pile Driving Sound Attenuation Specifications*. The FAHP User's Guide is available on the Agency's website at:

<https://www.oregon.gov/ODOT/GeoEnvironmental/Pages/Manuals.aspx>

- If water velocity is greater than 1.6 feet per second, surround the piling being driven by a confined bubble curtain (for example: a bubble ring surrounded by a fabric or metal sleeve) that will distribute air bubbles around 100 percent of the piling perimeter for the full depth of the water column and is in accordance to the

US101: Butte Creek Culvert Project

guidance in the Appendix of The ODOT-FHWA FAHP User's Guide titled *NMFS and USFWS Impact Pile Driving Sound Attenuation Specifications*.

(7) Drilling, Boring, or Jacking - If drilling, boring, or jacking is used, the following conditions apply:

- Design, build, and maintain facilities to collect and treat all construction and drilling discharge water using the best available technology applicable to site conditions. Provide treatment to remove debris, nutrients, sediment, petroleum hydrocarbons, metals, and other pollutants likely to be present. An alternate to treatment is collection and proper disposal offsite.
- Isolate drilling operations from wetted stream to prevent drilling fluids from contacting waters of the State or waters of the U.S.
- Use casing to prevent loss of drilling fluid to the subsurface formation. Do not drill without a containment method to keep drilling fluids and slurry isolated.
- If it is necessary to drill through an over-water bridge deck, use containment measures to prevent drilling debris from entering the stream channel.
- If drilling fluid or waste is released to surface water, wetland or other sensitive environment, cease all drilling pending written approval from appropriate regulatory agencies through the Engineer to resume drilling.
- Recover all waste and spoils if precipitation is falling or imminent. Recover, recycle, or dispose of all drilling fluids and waste to prevent entry into flowing water.
- Recycle drilling fluids using a tank instead of drill recovery/recycling pits, whenever feasible.
- When drilling is completed, make attempts to remove the remaining drilling fluid from the sleeve (for example: by pumping) to reduce turbidity when the sleeve is removed.

(8) Treated Wood - Treated wood includes any wood treated with any pesticide or wood preservatives. Do not use lumber, pilings, or other wood products that are treated or preserved with pesticidal compounds below the ordinary high water (OHW) or as part of an in-water or over-water structure, except as described below:

- Store treated wood shipped to the Project out of contact with standing water and wet soil, and protected from precipitation.
- Visually inspect each load and piece of treated wood. Reject for use in or above aquatic environments if visible residues, bleeding of preservative, preservative-saturated sawdust, contaminated soil, or other matter is present.
- Use pre-fabrication to the extent feasible. When field fabrication is necessary, perform all cutting and drilling of treated wood, and field preservative treatment of wood exposed by cutting and drilling, above the OHW. Use tarps, plastic tubs, or similar devices to contain the bulk of any fabrication debris, and wipe off any excess field preservative.
- Furnish all treated wood structures, including pilings, that have design features to avoid or minimize impacts and abrasion by livestock, pedestrians, vehicles, vessels, and floats.

US101: Butte Creek Culvert Project

- Treated wood may be used to construct a bridge, over-water structure or an in-water structure, with the exception of the work containment system, provided that all surfaces exposed to leaching by precipitation, overtopping waves, or submersion are coated with a water-proof seal or barrier are maintained. Apply and contain coatings and paint-on field treatment to prevent contamination. Surfaces that are not exposed to precipitation or wave attack, such as parts of a timber bridge completely covered by the bridge deck, are exempt from this requirement.
- During demolition of treated wood, ensure that no treated wood debris falls into the water. If treated wood debris does fall into the water, remove it immediately.
- Store removed treated wood debris in appropriate dry storage areas, at least 150 feet away from the regulated work area.

(9) Piling Removal - Remove temporary or permanent piling according to the following:

- Dislodge the piling with a vibratory hammer, whenever feasible.
- Once loose, place the piling onto the construction barge or other appropriate dry storage site.

a. Non-Treated Piling - Use the following methods to remove non-creosote piling:

- If a pile in uncontaminated sediment cannot be removed or breaks, cut or push the pile or stump off at least 3 feet below the surface of the sediment and cover with a cap of clean, native substrates that match surrounding streambed materials.
- If a pile in contaminated sediment cannot be removed or breaks above the sediment line, cut the pile or stump off at the sediment line. If the pile breaks below the sediment line, make no further effort to remove it.
- Fill holes left by each pile with clean, native sediments whenever feasible.
- Do not excavate to remove piling.

b. Treated Piling - To minimize toxic release, sediment disturbance, and total suspended solids, use the following methods to remove treated piling:

- Install a floating surface boom to capture floating surface debris.
- Keep all equipment out of the water, grip piles above the waterline, and complete all work during low water and low current conditions.
- Dislodge the piling with a vibratory hammer, whenever feasible. Do not intentionally break a pile by twisting or bending.
- Slowly lift the pile from the sediment and through the water column.
Place the pile in a containment basin on a barge deck, pier, or shoreline without attempting to clean or remove any adhering sediment.
- If a pile in uncontaminated sediment cannot be removed or breaks, cut or push the pile or stump at least 3 feet below the surface of the sediment and cover with a cap of clean, native substrates that match surrounding streambed materials.
- If a pile in contaminated sediment cannot be removed or breaks above the sediment line, cut the pile or stump off at the sediment line. If the pile breaks below the sediment line, make no further effort to remove it.

US101: Butte Creek Culvert Project

- Fill the hole left by each removed or partially removed pile with clean, native sediments and cap with clean, native substrates that match surrounding streambed materials immediately after removal.
- Dispose of all removed piles, floating surface debris, contaminated supplies, and sediment spilled on work surfaces at a permitted upland disposal site.

(10) Ditch and Culvert Cleaning - Complete ditch cleaning, culvert and trash rack cleaning by working from the top of bank, unless work area isolation would result in less habitat disturbance.

- Do not work more than 20 feet upstream or downstream the culvert or trash rack.
- Remove only the minimum amount of wood, sediment, or other natural debris necessary to maintain the facility's function, without disturbing spawning gravel or changing the configuration of the original ditch, unless the new configuration is part of the project design.
- Place all large wood, cobbles, and gravels recovered from during culvert and trash rack cleaning downstream from the structure.
- Complete drift removal in the following priority, as directed:
 - Pull and release whole logs or trees downstream.
 - Pull whole logs and trees and place in the riparian area, as directed.
 - Remove whole logs or trees only if roadside development plans have been developed for replacement in-kind.
 - Pull, cut only as necessary, and release logs and trees downstream.

(11) Temporary Power, Communication and Water Lines - Before installing temporary power, communication, or water lines across streams or bodies of water, submit a proposed plan to the Engineer for approval. Do not begin installation before receiving approval from the Engineer. Utilize the following design methods in the listed order of priority for proposed plans for installation of temporary power, communication, and water lines and stream crossings:

1. Aerial lines, including lines hung from existing bridges.
2. Directional drilling, boring and jacking that spans the channel migration zone and any associated wetland.
3. Trenching is restricted to intermittent streams and may only be used when the stream is naturally dry. For all sections of trenches below the ordinary high water line, backfill with native material and cap with clean gravel suitable for fish use in the project area.

Align each crossing as perpendicular to the watercourse as possible. For drilled, bored, or jacked crossings, ensure that the line is below the total scour prism. Return any large wood displaced by trenching or plowing as nearly as possible to its original position, or otherwise arranged to restore habitat functions.

(12) Injured Fish Notification - If a dead or injured fish is found in the project area, immediately notify the Agency. If the injured fish is in a location where further injury or stress may take place, attempt to move the fish to a safer location, if one is available, near

US101: Butte Creek Culvert Project

the capture site while keeping the fish in the water and reducing its stress as much as possible. Do not disturb the fish after it has been moved. If the fish is dead or dies while being captured or moved, save the fish and any tags. The Agency will notify appropriate regulatory agencies about the injured or dead fish and provide additional direction to the Contractor.

00290.36(a) Migratory Birds - Replace the paragraph that begins "Comply with the Migratory Bird Treaty Act ..." with the following paragraph:

Comply with the Migratory Bird Treaty Act (16 U.S.C. 703-712) that protects most species of birds in Oregon and prohibits the removal of nests containing eggs or dependent young (i.e., active nest) without a permit. Migratory birds include most birds in Oregon; the few exceptions include rock pigeons, house sparrows, and European starlings.

Replace the paragraph that begins "Except where allowed by the Contract ..." with the following paragraph:

Except where allowed by the Contract and by permit, do not disturb an active migratory bird nest, do not inhibit the ability of adult birds to care for eggs or dependent young, and do not impact the supporting structure where an active nest is built.

Add the following to the end of this subsection:

(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.

00290.38 Protection of Plants - Replace this subsection, except for the subsection number and title, with the following:

Plant habitats to be protected are shown with the plant habitat boundaries flagged by the Engineer. Avoid destruction of plant habitats by ensuring construction personnel, Equipment, and associated pollutants, including sediment, chemical contaminants, discharge water, non-native grass and weed seed, do not enter the habitat.

00290.41 Protection of Waters of the U.S. or State - Add the following to the end of this subsection:

Permits have been obtained for this project from the US Army Corps of Engineers Corps) and the Department of State Lands (DSL). Keep a copy of Corps and DSL permits at the project site during construction. Changes to the project that may increase the amount of fill placed or material removed in waters of the U.S. or State, or the acreage of waters impacted are not authorized. The following waters of the U.S. or State are present and have been determined to be unavoidable as indicated in Table 00290-2:

US101: Butte Creek Culvert Project

Table 00290-2

Impact Waters of the US or State	Removal Volume (cu yds.)	Fill Volume (Cu yds)	Station	Duration of Impact (Temporary or Permanent)	Area of impact (Acres)
Butte Creek	1,553	1,214	"P"2+70.00 – "P"6+20.77 & "T"1+70.00- "T"3+57.57	Permanent	0.32
Butte Creek	9	69	TBD	Temporary	0.01
Wetland C	17	0	"T"1+70.00 – "T"3+57.57	Permanent	0.01
Wetland D	20	20	North of "P" 5+50.00	Permanent	0.01
Wetland D	15	15	North of "P" 5+50.00	Temporary	0.01
Wetland E	58	29	"P"5+00.00 - "P"6+20.55	Permanent	0.01

00290.41(a) Identifying Waters of the U.S. or State, Including Wetlands - Replace the paragraph that begins "Wetlands known to be ..." with the following paragraph:

Wetlands known to be on the Project Site are shown and identified either as "permanently filled or excavated" or as "temporarily impacted". Wetlands to be protected are shown as "no Work Zones".

00290.41(b) Disturbing Waters of the U.S. or State, Including Wetlands - Replace the paragraph that begins "If Wetlands are shown, ..." with the following paragraph:

If Wetlands are shown, meet with the Agency Wetland Specialist, the Engineer, and Inspector on-site prior to moving Equipment onto the site or beginning any Work, to ensure that all parties understand the locations of Wetlands and the measures that are necessary to protect them.

Add the following subsection:

00290.42 Work Containment Plan - A Work Containment Plan (WCP) is required on this Project for bridge construction activities.

Develop and submit a WCP for approval at least 28 Calendar Days prior to mobilization for bridge construction activities. Maintain a copy of the WCP on the Project Site at all times during construction, readily available to employees and inspectors. Ensure that all employees comply with the provisions of the WCP. Design the WCP to avoid or minimize disturbance to protected features (sensitive cultural or natural resources, regulated work areas, aquatic life or habitat in regulated work areas) related to Contractor operations.

Before developing the WCP, meet with Agency to review the Contractor's activities that require the WCP to ensure that all parties understand the locations of protected features to be avoided and the measures needed to avoid and protect them.

US101: Butte Creek Culvert Project

Notify the Engineer at least 10 Calendar Days before beginning work access or containment construction activities.

The Agency reserves the right to stop Work and require the Contractor to change the WCP methods and Equipment before any additional Contract Work, at no additional cost to the Agency, if and when, in the opinion of the Agency, such methods jeopardize sensitive cultural or natural resources, regulated work areas, or aquatic life or habitat in regulated work areas.

Provide a WCP that identifies how the Contractor's construction operations will protect regulated features during mobilization, construction, maintenance, and demolition. Include a narrative describing compliance with Section 00290 as related to construction, operation, and demolition activities specified in Section 00253.

Design, construct, maintain, and remove temporary work access and containment systems according to Section 00253.

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)
- 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, no sites were identified.

The Region Environmental Coordinator for this Project is Corissa Anderson-Horvath..

The Agency Archaeology Representative for this Project is
Jessica Curteman.

The Engineer will coordinate all contact with the Agency Archaeology Representative and the Region Environmental Coordinator.

US101: Butte Creek Culvert Project

An Inadvertent Discovery Plan (IDP) has been developed for this project. The IDP is available from the Engineer.

00290.51(b) Disturbing Unknown Sensitive Cultural Sites - Replace the paragraph that begins "If the Contractor finds a previously undiscovered..." with the following paragraph:

If the Contractor finds a previously undiscovered sensitive cultural site, immediately cease all activities at that site, follow procedures listed in 00290.50, and notify the Engineer. If the Contractor inadvertently disturbs unknown sensitive cultural sites, but immediately ceases all activities and follows the procedures listed in 00290.50, the Agency, to the extent permitted by Article XI, section 7 of the Oregon Constitution and by the Oregon Tort Claims Act, will indemnify, within the limits of the Tort Claims Act, the Contractor for costs associated with monitoring, recovery, site restoration or other required archaeological Work, provided neither the Agency nor the State are required to indemnify the Contractor for such costs resulting from, arising out of or relating to the willful misconduct, negligence or other wrongful acts attributable to the Contractor or other persons on the Project site.

Replace the paragraph that begins "Delays to Work due to new ..." with the following paragraph:

The Engineer may consider for exclusion from Contract Time according to 00180.50(e) delays to Work due to new cultural resource finds.

00290.90 Payment - Add the following paragraph(s) to the end of this subsection:

The work containment plan will be paid for at the Contract lump sum amount for the item "Work Containment Plan".

Payment will be payment in full for providing all Materials, Equipment, labor, and Incidentals necessary to complete the Work as specified. Payment includes providing and updating the Work Containment Plan.

The accepted quantities of turbidity monitoring will be paid for at the Contract lump sum amount for the item "Turbidity Monitoring".

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

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

SECTION 00294 - CONTAMINATED MEDIA

Section 00294 is not a Standard Specification and is included in this Project by Special Provision.

Description

US101: Butte Creek Culvert Project

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 , Shoulder Soils, and contaminated grubbing materials, as defined by 00294.01, from the following locations:

Contaminated Soil Location Table 00294-1A

From Location/Station to Location/Station	Depth below grade (feet)	Approximate Quantity (cy)	Known Contaminants
Extent of project from edge of pavement to 30 feet from edge of pavement. Left side project extents go along the entire shoulder from Sta. "L" 37+31 Lt. to "L" 55+45 Lt., excluding Edleman Way street connection.	0 -1.5'	1,767	Lead, PAHs.
Extent of project from edge of pavement to 30 feet from edge of pavement. Right side project extents go along the entire shoulder from Sta. "L" 37+31 Rt. to "L" 51+77 Rt. & creek	0 -1.5'	333	Lead, PAHs.
Berm construction area "L" 52+30 to "L" 57+90	0 -1.5'	72	Lead, PAHs.

Approximate Total Quantity	2,172 cy
Quantity to be reused on Project	2,172 cy
Quantity to be disposed at landfill	0 Tons

- In areas where excavation is not required, leave contaminated Material , Shoulder Soils, and clearing and grubbing Material in place.
- Prepare a written lead compliance plan for work within contaminated areas of the Project as indicated in Table 00294-1A.

US101: Butte Creek Culvert Project

- Contain and dispose of Soil, Rock, and sediment materials within Structure No. BR04666 removed during asbestos abatement and culvert demolition as that material is presumed to contain asbestos from peeling coatings and incidental cutting.

Contaminated Soil Location Table 00294-1B

From Location/Station to Location/Station	Depth below grade (feet)	Approximate Quantity (tons)	Presumed Contaminants
Structure No. BR04666	NA	132	Asbestos
Approximate Total Quantity		94 yards	
Quantity to be reused on Project		0 yards	
Quantity to be disposed at landfill		132 tons	

The March 2024 ODOT report, titled Shoulder Soil Investigation and Asbestos Sampling Results documenting the contaminated media identified within the Project, is 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 is considered and treated as Contaminated Soil for the purposes of this Section. For this Project, Contaminated Soil is also defined as materials removed from within the culvert during culvert removal and demolition that may contain fragments of asbestos-containing coating that are ACM and require disposal in accordance with OAR 340-248-0280.

Asbestos-Containing Material (ACM) – A Material containing more than 1% asbestos by weight (OAR 340-248-0010(8)).

Asbestos-Containing Waste Material – Waste that contains or is contaminated by ACM (OAR 340-248-0010(9)).

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 and up to 30 feet laterally from the edge of pavement. 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.

00294.03 Submittals - Submit the following documents:

US101: Butte Creek Culvert Project

For the locations specified in Table 00294-1A:

- A Project-specific written lead compliance plan for Shoulder Soil, meeting the project applicable requirements of 29 CFR 1926.62(e)(2), at least 10 Calendar Days before the pre-construction conference. When applicable, include compliance procedures for cadmium and chromium VI, according to 29 CFR 1926.1127 and 29 CFR 1926.1126.

Modifications to the written lead compliance plan that are requested by the Engineer within 7 Calendar Days of the request.

For the locations specified in Table 00294-1B:

- Current employee training certificates and medical surveillance information before beginning Work within the contaminated areas.
- Completed and signed DEQ Waste Shipment Report Form according to the following:
 - Send the form along with the Asbestos-Containing Waste Material to the disposal facility.
 - Provide a copy of the form to the Engineer within 48 hours of transportation of the asbestos waste.
 - Obtain the final signed form from the disposal facility along with the disposal receipts and submit them to the Engineer within three Calendar Days after receiving them from the waste disposal facility.

Submit the following documents within 48 hours of removal of contaminated media:

- Permits, permit applications, and documentation of compliance.
- All reuse, recycled, and disposal receipts.
- Final quantities of Soil reused, recycled, and disposed and their final location.
- All analytical test results.

Labor

00294.30 Personnel Qualifications - Provide employees meeting the following requirements:

- For handling of Contaminated Soil and Shoulder Soil at locations specified in Table 00294-1A, 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).
- For handling of Contaminated Soil at locations specified in Table 00294-1B, provide employees trained in:
 - A current Oregon DEQ Asbestos Abatement Contractor license.

US101: Butte Creek Culvert Project

- A current Oregon DEQ Certified Supervisor meeting the requirements of OAR 340-248-0130.
- Current Oregon DEQ Certified asbestos workers meeting the requirements of OAR 340-248-0130.
- Ensure the DEQ Certified Supervisor is on site and overseeing work whenever Asbestos Containing Materials are disturbed or removed.

Construction

00294.40 Contaminated Soil Excavation and Shoulder Soil - Excavate and handle Contaminated Soil or Shoulder Soil from Project excavations specified in Table 00294-1A according to the following:

- Notify the Engineer 3 Calendar Days before beginning excavation activities within contaminated areas.
- Allow the Agency to collect Soil samples during excavation activities.
- Load Contaminated Soil or Shoulder Soil directly into trucks and transport directly to the prospective disposal site or disposal facility, or on-site reuse areas or, when approved by the Engineer, temporarily store Contaminated Soil or Shoulder Soil on-site.
- Store Contaminated Soil in covered water tight containers or place Contaminated Soil on minimum 6 mil thick polyethylene sheeting that has an impermeable berm around the edge. Cover the Contaminated Soil with minimum 6 mil thick polyethylene sheeting. Do not allow precipitation run-off to enter the excavated Contaminated Soil. Label all stored Material with the type of Material, the contaminants, and the dates of accumulation.
- Remove contaminated media from the exterior of all vehicles before they leave the Project Site
- Cover trucks transporting contaminated materials to prevent spillage during transit to the disposal facility according to OAR 340-093-0220.

Where over excavation is required, backfill the excavation according to 00330.42. Handle Contaminated Soil from culvert area specified in Table 00294-1B according to the following:

- Comply with 29 CFR 1910, 29 CFR 1926.1101, 40 CFR 61, 40 CFR 763, OAR 340 248, ORS 468A and the following:
 - Notify the Engineer 3 Calendar Days before beginning culvert abatement and demolition activities within contaminated areas.
 - Contain and dispose of materials removed from culverts during abatement and demolition that could contain fragments of black culvert coating that are ACM. Use collection and containment methods that minimize the release of asbestos fibers and minimize visible emissions.
 - Complete and sign all manifests and bill of lading forms for transporting and disposing the ACM.

US101: Butte Creek Culvert Project

- Maintain the ACM in an undamaged and non-friable condition by keeping the material wet during demolition or by using methods approved by DEQ.
- Keep material sealed during transport to the disposal facility. Transport and dispose of all ACM according to OAR 340-248-280.

00294.41 Contaminated and Shoulder Soil Management - Follow the requirements provided in Section 00294.40 for disposal of Contaminated Soil from the location listed in Table 00294-1B. Reuse, recycle, or dispose of Contaminated Soil and Shoulder Soil from locations listed in Table 00294-1A 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 in Table 00294-1B to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal. Dispose of temporarily stored Contaminated Soils within 30 Days of beginning excavation work or before Second Notification, whichever occurs first. Shoulder Soil listed in Table 00294-1A may also be transported and disposed of at a landfill, but no payment will be provided for landfill disposal of Shoulder Soils.
- Complete and sign all manifests and bill-of-lading forms for handling, loading, transporting, and disposing of the Contaminated Soil.
- Pay all filing and permit fees.

(e) Reuse Under ODOT BUD No. BUD-20181204:

- Follow the requirements of the DEQ Tier 3 Solid Waste Beneficial Use Determination Permit (BUD-20181204) for reuse of all Contaminated Soil or Shoulder Soil.
- Stockpile Contaminated Soil or Shoulder Soil as embankment at prospective disposal site identified in the plan set including "Md" 400+7 to "Md" 402+45.
- Complete all off-site reuse of Soil covered by ODOT BUD No. BUD-20181204, before Project completion.
- Transport and dispose all excess Contaminated Soil that is not reused in the Project within 30 Calendar Days of completing the Soil reuse Work, or before Second Notification, whichever occurs first, to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill.
- Reuse the Contaminated Soil or Shoulder Soil at the following location prospective disposal site identified in the plan set including "Md" 400+7 to "Md" 402+45.

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:

- Lead compliance plan.

US101: Butte Creek Culvert Project

The quantities of Contaminated Soil contaminated with ACM as described in Table 00294-01B disposal will be measured on the weight basis, based on weigh tickets from the recycling or disposal facility.

Clearing and grubbing will be measured according to 00320.80.

Payment

00294.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(b) Lead Compliance Plan.....	Lump Sum
(e) Contaminated Soil Disposal.....	Ton

No separate or additional payment will be made for the excavation or reuse of Contaminated Soil listed under Table 00294-1B or contaminated Shoulder Soil listed under Table 00294-1A. 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 providing all Equipment, labor, Plans, test results, and Incidentals necessary to complete the Work as specified.

SECTION 00295 - ASBESTOS MATERIALS

Section 00295 is not a Standard Specification and is included in this Project by Special Provision.

Description

00295.00 Scope - This Work consists of removing and disposing of materials containing asbestos. This Work may also consist of testing materials for the presence of asbestos and removing and disposing of materials containing asbestos.

00295.01 Asbestos Survey and Sampling - This Work consists of testing materials for the presence of asbestos and removing and disposing of materials containing asbestos.

Remove asbestos from the following locations listed in Table 00295-1 that were sampled and contain asbestos:

Table 00295-1

US101: Butte Creek Culvert Project

Location/Address	Material Description	Quantity (ft. or sq.ft.)	Percent Asbestos	Friable or Non-Friable
Structure No. BR04666	Black tar-like coating on exterior of culvert	180 ft	8%	Non-Friable

Structure No. BR04666 is a six-foot diameter corrugated metal culvert. The black coating was assessed as non-friable but is in poor condition and peeling.

The following ODOT reports, documenting the asbestos testing completed within the Project and subsequent DEQ 1200-CA permit required Contaminated Media Management Plan are available from the Engineer. Maintain a copy of this report and all additional asbestos survey results on site at all times and readily available to employees and inspectors during demolition and repair activities.

- Shoulder Soil Investigation and Asbestos Sampling Results dated March 2024 documenting the asbestos identified within the Project; and
- Contaminated Media Management Plan dated April 2025 documenting proposed asbestos work areas within the Project. Maintain a copy of these reports and all additional asbestos survey results on site at all times and readily available to employees and inspectors during demolition and repair activities.

00295.02 Definitions:

Asbestos Containing Material (ACM) - Any material containing more than 1% asbestos.

00295.03 Submittals - The following forms and reports are required:

- Completed and signed DEQ Project Notification Form and an abatement plan/culvert removal plan to Agency no more than 30 Days after preconstruction meeting and DEQ at least 10 Calendar Days before beginning asbestos removal.
- Completed and signed DEQ Waste Shipment Report Form according to the following:
 - Send the form along with the asbestos waste to the disposal facility.
 - Provide a copy of the form to the Engineer within 48 hours of transportation of the asbestos waste.
 - Obtain the final signed form from the disposal facility along with the disposal receipts and submit them to the Engineer within 3 Calendar Days after receiving them from the waste disposal facility.
- Disposal receipts within 72 hours of receipt from the waste disposal facility.

Labor

00295.30 Personnel Qualifications - Provide employees meeting the following requirements:

- A current Oregon DEQ Asbestos Abatement Contractor license.
- A current Oregon DEQ Certified Supervisor meeting the requirements of OAR 340-248-0130.

US101: Butte Creek Culvert Project

- Current Oregon DEQ Certified asbestos workers meeting the requirements of OAR 340-248-0130
- A current Oregon DEQ Certified Supervisor meeting the requirements of OAR 340-248-0130.
- A current AHERA Inspector Training Certification according to 40 CFR 763, Part 763, Appendix C - TSCA Tile II
- Workers trained according to 29 CFR 1926.1101.

When a DEQ Certified Supervisor is required, ensure the supervisor is on site and overseeing the work whenever asbestos materials are disturbed or removed.

Construction

00295.40 Asbestos Removal - Comply with Section 00290, 29 CFR 1910, 29 CFR 1926.1101, 40 CFR 61, 40 CFR 763, OAR 340-248, ORS 468A and the following:

- Before beginning asbestos removal work, sign and submit all notifications and pay all fees to DEQ. Provide copies to the Engineer.
- Complete and sign all manifests and bill-of-lading forms for transporting and disposing the ACM.
- Maintain the ACM in an undamaged and non-friable condition by keeping the material wet during demolition or by using methods approved by DEQ.
- Keep material sealed during transport to the disposal facility. Transport and dispose of all ACM according to OAR 340-248-280 and OAR 340-248-290.

Measurement

00295.80 Measurement - The quantities of removing asbestos containing materials will be measured on either the length basis or the area basis.

No measurement of quantities will be made for bulk asbestos sampling, analytical testing, and reporting.

Payment

00295.90 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 item(s):

Pay Item	Unit of Measurement
(a) Remove Asbestos Material, non-friable	Foot

Payment will be payment in full for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 00298 - WELL PRESERVATION AND ABANDONMENT

US101: Butte Creek Culvert Project

Section 00298 is not a Standard Specification and is included in this Project by Special Provision.

Description

00298.00 Scope - In addition to the requirements of Section 00290, protect, preserve, and abandon monitoring wells and water wells according to the following:

Abandon existing monitoring wells and water wells indicated in Table 00298-2 below:

Table 00298-2

Location/Station	Type	Depth below grade (feet)	Diameter (inches)	Other Well Design Information	Known Contaminants
"L" 44+60.50, 36.03' Lt.	Monitoring well	41	2	Flush mount monument, 2-inch PVC monitoring well. Oregon Water Resources Department (OWRD) TILL 53304, Well ID #L148642, Start Card# 1070410	N/A

00298.03 Submittals - Provide the Engineer with all Permit applications, permit fees, start cards, well reports, bonds, and letters of credit required by the Oregon Water Resources Department within 48 hours of completing the work.

Labor

00298.30 Personnel Qualifications - Provide contractors and workers meeting the following qualifications:

- A contractor with a current Oregon Water Well Constructor's license

Construction

00298.41 Abandon Monitoring Wells - Abandon monitoring wells before beginning ground disturbing construction work in the well locations according to OAR 690-240. Notify the Engineer at least 72 hours before beginning abandonment work.

Measurement

00298.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

Payment

00298.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the following item:

Pay Item	Unit of Measurement
(b) Abandon Monitoring Wells	Lump Sum

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

SECTION 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications modified as follows:

00305.00 Scope – Add the following to the end of this subsection:

In addition to the requirements of the ODOT *Construction Surveying Manual for Contractors*, establish Engineering Stationing at 100 foot intervals for the length of the project along the Shoulder of the Highway. Maintain the stationing so it is visible throughout construction of the project.

00305.05 3D Engineered Models - Replace this subsection, except for the subsection number and title, with the following:

If the Contractor elects to use the 3D Engineered Models to control the work, provide unstamped 3D Construction Models according to 00150.35 that include the following:

- An automated machine guidance (AMG) work plan containing a detailed outline, list of the Pay Items and Work controlled by the 3D Construction Models, and a narrative outlining any differences between the Agency prepared 3D Engineered Models and the 3D Construction Models.
- A copy of the 3D Construction Models used by the Contractor's Equipment for machine guidance or verification that include and represent the Agency prepared 3D Engineered Models with changes identified in the narrative. Provide files in LandXML format or as directed.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications modified as follows:

00310.80 Measurement - Replace the bullet "Length and Area..." with the following bullet:

- **Length and Area** - The length or area of the Structure or item actually removed, will be measured along the line and grade of the Structure or item for each continuous Structure or item removed. Measurement will be on the length or area basis, limited to the Neat Lines shown or directed.

Asphalt Pavement Sawcutting will be measured by the linear foot of sawcut, limited to the Neat Lines shown or directed unless otherwise specified. Methods other than sawcutting will not be measured.

US101: Butte Creek Culvert Project

Additional concrete sawcutting beyond what is shown or directed by the Engineer will not be measured.

00310.92 Separate Item Basis - Replace the Pay Item Asphalt Pavement Sawcutting with the following Pay Item:

Pay Item	Unit of Measurement
(g) Asphalt Pavement Sawcutting, _____ Inches Deep	Foot

Replace the paragraph that begins "Item (g) applies..." with the following paragraph:

In item (g), "less than 6", "6 to 14", or "greater than 14" is inserted in the blank.

Add the following paragraph to the end of the subsection:

No separate or additional payment will be made when methods other than sawcutting are utilized where sawcutting is shown or directed.

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications modified as follows:

00320.40(b)(3) Vegetation and Materials to be Saved - Replace the paragraph that begins "Do not work within the no Work ..." with the following paragraph:

Do not work within the no Work Zones or critical root zone of marked trees unless written approval is obtained from the Engineer. Be responsible for all damage to and removal of trees, landscaping, vegetation or other natural materials designated to be saved. The Engineer will select a specialist who will evaluate the damage.

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.

00320.42 Ownership and Disposal of Matter - Vegetation and natural material designated for preservation and salvage are the property of the Agency. All other matter and debris accumulated from clearing and grubbing operations become the Contractor's property at the place of origin. Dispose of all matter and debris according to 00290.20.

00320.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 00330 - EARTHWORK

Comply with Section 00330 of the Standard Specifications modified as follows:

00330.00 Scope - Replace the paragraph that begins "The term "earthwork" will be..." with the following paragraph:

The term "earthwork" is used as a general term to designate the Work included within the scope of this Section.

00330.01 Lines, Grades, and Cross Sections - Replace the paragraph that begins "All earthwork..." with the following paragraph:

Conform all earthwork to the lines, grades and Cross Sections established.

Replace the paragraph that begins "Roadbed Cross Sections ..." with the following paragraph:

Roadbed Cross Sections are subject to variation from the Typical Sections , if directed, to:

00330.02 Definitions - Replace the paragraph that begins "**Construction Slide** - A Slide outside ..." with the following paragraph:

Construction Slide - A Slide outside the designated limits of excavations, or below the foundation within designed limits of embankments or within embankments, that occurs after excavation or embankment construction starts and before Final Acceptance of the Contract.

00330.03 Basis of Performance - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section except for Stone Embankment on the excavation basis.

00330.03(a) General - Replace this subsection, except for the subsection number and title, with the following:

Except as provided in 00330.00, perform all earthwork on either the excavation basis or the embankment basis. The basis of performance for each earthwork Pay Item is specified in the Special Provisions and the Contract Schedule of Items.

00330.04 Sources of Borrow Replace this subsection, except for the subsection number and title, with the following:

(a) Agency-Furnished Borrow - Use Materials obtained from Agency-provided sources lying outside of, separated from and independent of planned Roadbed excavations, or other required excavations within the Project limits, only when called for by the Contract or when specifically directed. (See 00330.41(d).)

US101: Butte Creek Culvert Project

(b) Contractor-Furnished Borrow - Unless otherwise specified or directed, furnish all Borrow. Use sources that are wholly outside of and beyond the limits of Agency-Controlled Lands. Acquire at Contractor's own expense. The provisions of 00160.60 and 00160.80 apply.

00330.10 Selected Materials - Replace this subsection, except for the subsection number and title, with the following:

When the Contract contains a Pay Item "Extra for Selected ____ Material", furnish the Material from required excavations. The Specifications for the selected Materials are in the Special Provisions, if different than specified in these Specifications. If other provisions of this Section call for selecting or sorting Material for various parts of the Work, select and sort the Materials to meet the directed requirements.

00330.16(a) Requirements - Replace the paragraph that begins "If the 1" - 0 portion exceeds ..." with the following paragraph:

If the 1" - 0 portion exceeds 10 percent of the total volume by the Engineer's visual examination, the 1" - 0 material will be randomly sampled for testing. The Agency will perform the wet sieve test, according to AASHTO T 11, on the sampled material. The limit on the amount of material passing the No. 200 sieve is not to exceed 5.0 percent by weight.

00330.16(b) Control Sample - Replace this subsection, except for the subsection number and title, with the following:

Provide, at a location acceptable to the Engineer, in close proximity to the Project, at least a 5-cubic yard sample of stone embankment meeting the gradation specified. This sample is used as a frequent reference for judging the gradation of the material supplied.

00330.40(a) Quantities - Replace the paragraph that begins "The Agency makes no guarantee ..." with the following paragraph:

The Agency makes no guarantee or representation by implication or otherwise, that any Material available on the Project site is suitable for incorporation into any portion of the Project. No Material is considered unsuitable on the sole basis that special or additional processing or handling is required to make it suitable for incorporation into the Project.

00330.40(c) Avoidance and Correction of Detrimental Operations - Replace the paragraph that begins "Perform all operations involved ..." with the following paragraph:

Perform all operations involved in excavating, hauling and placing of earthwork Materials so no damage or detriment to the completed or partially completed Work results. At all times provide sufficient drainage of completed or partially completed earthwork to prevent damage or loss due to rainfall, surface water or any other cause. In all cases, take proper precautions to ensure that embankment construction and filling do not move, endanger or cause undue strain or stress to any Structure or adjacent ground. Do not construct temporary and final embankment slopes within any Cross Section steeper than the Slope staked for that Cross Section.

US101: Butte Creek Culvert Project

00330.41(a)(3) Unsuitable Materials - Replace this subsection, except for the subsection number and title, with the following:

Unsuitable Materials encountered in required excavations are classed as waste material and disposed of according to 00330.41(a)(5).

00330.41(a)(5) Waste Materials - Replace this subsection, except for the subsection number and title, with the following:

Dispose of waste materials according to Section 00236.

00330.41(a)(9) Excavation Below Grade - Delete subsection 00330.41(a)(9)(c).

00330.41(a)(12) Outside Earthwork Limits - Replace this subsection, except for the subsection number and title, with the following:

Outside earthwork limits but within the Clear Zone, (see 00320.02(c)), remove partially buried natural objects, such as Boulders, that the Engineer determines would be dangerous to an errant vehicle. Place them within embankments as specified or dispose of them as directed.

00330.41(b) Foundation Excavation - Replace this subsection, except for the subsection number and title, with the following:

Excavate Unsuitable Materials in embankment foundations and elsewhere as designated. This Work is classed as "Foundation Excavation". Dispose of these materials according to 00330.41(a)(5) and replace with selected general backfill, selected granular backfill or other suitable Materials as directed.

00330.41(d) Borrow Excavation - Replace this subsection, except for the subsection number and title, with the following:

Whenever the Specifications or Contract Plans call for an Agency-provided Borrow source for earthwork materials, the Material excavated from such source and used in the Work as earthwork materials are classed as "Borrow Excavation". Excavate and use these materials according to the Contract provisions, or as directed.

00330.42(a) Embankment Foundation Preparation - Replace the paragraph that begins "In addition to the excavation ..." with the following paragraph:

In addition to the excavation and replacement of Unsuitable Materials as provided in 00330.41(b), and before constructing embankments, prepare the areas where embankments are to be constructed as follows:

00330.42(a)(1) Unstable Areas - Replace this subsection, except for the subsection number and title, with the following:

Where the embankment foundation will not support hauling or compaction Equipment and only if directed, place an initial layer of selected Materials. Place the initial layer by dumping successive loads in a uniformly distributed layer of a thickness not greater than necessary to support the Equipment and not greater than 3 feet, unless otherwise authorized. Do not place the initial layer higher than 3 feet below Subgrade. Commence consolidation of the initial

US101: Butte Creek Culvert Project

layer by routing construction Equipment uniformly over the entire layer. Meet the compaction requirements of 00330.43 for the initial layer, except for layer thickness. Meet all requirements of 00330.43 for subsequent layers.

00330.42(a)(3) Drainage - Replace this subsection, except for the subsection number and title, with the following:

Provide drainage and drainage Structures as shown or directed.

00330.42(a)(4) Backfilling Inside Roadbed Limits - Replace this subsection, except for the subsection number and title, with the following:

Break up concrete or asphalt floors, slabs, or walls, as specified in 00310.41(d), before backfilling or placing embankment. Backfill basements, trenches and holes within embankment limits with selected stone backfill Material. Backfill Material placed in basements may include pieces of broken concrete and masonry not exceeding 15 inches in any dimension provided they are placed and compacted according to 00330.42(c). Protruding reinforcement is not allowed in the broken concrete and masonry used as backfill.

00330.42(a)(7) Foundation Benching - Replace the paragraph that begins "Make the bottom bench ..." with the following paragraph:

Make the bottom bench at least 10 feet wide. Penetrate each succeeding bench into the slope at least 3 feet horizontally beyond the vertical side of the previous bench. Ensure the bench is wide enough to operate placing and compaction Equipment. Bring each bench and embankment layer surface to a Slope flatter than 1V:10H. Perform the benching, placing and compaction operation simultaneously from the bottom up.

00330.42(c)(1) General - Replace the paragraph that begins "Except as provided in ..." with the following paragraph:

Except as provided in 00330.42(a)(1), do not construct embankments or fillings when the embankment Material, the foundation or the embankment where it would be placed is frozen, not stable or not compacted, unless otherwise directed.

00330.42(c)(2)(c) Oversize Durable Rock Fragments - Replace the paragraph that begins "Placing isolated individual ..." with the following paragraph:

Placing isolated individual Durable Rock fragments having dimensions greater than the specified layer thickness is allowed if:

00330.42(c)(2)(d) Durable Rock - Replace the paragraph that begins "If the visible quantity of Silt ..." with the following paragraph:

If the visible quantity of Silt and Clay Materials passing the No. 200 screen is less than 20 percent by volume, as determined by the Engineer, the maximum Rock fragment size and layer thickness may be increased to 36 inches, but do not exceed the layer thickness of the average maximum size of the Rock fragments.

00330.42(c)(2)(e) Nondurable Rock - Replace the bullet that begins "The moisture content of ..." with the following bullet:

US101: Butte Creek Culvert Project

- Compact the Material when the moisture content is within the requirements of 00330.43.

Replace the bullet that begins "Compact the Material to density ..." with the following bullet:

- Compact the Material to density/deflection requirements specified in 00330.43 with a tamping-foot roller that meets the requirements of 00330.20. Perform a minimum of three Coverages on each embankment layer with the tamping-foot roller. Operate the roller at a uniform speed not exceeding 3 mph. No additional compensation will be made for additional roller Coverages to meet the requirements of 00330.43.

00330.42(c)(3) Embankment Slope Protection - Replace the paragraph that begins "Construct outer portions of ..." with the following paragraph:

Construct outer portions of embankments exposed to erosion by stream flow or other erosive action with Rock fragments, or other desirable Materials, if directed, and such are available in the excavations. Also, if directed, place similar Material as a protective layer on the outside of the regular embankment slopes as embankment widening, closely following construction of the embankment. Compaction is not required for protective Materials placed as embankment widening. Place protective Materials with a reasonably smooth surface, resistant to washout or slippage.

Add the following paragraph to the end of this subsection:

Construct the outer 12 inches of embankments with suitable materials to establish slope stabilization through permanent seeding. If suitable material is not available, furnish suitable materials from a Contractor-provided source that conforms to the requirements of 00330.11 or 00330.13 and provides favorable conditions for germination of seed and growth of grass.

00330.42(c)(5) Embankment Construction Around Minor Structures - Replace this subsection, except for the subsection number and title, with the following:

Backfill prior excavations in the vicinity of curbs, walks, driveways, inlets, manholes and other such minor Structures with selected general backfill, or selected granular backfill as directed with no particles larger than 1 inch and that is compatible with the adjacent material, unless otherwise specified. Place backfill in layers according to 00330.42(c)(1), compact according to 00330.43, and with a moisture content according to 00330.43.

00330.42(c)(7) Embankment Construction at Bridge Ends - Replace this subsection, except for the subsection number and title, with the following:

At the ends of Bridges and for a distance of at least 100 feet from the Bridge, place and compact the embankments before beginning Bridge construction, unless otherwise directed. Unless the embankment is constructed according to 00330.42(c)(8), furnish and place selected stone backfill Material, meeting the requirements of 00330.15 when such is available from excavations, in all embankments within 100 feet of Bridges, or as directed.

00330.42(c)(8) Engineered Fills - Replace the paragraph that begins "Place the granular structure ..." with the following paragraph:

US101: Butte Creek Culvert Project

Place the granular structure backfill, meeting the requirements of 00510.13, in maximum 6-inch Lifts and compact to 100 percent maximum density from the top of the selected stone backfill to the footing elevation shown. Place these Materials at the thickness and extent according to the details shown, or as directed.

Replace the paragraph that begins "The foundation compaction ..." with the following paragraph:

The foundation compaction requirements in 00330.43 are subject to the higher requirements of this subsection. Compact according to the percentages required above.

00330.42(d) Stone Embankment - Replace the paragraph that begins "If the Contract Plans or ..." with the following paragraph:

If the Contract Plans or Specifications require embankments, or parts of embankments, to be constructed of stone embankment Material, furnish and place the stone embankment Material according to this provision and as directed. Furnish Materials from Contractor-provided sources according to the requirements of 00330.16, unless otherwise specified.

Replace the bullet that begins "Material placed in the ..." with the following bullet:

- Material placed in the upper 1-foot of embankments or within 1-foot of a culvert or other Structure, are not more than 3 inches in size.

00330.43(b)(2) Replace the paragraph that begins "In place Materials shall ..." with the following paragraph:

Meet the following moisture content, density, and deflection requirements for in-place Materials:

00330.43(b)(2)(a) Moisture Content - Replace this subsection, except for the subsection number and title, with the following:

At the time of compaction, compact the Materials at a moisture content to within minus 4 percent to plus 2 percent of optimum moisture content. Add water to Material that does not contain sufficient moisture to obtain proper compaction and thoroughly mix as directed. Dry Material containing an excess of moisture by manipulation, aeration, drainage or other means before being compacted.

00330.43(b)(2)(b) Density - Replace the paragraph that begins "After compaction of each ..." with the following paragraph:

After compaction of each layer provide a density of at least:

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:

US101: Butte Creek Culvert Project

00330.44(a) Preparation - Replace this subsection, except for the subsection number and title, with the following:

Do not start excavation for each segment until a stockpile of stone embankment Material is immediately available at or near the site. Locate the stockpile at a site approved by the Engineer. Provide a stockpile size sufficient to fill one excavated segment.

00330.44(b) Sequence of Construction - Replace this subsection, except for the subsection number and title, with the following:

Excavate the area according to 00330.40 and 00330.41 to provide a backslope to the lines, Slopes and details shown, or as directed. Excavate and backfill in segments to minimize aggravating stability conditions. For each segment do not exceed 75 feet in length as measured across the top of each open excavation segment, unless otherwise specified or directed.

00330.47 Specified Selected Courses or Layers of Materials - Replace the paragraph that begins "Place and construct selected ..." with the following paragraph:

Place and construct selected Courses or layers according to the requirements of 00330.42 and 00330.43, unless otherwise specified.

00330.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

Replace the paragraph that begins "No separate or additional ..." with the following paragraph:

No separate or additional payment will be made for blasting done according to 00330.41(e) unless a blasting item is listed in the Contract Schedule of Items.

00330.91(c) Toe Trench Excavation - Replace the bullet that begins "At the toe of riprap slopes ..." with the following bullet:

- At the toe of riprap slopes as shown and elsewhere as directed to provide a suitable foundation toe trench where to place riprap geotextile or filter blanket, and riprap Material.

00330.91(d) General Excavation - Delete the bullet that begins "Includes Unsuitable Material...".

SECTION 00331 - SUBGRADE STABILIZATION

Comply with Section 00331 of the Standard Specifications modified as follows:

00331.10 Materials - Replace the Material that begins "Aggregate Base..." with the following Material:

Aggregate Base 02630.10

00331.90 Payment - Replace the paragraph that begins "The depth of stabilization ..." with the following paragraph:

The depth of stabilization is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications modified as follows:

00350.01 Definitions - Add the following definition:

Geomembrane - An essentially impermeable geosynthetic composed of one or more synthetic sheets.

Replace the definition "**Geogrid**" with the following definition:

Geogrid - A geosynthetic used for reinforcement that is formed by a regular network of tensile elements with apertures of sufficient size to allow strike-through of surrounding Soil, Rock or other geotechnical material.

Replace the definition "**Seam Type**" with the following definition:

Seam Type - A designation of Geotextile positioning and rows of stitching in a specified sewn seam as shown (for example Type SSn-1, "J" Seam SSn-1). The designated method of joining Geomembrane sheets (for example thermal fusion welding, extrusion welding).

00350.40 General - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Furnish geosynthetic from the manufacturer and protect against damage and deterioration. Prevent excessive mud, wet concrete, epoxy and like materials from coming in contact with the geosynthetic. Store all Geosynthetics in a dry place and off the ground at all times according to ASTM D4873. Cover all Geosynthetics with a dark protective covering when received. The geosynthetic will be rejected for use if the Engineer determines it has defects or deterioration or has been damaged.

00350.41(a)(3)(a) General - Replace the paragraph that begins "Sew field seams with polymeric ..." with the following paragraph:

Sew field seams with polymeric thread consisting of polypropylene, polyester or kevlar, and as resistant to deterioration as the Geotextile being sewn. Use a color of thread that contrasts with the Geotextile being sewn so the stitches are exposed for inspection when the Geotextile is placed. Meet the testing requirements of 02320.11(b).

00350.41(a)(3)(b) Stitch Requirements - Replace the paragraph that begins "Use two rows of lock-type ..." with the following paragraph:

Use two rows of lock-type stitching, Type 401, spaced 1/2 inch apart with a tolerance of plus or minus 1/4 inch as shown, to make the seams. Do not cross stitches except for restitching.

00350.41(f)(2) Weather Limitations - Replace this subsection, except for the subsection number and title, with the following:

Do not place sealant and Geotextile unless the weather limitations of 00745.40 are met, as appropriate, except the minimum air temperature is 50 °F for paving grade asphalt sealant placement and 60 °F for asphalt emulsion sealant placement.

00350.41(f)(3) Surface Preparation - Replace the paragraph that begins "Prepare the Pavement surface ..." with the following paragraph:

Prepare the Pavement surface that the sealant is to be placed according to 00730.42 and the following:

00350.41(f)(4) Sealant Application - Replace the paragraph that begins "Uniformly spray the asphalt ..." with the following paragraph:

Uniformly spray the asphalt sealant at normal application temperature by means of a pressure distributor according to 00350.21 on the prepared dry Pavement surface. Apply at the rate of 0.20 - 0.30 gallon per square yard, or as recommended by the Geotextile manufacturer or as directed.

Replace the paragraph that begins "The target width of the sealant ..." with the following paragraph:

The target width of the sealant application is the Geotextile width plus 6 inches. Apply the sealant only as far in advance of the Geotextile installation as appropriate to ensure a tacky surface at the time of Geotextile placement. Place the Geotextile the same Day as the sealant. Do not allow traffic on the sealant. Clean excess asphalt from the road surface.

US101: Butte Creek Culvert Project

00350.42(a) Placement - Replace the bullet that begins "Unroll the Geogrid ..." with the following bullet:

- Unroll the Geogrid in the same direction the cover Material is placed. If the Geogrid shifts or becomes misaligned, realign it and anchor it according to the manufacturer's recommendations.

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications modified as follows:

00390.11(a) General - Replace the bullet that begins "Be angular in shape ..." with the following bullet:

- Be angular in shape. Thickness of a single Rock is not less than one-third its length. Rounded Rock will not be accepted unless authorized by the Engineer.

00390.11(b) Test Requirements - Replace the paragraph that begins "Furnish the Rock..." with the following paragraph:

Furnish Rock meeting the following test requirements:

00390.11(c)(1) Control Sample - Replace this subsection, except for the subsection number and title, with the following:

If directed, provide, at a satisfactory location near the Project, a Rock sample of at least 5 Tons meeting the gradation for the class specified. The Engineer will use the sample as a frequent visual reference for judging the gradation of the riprap supplied.

00390.11(c)(2) Sampling and Testing Assistance - Replace this subsection, except for the subsection number and title, with the following:

The Engineer may request a gradation verification of two random truckloads of Rock. Provide mechanical Equipment, a sorting site and labor needed to assist in checking gradation at no additional cost to the Agency

00390.42 Filter Blanket Construction - Replace this subsection, except for the subsection number and title, with the following:

Place the Filter Blanket on the prepared area to the full specified thickness in one operation, using methods that do not cause segregation.

00390.44(a) General - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Unless otherwise directed, place the riprap protection as the embankment is constructed. Lag the riprap placement behind the embankment construction only as necessary to allow proper embankment construction and prevent mixture of embankment and riprap Material.

00390.44(b) Loose Riprap - Replace the bullet that begins "With a clamshell ..." with the following bullet:

- With a clamshell, orange-peel bucket, skip or similar approved device that will contain the riprap Material to its final destination. Do not open the bucket until it has been lowered to the slope where the Material is being placed.

Replace the bullet that begins "To produce a compact ..." with the following bullet:

- To produce a compact riprap protection where all sizes of Material are placed in their proper proportion.

00390.44(c) Keyed Riprap - Replace this subsection, except for the subsection number and title, with the following:

After placing Loose Riprap Material according to 00390.44(a) and 00390.44(b), key the riprap into place by slapping the surface with a piece of armor plating (approximately 4 feet x 5 feet in size weighing approximately 5,000 pounds) or other approved means that will produce a nearly smooth surface.

00390.44(d) Grouted Riprap - Replace the paragraph that begins "Thoroughly moisten the stones ..." with the following paragraph:

Thoroughly moisten the stones and sluice any excess fines to the underside of the riprap before grouting. Deliver the grout to the place of final deposit by any means that ensure uniformity and prevent segregation of the grout. Spade or rod the grout into the spaces to completely fill the voids in the riprap. Control pressure grouting and do not unseat the stones. Penetrate the grout to the depth as shown. If a rough surface is specified, brush the stone until 25 to 50 percent of the depth of surface stone is exposed. For a smooth surface, grout the crevices to within 5/8 inch of the surface.

00390.90 Payment - Replace the paragraph that begins "In items (b), (c), and (d) ..." with the following paragraph:

In items (b), (c), and (d), the class of riprap is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

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.

00415.20(c) Recording Device - Replace the paragraph that begins "Provide a device capable ..." with the following paragraph:

Provide a device capable of recording video with the pipe identification, a remote meter counter displaying length along the profile in tenths of feet and indicating the camera's position from the starting point. Calibrate the meter counter to be accurate within 0.5 percent over the length of pipe being inspected. Provide a device capable of recording a digital video with a minimum resolution of 720 x 480.

00415.23 Manual Inspection - Replace this subsection, except for the subsection number and title, with the following:

For pipes larger than 48 inches and when the entire length of the pipe is accessible, a handheld video camera and a light source may be used. Provide video camera and lighting meeting the requirements of 00415.20(a). A digital camera may be used as a supplement for taking photographs. Use a light source that provides a clear, focused and high-quality photograph of the culvert surface under all conditions.

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 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.

US101: Butte Creek Culvert Project

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.

00415.70 Video Inspection Recording and Inspection Report - Replace the paragraph that begins “Furnish two copies...” with the following paragraph:

Provide two copies of all preconstruction and post construction inspection video and reports within 3 Calendar Days after completing the inspections. If inspection video or audio recording quality is poor, the Engineer has the right to reject the recording and request new video inspection at no additional cost to the Agency.

00415.71 Corrections to Deficiencies in Work - Replace the paragraph that begins “Where the pipe deflection...” with the following paragraph:

US101: Butte Creek Culvert Project

Where the pipe deflection is greater than 5 percent and less than 7.5 percent of the nominal diameter, submit a remediation plan as 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.

00415.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 00430 - SUBSURFACE DRAINS

Comply with Section 00430 of the Standard Specifications modified as follows:

00430.02 Contractor's Options - Replace the paragraph that begins "If the Contractor has an option ..." with the following paragraph:

If the Contractor has an option of using different kinds of pipe, the option and its limitations are shown.

00430.03 Size Determination - Replace this subsection, except for the subsection number and title, with the following:

The nominal size of pipe is determined according to AASHTO tolerances for pipe dimensions for the appropriate kind or class of pipe.

00430.90 Payment - Replace the paragraph that begins "In item (a), the ..." with the following paragraph:

In item (a), the nominal diameter of pipe is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications modified as follows:

US101: Butte Creek Culvert Project

00440.11 Proportions - Replace the paragraph that begins "Furnish, in writing to the Engineer ..." with the following paragraph:

Provide, in writing to the Engineer, the proportions by weight of the following Materials before using any CGC:

00440.12 Properties of Commercial Grade Concrete - Replace the bullet that begins "Entrained Air..." with the following bullet:

- **Entrained Air** - 4.0 to 7.0 percent
 - Entrained air not required for precast elements utilizing dry cast mix designs.

00440.13 Field-Mixed Concrete - Replace the paragraph that begins "CGC Work items listed in 00440.14(a)..." with the following paragraph:

CGC Work items listed in 00440.14(a) may be field-mixed conventionally, or by volumetric/mobile mixers according to ASTM C685. When approved, concrete sidewalks, concrete curb ramps, concrete driveways, and other flat concrete surfaces may be field-mixed using volumetric/mobile mixers according to ASTM C685, request approval prior to placement. For all other CGC applications, submit written request to the Engineer for approval to use volumetric/mobile mixers according to ASTM C685 at least 21 Days prior to placement.

00440.14(a) General - Replace the paragraph that begins "Acceptance sampling..." with the following paragraph:

Acceptance sampling and testing is based on tests performed by the Contractor's QCT from samples obtained at the site of placement from the discharge of the delivery vehicle.

00440.40(b) Placing - Replace the paragraph that begins "Place CGC..." with the following paragraph:

Place CGC according to the appropriate Sections where CGC is required and the following:

00440.40(c) Forms - Replace the paragraph that begins "Provide forms for CGC ..." with the following paragraph:

Provide forms for CGC according to the appropriate Sections where CGC is required and best common practices. Place to the lines and grades shown or directed.

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:

00445.02 Contractor's Options - Replace the paragraph that begins "If the Contractor has an option ..." with the following paragraph:

If the Contractor has an option of using different kinds of pipe, the option and its installation and other limits are as shown or on the Pipe Data Sheet.

00445.03 Size Determination - Replace this subsection, except for the subsection number and title, with the following:

The nominal size of pipe is determined according to AASHTO tolerances for pipe dimensions for the appropriate kind or class of pipe.

00445.10 General - Replace this subsection, except for the subsection number and title, with the following:

Furnish appropriate certification from the manufacturer or fabricator, based on the manufacturer's quality control tests, that the Materials used in the production of the pipe meet the Specifications. Materials and strength are as specified for the particular kind of pipe and fittings required.

Use flexible elastomeric gasket Joints on all pipes and fittings. Furnish caps or plugs with each fitting, outlet or stub as required, with the same type of gasket or Joint as the pipe.

For sanitary sewers provide tee or wye fittings in the main of the same Materials as the pipe. Furnish fittings of sufficient strength to withstand all handling and load stresses encountered. Furnish Material joining the fittings to the pipe that is free from cracks and that adheres tightly to each joining surface.

Cap or plug all fittings and provide with gaskets of the same Material as used in the pipe Joint. Fit with an approved mechanical stopper or install an integrally cast knockout plug.

US101: Butte Creek Culvert Project

Provide a cap or plug capable of withstanding test pressures without leaking and, when later removed, permits continuation of piping with jointing similar to Joints in the installed line.

00445.11(a) Pipe Anchors - Replace this subsection, except for the subsection number and title, with the following:

Use pipe anchors according to the Standard Drawings and as shown. Furnish metal bands according to the material Specifications for the Metal pipe that they are attached to.

00445.11(b) Slip Joints - Replace this subsection, except for the subsection number and title, with the following:

Construct slip Joints according to the details shown. Furnish the outer sleeve and tapered section according to the material Specifications for the Metal pipe that they are installed with.

00445.11(c) Safety End Sections - Replace this subsection, except for the subsection number and title, with the following:

Use safety end sections according to 02420.10 and the Standard Drawings. Provide safety bars unless otherwise shown.

00445.11(e) Tracer Wire - Replace this subsection, except for the subsection number and title, with the following:

Use 12-gauge stranded or solid copper insulated high molecular weight polyethylene (HMW-PE) tracer wire or 12-gauge copper clad steel reinforced insulated HMW-PE tracer wire. Use a green, minimum 45 mil thick HMW-PE insulated cover. Use a tracer wire that is UL rated for 140 °F.

00445.11(f) Fittings for Concrete Pipe - Replace this subsection, except for the subsection number and title, with the following:

Where fittings are fabricated by inserting a stub into a hole cut in the pipe, grout with a non-shrinking grout. Coat surfaces to receive grout with an epoxy bonding agent prior to grouting. Do not allow fitting stubs to protrude inside of the sewer pipe.

00445.40(b) Line and Grade - Replace the paragraph that begins "Centerline and grade control ..." with the following paragraph:

Centerline and grade control is established prior to the start of construction and the Special Provisions will indicate if the Agency or the Contractor establishes the control.

Replace the paragraph that begins "Do not vary from established ..." with the following paragraph:

Do not vary from established line and grade by more than 1/32 inch per inch of pipe diameter or 1/2 inch for pipe diameter of 16 inches or longer, subject to the following limitations:

00445.40(d) Laying Pipe on Curves - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Lay pipe on horizontal or vertical curves as shown or approved. When deflecting the pipe from a straight line, either in the vertical or horizontal plane, or when long radius curves are shown, do not exceed the amount of deflection allowed by the pipe manufacturer.

00445.40(f) Installation of Sanitary Sewer Service Tees and Wyes - Replace the paragraph that begins "The maximum line or ..." with the following paragraph:

Accomplish line or grade changes with fittings and long radius curves or bends. Do not exceed 45 degrees line or grade change with any one fitting.

00445.43(a) General - Replace the paragraph that begins "Lay pipe proceeding upgrade ..." with the following paragraph:

Lay pipe proceeding upgrade with spigot ends in the direction of flow. Assemble Joints according to the recommendations of the manufacturer for the type of Joint used. Furnish a trench bottom that has a continuous and uniform bearing and support for the pipe at every point between Joints.

Replace the paragraph that begins "Prevent excavated or other ..." with the following paragraph:

Prevent excavated or other foreign material from getting into the pipe. Plug or close off pipes that are stubbed off for future connection. When cutting or machining of the pipe is necessary, use only the tools and methods recommended by the pipe manufacturer. Furnish field Joints that:

00445.43(d) Polyethylene Pipe - Replace the paragraph that begins "Assemble and join ..." with the following paragraph:

Assemble and join solid-wall HDPE pipe at the site using the thermal butt fusion method to provide a leak-proof Joint. Threaded or solvent-cement Joints are not allowed. Use Equipment and procedures in strict compliance with the manufacturer's recommendations. Use personnel certified as fusion technicians by the manufacturer of the pipe or fusing Equipment to accomplish the fusing.

00445.43(f) Polypropylene Pipe - Replace the paragraph that begins "When the ambient air ..." with the following paragraph:

When the ambient air temperature is less than 10 °F, do not install, move, cover, bury, or otherwise handle the polypropylene pipe. All polypropylene pipe handled at temperatures below 10 °F is rejected and not allowed to be used on the Project.

00445.44 Strutting Metal Pipe - Replace this subsection, except for the subsection number and title, with the following:

When the Plans or Special Provisions call for Metal pipe to be installed in a tied or strutted condition, place the ties or struts before backfilling, according to the details shown. Strutting with timber is not allowed in pipe furnished with paved inverts or with centrifugally applied bituminous inner linings. Remove the ties and struts after the embankment over the pipe is completed and compacted.

US101: Butte Creek Culvert Project

00445.47 Contact Surfaces, Aluminum to Concrete - Replace the paragraph that begins "Where uncoated aluminum ..." with the following paragraph:

Where uncoated aluminum pipe or aluminum coated steel pipe is touching portland cement concrete, give the contact surfaces of the pipe a coating of asphalt mastic applied at a rate that will give a minimum dry film thickness of 50 mils.

00445.71(a) General - Replace this subsection, except for the subsection number and title, with the following:

Provide storm gravity sewer systems, sanitary gravity systems, siphon systems and irrigation systems and appurtenances that successfully pass a hydrostatic or air test prior to acceptance and are free of visible infiltration of water. Test manholes as specified in Section 00470.

On pipe 30 inches in diameter and larger, individual Joints may be tested by an approved Joint testing device. Submit all testing procedures and details for review by the Engineer.

00445.71(c) Testing Equipment - Replace this subsection, except for the subsection number and title, with the following:

Provide all necessary testing Equipment and perform the tests in a manner that provides observable and accurate measurements of either air or water leakage under the specified conditions. Calibrate and certify gauges at the direction of the Engineer. Provide the certification with the gauge.

00445.72(a) General - Replace the paragraph that begins "The method, Equipment ..." with the following paragraph:

Submit the method, Equipment and personnel used in testing for approval by the Engineer. The Engineer may, at any time, require a calibration check of the instrumentation used.

00445.72(a)(1) Safety Precautions - Replace this subsection, except for the subsection number and title, with the following:

Only qualified personnel are allowed to conduct the test. Furnish plugs used to close the system for the testing that are capable of resisting the expected internal pressures. Securely brace plugs, if necessary.

00445.72(b) Exfiltration Leakage Testing - Replace this subsection, except for the subsection number and title, with the following:

Prior to the exfiltration leakage test, the pipe test section may be filled with clear water to permit normal absorption into the pipe walls. Keep the test pipe section saturated for a minimum of 4 hours. After the absorption period, refill the pipe to the required test head.

Exfiltration leakage of more than 0.04 gallons per hour per inch diameter per 100 feet of pipe is unacceptable, except 0.3 gallons per hour, per inch per 100 feet may be used in arid climate zones if approved by the Engineer. The minimum hydrostatic head for testing is a minimum 6-foot water column above the crown of the highest section of pipe including service

US101: Butte Creek Culvert Project

connections or exceed the maximum estimated groundwater level. The Engineer will make the final decisions regarding test height for the water in the pipe section.

Limit the length of pipe tested by exfiltration so that the pressure on the invert of the lower end of the section does not exceed 16 feet of water column. Account for all service connection footage for computing allowable leakage.

00445.72(c) Air Testing - Replace the paragraph that begins "The pressure gauge ..." with the following paragraph:

Provide a pressure gauge for use in air testing having minimum divisions of 0.1 psi and an accuracy of 0.0625 psi. All air testing is by the time pressure drop method. The test procedure is as follows:

00445.72(c)(2) Replace this subsection, except for the subsection number, with the following:

Determine the average height of the groundwater over the line. Increase the required test pressures by 0.433 psi for each foot of average water depth over the exterior crown of the pipe.

00445.72(c)(6) Replace the paragraph that begins "For air permeable Materials ..." with the following paragraph:

For air permeable Materials (concrete & clay) the tested section is acceptable if the time recorded in paragraph (6) above is not less than the time in seconds (T) computed by the formula:

Replace the paragraph that begins "C = the sum of the ..." with the following paragraph:

C = the sum of the computations (0.0003882 dL) for each size of pipe and its length in the section, except that the minimum value for C is 1

Replace the paragraph that begins "For non-air permeable pipe ..." with the following paragraph:

For non-air permeable pipe (Metal, PVC, HDPE, ABS composite), the section tested is acceptable if the time recorded in (6) above is not less than the time determined by the following equation.

00445.72(d)(1) General - Replace this subsection, except for the subsection number and title, with the following:

The Contractor may test each individual Joint for leakage using a pneumatic Joint testing apparatus. The method, Equipment and personnel used in individual Joint testing is as approved. The Engineer may, at any time, require a calibration check of the instrumentation used. Use a pressure gauge having minimum divisions of 0.1 psi and have an accuracy of 0.0625 psi. Pass all air used through a single control panel.

00445.72(d)(2) Method - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

All air testing is by the time pressure drop method. The test procedure is as follows:

- a. Determine the average height of the groundwater over the line. Increase the test pressures required below by 0.433 psi for each foot of average water depth over the exterior crown of the pipe.
- b. Add air slowly to the section being tested until the internal air pressure is raised to 4 psi greater than the average backpressure due to groundwater.

00445.72(d)(3) Acceptance - Replace this subsection, except for the subsection number and title, with the following:

The Joint is considered acceptable if the pressure drops less than 1 psi within 5 seconds.

00445.75 Repairs - Replace the paragraph that begins "Following a successful ..." with the following paragraph:

Following a successful hydrostatic or air test, visible infiltration of groundwater in any section is considered evidence that the original test was in error or that failure of the section has occurred. Correct such failures and retest the repaired sections, at no additional cost to the Agency.

00445.91 Payment - Replace the paragraph that begins "In item (a), the ..." with the following paragraph:

In item (a), the nominal pipe diameter is inserted in the first blank. The type of pipe is inserted in the second blank. The appropriate flow line depth range is inserted in the third blank.

Replace the paragraph that begins "In item (b), the nominal pipe ..." with the following paragraph:

In item (b), the nominal pipe diameter is inserted in the first blank. For arch type pipe, the nominal diameter of circular Metal pipe from which the pipe arch is formed, or reformed, is inserted in the first blank. The type of pipe is inserted in the second blank.

Replace the paragraph that begins "In items (c) and (d) ..." with the following paragraph:

In items (c) and (d), the nominal pipe size is inserted in the blank.

Replace the paragraph that begins "In item (e), the ..." with the following paragraph:

In item (e), the outer sleeve slip Joint size is inserted in the blank. The inner sleeve will be included in payment made for the smaller pipe.

Replace the paragraph that begins "In item (f) and (g)..." with the following paragraph:

In items (f) and (g), the nominal pipe diameter is inserted in the blank.

Replace the paragraph that begins "In item (h), the ..." with the following paragraph:

US101: Butte Creek Culvert Project

In item (h), the type of pipe slope anchor is inserted in the first blank and the nominal pipe diameter is inserted in the second blank.

Replace the paragraph that begins "In item (l), the ..." with the following paragraph:

In item (l), the nominal pipe diameter is inserted in the blank.

Replace the paragraph that begins "In item (m), the ..." with the following paragraph:

In item (m) the nominal pipe diameter is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00460 - PAVED CULVERT END SLOPES

Comply with Section 00460 of the Standard Specifications modified as follows:

00460.40 General - Replace the bullet that begins "Shape the Base where ..." with the following bullet:

- Shape the Base where the concrete is to be placed to the lines and grades established. Water and compact the areas before placing concrete.

00460.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00480 - DRAINAGE CURBS

Comply with Section 00480 of the Standard Specifications modified as follows:

00480.40 Preparation of Base - Replace this subsection, except for the subsection number and title, with the following:

Clean Pavements where drainage curbs are to be constructed so that they are free of dirt, dust, oil, grease or other extraneous matter.

US101: Butte Creek Culvert Project

00480.41(a) CGC Curbs - Replace this subsection, except for the subsection number and title, with the following:

Bond CGC curbs to underlying Pavements with an epoxy bonding agent from the QPL or according to 00480.10. Apply according to the manufacturer's recommendations and at a rate that provides a thorough coating to the surface with all voids and depressions filled. Place the new curb on the epoxy bonding agent within 15 minutes after spreading, or before it loses its tackiness, whichever is sooner.

00480.41(b) Asphalt Concrete Curbs - Replace the bullet that begins "An Emulsified Asphalt of ..." with the following bullet:

- An Emulsified Asphalt of the type designated by the Engineer and according to 00480.10. Apply Emulsified Asphalt at a rate of 0.05 to 0.10 gallons per square yard of curb. Place the new curb on the Emulsified Asphalt after the asphalt separates from the water (breaks), but before it loses its tackiness.

00480.42(b) Transverse Expansion Joints - Replace the paragraph that begins "Space expansion joints as ..." with the following paragraph:

Space expansion joints as shown. Construct the width of the joint and thickness of the filler to a minimum of 1/2 inch. Construct each expansion joint at right angles to the curb alignment, normal to the surface of the curb and provide complete separation of new concrete.

00480.44 Line and Grade - Replace this subsection, except for the subsection number and title, with the following:

Place a 12-foot straightedge on the top or face of curb. The curb surface is unacceptable if it varies more than 1/4 inch from the edge of the straightedge, except at grade changes or curves.

00480.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

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:

US101: Butte Creek Culvert Project

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.

00490.40 General - Replace the paragraph that begins "Provide high early strength concrete ..." with the following paragraph:

Furnish high early strength concrete when shown, or when traffic is required to traverse the Structure due to staging requirements. The Engineer will determine the length of curing time.

Replace the paragraph that begins "New construction ..." with the following paragraph:

Provide new construction according to Section 00470.

Replace the paragraph that begins "Bypass pump sanitary ..." with the following paragraph:

Bypass pump sanitary sewer and stormwater flows around the pipe section or manhole being repaired or replaced by plugging an existing upstream manhole and pumping the flow around the Work to a downstream manhole. Submit a bypass pumping plan to the Engineer at least 48 hours before beginning bypass pumping. Use a pump with adequate capacity to handle existing flows and additional flow due to rain. Use a pump that does not exceed a noise level of 86 dB at a distance of 50 feet. Do not operate bypass pumps at night except in an emergency. Do not discharge raw sewage onto private property or city streets, or into storm drain systems.

00490.41(b) Manholes over Existing Rigid Pipe Sewers - Replace the paragraph that begins "Construct manholes over existing ..." with the following paragraph:

Construct manholes over existing rigid sewers after first cleaning and applying an approved commercial concrete bonding agent to all surfaces of the pipe that are in contact with the manhole.

00490.41(c) Manholes over Existing Flexible Pipe Sewers - Replace the bullet that begins "Apply a coating of PVC ..." with the following bullet:

- Apply a coating of PVC solvent to the pipe that is in contact with the manhole.

00490.41(d) Manhole Connections - Replace this subsection, except for the subsection number and title, with the following:

Core or sawcut openings in the existing manhole base or barrel as required. Construct connections that are watertight and that will provide a smooth flow into and through the manhole. Provide all sanitary sewer pipe connections, including those at invert level as well as penetrations for drop connectors, conduits and carry-throughs, according to Section 00470.

US101: Butte Creek Culvert Project

00490.43 Abandoning Pipe in Place - Replace the paragraph that begins "Drain abandoned pipes and ..." with the following paragraph:

Drain abandoned pipes and plug watertight. Plug abandoned pipes with gasketed mechanical plugs or grout seals, as directed. Where abandoned pipes connect to sewer manholes, install the plugs or seals from the inside of the manhole and reshape the channel according to the Standard Drawings.

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.

00490.45 Salvaging Manhole Frames, Covers and Grates - Replace the paragraph that begins "Remove manhole frames ..." with the following paragraph:

Remove manhole frames, covers and grates scheduled for salvage and store in an approved location. Frames, grates and covers meeting Specifications may be salvaged from Structures to be adjusted and may be reused in the Work if of suitable size and condition. Replace, at no additional cost to the Agency, all items damaged or lost by the Contractor with similar items that are comparable in all respects with those they are to replace, and that are adequate for the intended purpose.

00490.46(c) Raising Tops of Manholes - Replace the paragraph that begins "Do not exceed 24 inches ..." with the following paragraph:

Do not exceed 24 inches total distance from the top of the metal frame at its new adjusted grade to the top of the cone. Provide riser rings and repairs according to Section 00470. Extend manhole barrels of brick, block or concrete in kind.

00490.46(c)(1) Concrete Manholes - Replace the bullet that begins "Chip away the exposed ..." with the following bullet:

- Chip away the exposed top surface where new mortar or concrete is to be placed, to a depth of 1 1/2 inches or until firm concrete is exposed.

00490.49 Finish Grade - Replace this subsection, except for the subsection number and title, with the following:

Center a 12-foot straightedge, as nearly as practicable, over the center of the cover of manholes and boxes. The final grade of the Pavement surface and adjusted manholes and boxes is unacceptable if it varies more than 1/4 inch from the finish grade and Cross Section at any point along the straightedge.

US101: Butte Creek Culvert Project

00490.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL

Comply with Section 00510 of the Standard Specifications modified as follows:

00510.00 Scope - Replace the paragraph that begins "This Work does not include any ..." with the following paragraph:

This Work does not include any earthwork covered under any sections of Parts 00300 or 00400, or any earthwork that may be specifically included and provided for as Incidental Work for particular items or parts of the Work. The construction, measurement, and payment of embankment at bridge ends and engineered fills is according to Section 00330.

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:

Beginning Station	Ending Station	Shoring System Type(s) Allowed
Station "L" 45+05 (Lt.)	Station "L" 45+26 (Lt.)	5A, 5B, 6A, 6B
Station "L" 46+20 (Lt.)	Station "L" 46+41 (Lt.)	5A, 5B, 6A, 6B

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. Submit calculations and other data satisfying 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.

Replace the bullet that begins "A list of supervisory personnel ..." with the following bullet:

- A list of supervisory personnel who are on-site during construction of the atypical Shoring system and documentation of their experience and qualifications to perform the Work.

US101: Butte Creek Culvert Project

Replace the paragraph that begins "Geotechnical and structural analysis ..." with the following paragraph:

Geotechnical and structural analysis and design for the Shoring include, but are not limited to the items listed in the Shoring Design Checklist. Submit a completed Shoring Design Checklist and a written Shoring Design Summary, prepared by the shoring design engineer, to accompany the Working Drawings and calculations. Include the following in the Design Summary:

Replace the bullet that begins "Performance requirements (actual threshold ...)" with the following bullet:

- Performance requirements (actual threshold limits of tolerable differential foundation settlement and lateral movement). Indicate how the performance requirements are monitored during construction.

00510.13(1) Material Passing No. 200 Sieve - Replace the paragraph that begins "The amount of Materials passing ..." with the following paragraph:

Ensure the amount of Materials passing the No. 200 sieve does not exceed 15 percent by weight. Test according to AASHTO T 11.

00510.13(2) Plasticity Index - Replace the paragraph that begins "The plasticity index of the ..." with the following paragraph:

Ensure the plasticity index of the Material passing the No. 40 sieve does not exceed 6. Test according to AASHTO T 90.

00510.40 Clearing, Grubbing, and Removal Work - Replace this subsection, except for the subsection number and title, with the following:

Perform clearing, grubbing and removal work according to Section 00310 and Section 00320.

Perform clearing, grubbing, and removal at least 10 feet outside of the entire Structure, including the ends of the Structure but within the Right-of-Way.

00510.41 Structure Excavation - Replace the paragraph that begins "Concrete placed against steel ..." with the following paragraph:

Concrete placed against steel sheet piles in cofferdams or cribs are considered placed against undisturbed material, whether or not the steel sheets are later removed.

00510.44(a) Cofferdams and Cribs - Replace the paragraph that begins "Do not begin cofferdam or crib ..." with the following paragraph:

Do not begin cofferdam or crib construction Work until all submittals have been approved. Upon completion of the cofferdam construction, and immediately after dewatering, field inspect the cofferdam with the cofferdam design engineer of record and accompanied by the Engineer. Do not continue construction until the cofferdam design engineer provides the Engineer a written statement that the cofferdam conforms to the design and will serve the intended purpose.

US101: Butte Creek Culvert Project

00510.44(b) Shoring - Replace the paragraph that begins “Upon completion of the Shoring construction ...” with the following paragraph:

Upon completion of the Shoring construction, field inspect the Shoring with the shoring design engineer of record, accompanied by the Engineer. Do not continue construction until the shoring design engineer provides the Engineer a written statement that the Shoring conforms to the design and will serve the intended purpose.

00510.45 Pumping - Replace the paragraph that begins “No pumping of water from the ...” with the following paragraph:

No pumping of water from the interior of any foundation enclosure is allowed during the placing of concrete or for a period of at least 24 hours thereafter unless an effective means of eliminating moving water through fresh concrete is employed. Water may then be pumped, if approved.

00510.48(b)(3)(a) Test Pad Method - Replace the paragraph that begins “Before placing the wall backfill ...” with the following paragraph:

Before placing the wall backfill, determine the number of Passes necessary to achieve the specified density by constructing a test pad that is at least 5 feet wide, 15 feet long, and 3 feet in final depth. Construct test pad fill in layers no more than 8 inches thick using the same Equipment and methods that are used to compact the wall backfill. Perform at least one density test according to AASHTO T 310 on each test pad layer. Construct and test a new test pad when changes in Material occur or different Equipment is used during the construction of the wall backfill.

00510.48(d) Reinforced Concrete Box Culverts, Structural Plate Structures and Pipe Culverts Over 72 Inches in Diameter - Replace the paragraph that begins “Provide bedding, if required ...” with the following paragraph:

Provide bedding, if required, according to 00405.12. Use backfill Materials meeting the requirements of 00510.12 or 00510.13 unless otherwise specified. Place and compact as shown and according to 00405.46. Place backfill up to the surrounding ground surface, to the top of trench, or the upper backfill pay limits shown or as directed.

00510.80(b)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of Structure excavation is:

Location	Structure Excavation (Cubic Yard)
Structure No. 24348	1050

00510.80(d)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of granular structure backfill is:

Granular

US101: Butte Creek Culvert Project

Location	Structure Backfill (Cubic Yard)
Structure No. 24348	480
00510.90(d) Granular Wall/Structure Backfill - Replace the paragraph that begins “Payment will be payment ...” with the following paragraph:	
Payment will be payment in full for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.	

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 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?	_____	_____	_____

US101: Butte Creek Culvert Project

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 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?	_____	_____	_____

US101: Butte Creek Culvert Project

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?	_____	_____	_____
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?	_____	_____	_____

US101: Butte Creek Culvert Project

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

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
Str. No. 24348, Bent 1	7	448	PP18x0.5	n/a	n/a
Str. No. 24348, Bent 2	7	462	PP18x0.5	n/a	n/a

¹ Protective coating system and color requirements according to 00594.10.

00520.14 Unused Piles - Replace the paragraph that begins " Acceptable full-length piles ..." with the following paragraph:

Acceptable full-length piles furnished according to the estimated length list, order list, or revised pile order list, but not incorporated in the Work, is handled according to one of the following:

00520.20(a)(2) Open-End Diesel Hammers - Replace this subsection, except for the subsection number and title, with the following:

Provide open-end (single-acting) diesel hammers equipped with a device that allows the Engineer to visually determine hammer stroke at all times during pile driving operations. Provide the Engineer with the hammer manufacturer's chart equating stroke and blows per minute.

00520.20(a)(4) Gravity Hammers - Replace this subsection, except for the subsection number and title, with the following:

Provide gravity hammers that have a ram weighing between 2,000 pounds and 5,000 pounds, weigh not less than the combined weight of helmet and pile and a drop height of not more than 10 feet.

00520.20(b) Vibratory Hammers - Replace this subsection, except for the subsection number and title, with the following:

Control installation of production piles with vibratory hammers according to the power consumption, rate of penetration, specified tip elevation, or other acceptable means that assure the pile resistance equals or exceeds the required nominal pile bearing resistance. After driving piles with a vibratory hammer, verify pile resistance (see 00520.42) by driving them with an impact hammer of suitable energy. Do not use vibratory hammers to drive test piles or when preboring or jetting.

US101: Butte Creek Culvert Project

00520.20(c)(1) Helmet - Replace the paragraph that begins "Equip piles driven with ..." with the following paragraph:

Equip piles driven with impact hammers with an adequate metal helmet. Provide helmets that:

00520.20(c)(4) Followers - Replace this subsection, except for the subsection number and title, with the following:

Support piles in line and position while driving. Construct pile hammer leads to give the hammer freedom of movement while maintaining alignment of the hammer and the pile to ensure concentric impact for each blow. Use fixed leads unless the Engineer approves the use of swinging leads. Fit swinging leads, when used, with a pile gate at the bottom of the leads. To maintain alignment of batter piles, use horizontally braced swinging leads, adequately embedded in the ground, or rigidly attached to prevent movement during pile driving.

Followers are permitted.

00520.20(d)(1) General - Replace the paragraph that begins "During pile-driving operations, no ..." with the following paragraph:

During pile-driving operations, no changes to the approved Equipment are allowed without the Engineer's written permission. Submit a request for change on a "Pile and Driving Equipment Data" form. The Engineer will give notification of approval or rejection within 7 Calendar Days of receiving the form. Time required for resubmission and review of a Contractor's Equipment change request is not a basis for a Contract Time extension request unless the Engineer does not respond in 7 Calendar Days.

00520.20(d)(2) Standard Evaluation Method - Replace the paragraph that begins "¹ Requirements are based ..." with the following paragraph:

¹ Requirements are based on the FHWA Gates equation (see 00520.42(b)), except all driving criteria for double acting and differential hammers both air/steam and diesel are by the wave equation analysis.

Replace the paragraph that begins "The required number of ..." with the following paragraph:

The required number of hammer blows indicated by the FHWA Gates equation at the nominal pile bearing resistance is at a rate between 2 and 10 blows per inch.

00520.20(d)(3) Wave Equation Method - Replace the bullet that begins "The energy of the submitted ..." with the following bullet:

- The energy of the submitted hammer produces a wave equation predicted blow count between 2 and 10 blows per inch for the nominal resistances, pile lengths and other conditions specified.

Replace the bullet that begins "The pile stresses indicated by ..." with the following bullet:

US101: Butte Creek Culvert Project

- The pile stresses indicated by the wave equation at the nominal resistance are not greater than the stress at the point of impending damage to the pile as follows:

Replace the paragraph that begins "Hammers not meeting these ..." with the following paragraph:

Hammers not meeting these requirements are rejected. Replace rejected hammers with suitable hammers.

Replace the bullet that begins "Electronic and paper copies ..." with the following bullet:

- Electronic and paper copies of the wave equation input and output files. Provide output files in the standard WEAP output format.

Replace the paragraph that begins "For Agency reviewing and approving ..." with the following paragraph:

The Agency will consider the following when reviewing and approving the wave equation analysis submittals:

Replace the paragraph that begins "Failure of a previously approved ..." with the following paragraph:

Failure of a previously approved hammer to operate properly during construction is cause for rejection.

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)
1	PP18 x 0.5	64	0.1	0.039	0.05	0.15	8	555
2	PP18 x 0.5	64	0.1	0.039	0.05	0.15	8	555

- * These pile lengths are based on the top of the pile being at the finished cutoff elevation. Add all additional pile length above the cutoff elevation, that may be required to accommodate the Contractor's pile installation method or site conditions to the lengths listed above and appropriate changes made to the skin friction distribution input listed below.

Use triangular skin friction distribution.

00520.41(f) Location and Alignment Tolerance - Replace the paragraph that begins "Place the tops of piles at ..." with the following paragraph:

Place the tops of piles at plan cutoff elevation and horizontally within 6 inches of plan locations and no closer than 4 inches from any edge of the cap. Any increase in cap size to meet this edge distance requirement is at no additional cost to the Agency.

US101: Butte Creek Culvert Project

00520.41(h) Test Piles - Replace the paragraph that begins "When specified, furnish and ..." with the following paragraph:

When specified, furnish and drive test piles at the locations and to the lengths directed. Furnish all test piles of the kind and size specified for the permanent foundation piles unless otherwise directed. Drive all test piles with approved pile driving Equipment. The specified length of test piles is greater than the estimated length of production piles to provide for variation in Soil conditions. Drive test piles using driving Equipment identical to what the Contractor proposes to use on the production piling. Excavate to the elevation of the bottom of the footing before driving test piles. (See Section 00510.)

Replace the paragraph that begins "Drive test piles to or below ..." with the following paragraph:

Drive test piles to or below the required minimum tip elevation and to a hammer blow count established by the Engineer. Allow test piles that do not attain the hammer blow count specified at the minimum tip elevation shown to "set up" for 24 hours, or less if directed, before being redriven. (See 00520.42(d).) If the tops of test piles reach plan grade without attaining the required pile bearing resistance, splice them and drive until the required bearing resistance is attained.

00520.42(a) General - Replace the paragraph that begins "Drive piles with approved pile ..." with the following paragraph:

Drive piles with approved pile driving Equipment to the lengths necessary to attain the required penetration and nominal pile bearing resistance. Adequate pile penetration is considered reached when the piles are driven to or below the minimum penetration depth and the specified bearing resistance is achieved. If piles do not achieve the specified resistance when driven to order length or estimated length, splice and drive them to penetrations established by the Engineer. Provide a pile blow count at a rate of between 2 and 10 blows per inch at the required nominal pile bearing resistance. Maintain the required number of hammer blows per inch at final penetration for 3 consecutive inches unless "refusal" driving is first obtained. "Refusal" driving is defined as 20 blows per 1 inch or as determined by the Engineer.

Replace the paragraph that begins "If water jets are used ..." with the following paragraph:

If water jets are used with the driving, determine the bearing value by the specified equation from the results of driving after the jetting has been completed according to 00520.42(e).

00520.42(d) Set Period and Redriving - Replace the paragraph that begins "If piles do not attain the ..." with the following paragraph:

If piles do not attain the required nominal bearing resistance when driven to the specified length, and if allowed or required, allow the piles to stand for a "set period" without driving. The "set period" is a minimum of 24 hours. After the set period, perform check driving on either two piles in each bent or on one pile in every 10 piles, whichever is more. The Engineer will designate the piles that check driving is to be performed. Do not use a cold hammer for redriving. Warm up the hammer before redriving begins by applying at least 20 blows to another pile. Redriving consists of driving the pile to the required bearing resistance with a maximum of 15 blows. If the specified hammer blow count is not attained on redriving, the

US101: Butte Creek Culvert Project

Engineer may direct the Contractor to drive all of the remaining pile length and repeat the set period and redriving procedure. Splice those piles driven to plan grade that do not attain the hammer blow count required, and drive until the required bearing resistance is attained. If the required bearing resistance is attained for each pile that is redriven, then the remaining piles in that bent are considered satisfactory when driven to at least the same penetration and resistance as the redriven piles.

Replace the sentence that begins “The “set period” shall be...” with the following sentence:

The “set period” is a minimum of 72 hours unless otherwise approved by the Engineer.

Add the following sentence to the end of this subsection:

Piles are required to set before redriving.

00520.42(e) Jetted Piles - Replace this subsection, except for the subsection number and title, with the following:

The nominal pile bearing resistance of jetted piles is based on impact driving blow count after jetting has been completed. Jet pipes may be removed when the pile tip is at the required minimum pile tip elevation and before the pile is driven to the required bearing resistance. For piles that are jetted at the Contractor's request and do not attain the required nominal bearing resistance at the ordered length, splice, as required, and drive with a specified impact pile hammer until the required nominal bearing resistance is achieved according to appropriate criteria in 00520.42. If jetting is requested by the Contractor, perform all splicing and driving piles beyond the order length at no additional cost to the Agency.

00520.42(g) Vibratory Hammers - Replace this subsection, except for the subsection number and title, with the following:

The nominal bearing resistance of piles driven with vibratory hammers is based on impact driving blow count after the vibratory Equipment has been removed. When vibratory installation of the piles is approved by the Engineer and the vibrated piles do not attain the required nominal bearing resistance at the specified length, splice them as required, at no additional cost to the Agency, and drive with a specified impact pile hammer until the required nominal bearing resistance is achieved, according to 00520.42.

00520.43(b) Storage and Handling - Replace this subsection, except for the subsection number and title, with the following:

Store and handle steel piles in ways that protect them from damage. Bent or kinked piles are rejected.

00520.43(c) End Treatment - Add the following sentence to the end of this subsection:

Drive steel pipe piles open-ended with tip treatment as shown.

00520.43(d) Reinforced Pile Tips - Add the following sentence to the end of this subsection:

US101: Butte Creek Culvert Project

For steel pipe piling, provide inside fit, open end cutting shoes meeting the requirements of 02520.10(e).

00520.43(g)(1) Splices - Replace this subsection, except for the subsection number and title, with the following:

Construct splice joints for pipe piles according to Joint B-U4a or B-U4a-GF (Single-Bevel Groove Weld) in D1.1. Weld back-up rings with a full penetration groove weld. Construct pipe pile splices that include a steel plate for Soil plug formation according to Joint TC-U4a or TC-U4a-GF.

Construct splice joints for H-piles according to Joint B-U3b or B-U3-GF (Double V-Groove Weld) in D1.1 for both the web and flange sections. Joint B-U4a or B-U4a-GF may be substituted on the flange weld. Provide access holes at the ends of the web according to D1.1.

00520.43(g)(2) Submittals - Replace the bullet that begins "A Welding Procedure Specification ..." with the following bullet:

- A Welding Procedure Specification (WPS) for all pile welds, according to the limitations of D1.1. Both ASTM A36 and ASTM A252 Grade 1 and 2 may be treated as prequalified base metals under Group 1. ASTM A252 Grade 3 will not be considered a prequalified base metal unless the steel has a Carbon Equivalent (CE) of 0.30 percent or less. Develop a Procedure Qualification Record (PQR) for all welding using Grade 3 steel or present proof that the chemistry of the steel meets the CE requirements.

Replace the bullet that begins "An inspection report stating ..." with the following bullet:

- An inspection report stating that the welding under the Contract was performed according to D1.1. Include a review of the WPS, a review of welder qualifications and a report on visual inspection of the welds on the Project Site in the report. Submit inspection reports signed by a Certified Welding Inspector (CWI) holding QC1 certification as defined in D1.1.

00520.43(g)(3) Additional Testing - Replace this subsection, except for the subsection number and title, with the following:

The Engineer may request additional nondestructive testing (NDT), such as radiography or ultrasonic testing of any or all welds. If the additional testing identifies defects warranting rejection, perform repair and additional inspection at no additional cost to the Agency. If the additional NDT does not identify defects warranting rejection, the Agency will pay the cost of the additional testing. Radiographic and ultrasonic defect indications are evaluated according to the statically loaded criteria of D1.1.

00520.43(h) Cutoff Lengths - Replace this subsection, except for the subsection number and title, with the following:

Cut off the tops of all permanent piles square and smooth at the elevation shown or as directed. All cut-off pile becomes the property of the Contractor. Dispose of according to 00290.20. With approval, undamaged cutoffs may be used as pile extensions or welded

US101: Butte Creek Culvert Project

together to form full length piles. Do not vary steel pile cutoffs welded together from a straight line more than 1/4 inch in 20 feet measured along any edge of the pile, whether pile extensions or full length piles.

Mark all acceptable cutoffs and unused pile lengths remaining at completion of pile driving for identification by the Engineer as acceptable for use on other or future Agency projects if requested by the Contractor.

00520.46 Damaged or Defective Piles - Replace this subsection, except for the subsection number and title, with the following:

In addition to other specified requirements:

- Approval of a pile hammer does not relieve the Contractor of responsibility for piles damaged from misalignment of the leads, failure of cap block or cushion materials, failure of splices, malfunctioning of the pile hammer or other improper construction methods.
- Piles damaged during installation are considered unsatisfactory unless the nominal bearing resistance is proved by load tests performed by the Contractor. If such tests indicate inadequate resistance, take corrective measures, such as the use of damaged piles at reduced resistance, installation of additional piles, strengthening of damaged piles, or replacement of damaged piles.
- A concrete pile is considered defective if a visible crack appears around the entire periphery of the pile, or any other crack or defect is observed that is determined to affect the strength or performance of the pile.
- Do not place footing concrete until all piles within a footing are inspected by the Engineer.

00520.80(a) Furnish Pile Driving Equipment - Replace this subsection with the following subsection:

00520.80(a) Provide Pile Driving Equipment - No measurement of quantities will be made for providing Equipment for driving piles.

00512.90 Payment - Replace the Pay Item Furnish Pile Driving Equipment with the following Pay Item:

Pay Item	Unit of Measurement
(a) Provide Pile Driving Equipment.....	Lump Sum

Replace the bullet that begins "When Equipment for driving ..." with the following bullet:

- When Equipment for driving piles is provided and is satisfactorily driving piles 75%

Replace the paragraph that begins "The cost of all Materials ..." with the following paragraph:

The cost of all Materials and labor, including the manipulation of the pile driving Equipment in connection with driving piles will be included in the unit price each for driven piles. Providing Equipment for driving sheet piling is not included in this Work.

US101: Butte Creek Culvert Project

Replace the paragraph that begins "In items (b), (c), (d) ..." with the following paragraph:

In items (b), (c), (d) and (k) the type and size of pile is inserted in the blank.

Replace the paragraph that begins "Items (d) and (e) ..." with the following paragraph:

Items (d) and (e) include all expenses involved in driving piles that have not attained the required bearing resistance and are required to stand for a "set period".

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

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

00530.13 Miscellaneous Metal - Replace this subsection, except for the subsection number and title, with the following:

Minor metal parts such as drains, bolts, concrete anchors, spacer blocks, expansion and bearing devices, access hole covers and frames, anchor bolts, inserts and similar miscellaneous metal, unless otherwise provided, are classified as reinforcement.

Pipe attached to or used in conjunction with bridge deck drains or catch basins are classified as reinforcement.

US101: Butte Creek Culvert Project

00530.14 Concrete Inserts - Replace the paragraph that begins "Furnish hot-dip galvanized ..." with the following paragraph:

Furnish hot-dip galvanized expanded coil concrete inserts with closed back ferrule threaded to receive UNC threaded bolts or rods of the size shown. Furnish concrete inserts with the following minimum lengths and capacities:

00530.30 Mechanical Splice Installers - Replace the bullet that begins "Make splice samples ..." with the following bullet:

- Make splice samples in the presence of the Engineer using the same Materials, Equipment, and procedures that are used on the Project.

00530.35 Headed Bar Reinforcement Installers - Replace the bullet that begins "Make samples in the ..." with the following bullet:

- Make samples in the presence of the Engineer using the same Materials, Equipment, and procedures that are used on the Project.

00530.40 Protection of Material - Replace the paragraph that begins "In addition to the requirements ..." with the following paragraph:

In addition to the requirements above, store epoxy coated bars with supports close enough to prevent sagging in the bundles. Provide protective padding when bundles are stacked or when supported on metal. Store bars as close as practicable to where they are placed in the Structure. Cover bars with an opaque material during storage to protect them from exposure to sunlight and saline mist. Move bars to or from storage according to 02510.11(b) to minimize damage to the coating. Do not allow the total exposure time from bar delivery to concrete placement, while in storage or in place, to exceed 2 months.

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 precast concrete bar ..." with the following bullet:

- When precast concrete bar supports are used, furnish Wired Blocks. Furnish tie wires meeting the requirements of 02510.60. Combination Blocks may be used in horizontal applications. Furnish tie wires meeting the requirements of 02513.60 for blocks supporting stainless steel reinforcement.

Replace the bullet that begins "Where at least one of the ..." with the following bullet:

- Where at least one of the bars to be tied or supported is epoxy coated, furnish tie wires that are either plastic or epoxy coated.

Replace the bullet that begins "When stainless steel rebar is specified..." with the following bullet:

US101: Butte Creek Culvert Project

- When stainless steel reinforcing is specified, use stainless steel ties and supports meeting the requirements of 02513.60.

Replace the bullet that begins "Use plastic tipped feet or ..." with the following bullet:

- Use plastic tipped feet or Class 2, Type A stainless steel tips if the feet of the support are on an exposed surface.

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:

- 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).

00530.42(c)(2)(a) General - Replace this subsection with the following subsection:

Provide labor, Material and Equipment for fabricating sample mechanical splices at no additional cost to the Agency. All sample splices are tested by the Agency at the Agency's expense.

00530.42(c)(2)(d) Project Site Quality Control - Replace the bullet that begins "Submit one quality control ..." with the following bullet:

- Submit one quality control sample for each 100 splices performed up to 500 splices and then submit one sample for each 500 splices. Successful installer qualification according to 00530.30 satisfies quality control for the first 100 splices being installed. This sequence of testing is required for each heat treatment lot used.

Replace the bullet that begins "Quality control samples ..." with the following bullet:

- Quality control samples are tested according to this Section. If any sample fails to meet the test criteria, the lot that it represents is rejected until the cause of failure has been determined. Materials from a rejected lot may be accepted if they are shown to be free of the condition that caused the failure.

US101: Butte Creek Culvert Project

00530.42(c)(3) Installation - Replace the paragraph that begins "Install splices in the ..." with the following paragraph:

Install splices in the presence of the Engineer. Splices made without the Engineer present are rejected.

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.

00530.47(b)(1) General - Replace this subsection with the following subsection:

Provide labor, Material and Equipment for fabricating sample headed bar reinforcement at no additional cost to the Agency. All sample headed bar reinforcement are tested by the Agency at the Agency's expense.

00530.47(b)(4) Project Site Quality Control - Replace this subsection with the following subsection:

During the installation of headed bar reinforcement:

- Submit one quality control sample for each 100 headed bars installed up to 500 headed bars and then submit one sample for each 500 headed bars. Successful installer qualification according to 00530.35 satisfies quality control for the first 100 headed bars being installed. This sequence of testing is required for each heat treatment lot used.
- Complete the headed bar reinforcement according to the manufacturer's recommendations.
- Quality control samples are tested according to this Section. If any sample fails to meet the test criteria, the lot that it represents is rejected until the cause of failure has been determined.

00530.47(c) Installation - Replace the paragraph that begins "Install headed bar reinforcement ..." with the following paragraph:

Install headed bar reinforcement in the presence of the Engineer. Headed bar reinforcement installed without the Engineer present is rejected.

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 (CM)
24348	0	0	0	0	38000

US101: Butte Creek Culvert 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
(b) Reinforcement, Grade _____, ASTM A1035	Lump Sum or Pound
(c) Coated Reinforcement, Grade _____	Lump Sum or Pound
(d) Coated Reinforcement, ASTM A1035 _____	Lump Sum or Pound
(e) Stainless Steel Reinforcement, Grade _____	Lump Sum or Pound
(f) Welded Wire Reinforcement, Grade _____	Lump Sum or Pound

In items (a), (c), (e), and (f) the grade of reinforcement is inserted in the blank.

In items (b) and (d) the Grade and ASTM chromium content, "CS", "CM", or "CL" is inserted in the blank.

Item (a) and (b) include fabricating and placing uncoated reinforcement as specified.

Item (c) and (d) include placing epoxy coated reinforcement as specified.

Item (e) includes fabricating and placing stainless steel reinforcement as specified.

Item (f) includes fabricating and placing welded wire 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 providing 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 00531 – GLASS FIBER REINFORCED POLYMER BAR REINFORCEMENT FOR CONCRETE

Section 00531 is not a Standard Specification and is included in this Project by Special Provision.

Description

00531.00 Scope - This Work consists of furnishing and placing glass fiber reinforced polymer (GFRP) bar reinforcement of the size shown or specified.

US101: Butte Creek Culvert Project

00531.02 Submittals - Submit a product certificate to the Engineer at least 21 Calendar Days before delivering GFRP reinforcement to the Project Site for each size of GFRP reinforcement. Provide test data for each of the mechanical, physical and durability properties for product certification for each bar diameter of the Material furnished. Provide the following information:

- The testing agency and the representative responsible for the test results.
- The resin matrix, filler and additives.
- The fiber type.
- The test results and the test method for each of the following properties:
 - Mechanical Properties:
 - Tensile Modulus of Elasticity
 - Ultimate Tensile Strength
 - Ultimate Strain
 - Bond Strength
 - Transverse Shear Strength
 - Physical Properties:
 - Fiber Mass Content
 - Glass Transition Temperature
 - Bar Diameter
 - Bar Area
 - Durability Properties:
 - Moisture Absorption
 - Alkaline Resistance

Submit order lists and bending diagrams according to 00531.11.

Materials

00531.10 General - Furnish GFRP reinforcement from the QPL.

00531.11 Order Lists and Bending Diagrams - Before ordering Material, submit all order lists according to 00150.37 and unstamped Working Drawings and bending diagrams according to 00150.35 for approval. Do not order Material until such lists, Working Drawings and bending diagrams have been approved. The review of order lists, Working Drawings and bending diagrams by the Engineer in no way relieves the Contractor of responsibility for the correctness of such lists and diagrams. Revise lists, Working Drawings and diagrams as required to comply with the design drawings at no additional cost to the Agency.

00531.12 Fabrication - Create bends as shown during GFRP bar manufacturing. Use a minimum inside bend diameter of 3 times the bar diameter for #4 - #8 bars and a minimum inside bend diameter of 4 times the bar diameter for #9 and #10 bars.

US101: Butte Creek Culvert Project

Provide identification marks on each GFRP reinforcement or affix a durable tag to each bundle for Production Lot traceability and nominal bar size designation.

Construction

00531.40 Protection of Material - Store GFRP reinforcement above the surface of the ground on dunnage. If stored outdoors for more than 2 months, cover the GFRP reinforcement with opaque plastic or other types of cover that protects the bars from ultraviolet rays. Prevent exposure of GFRP reinforcement to temperatures above 120 °F during storage.

Protect GFRP reinforcement from damage at all times. Ensure GFRP reinforcement is free of dirt, paint, oil and other foreign substances. When handling GFRP reinforcement, use Equipment that avoids damaging or abrading the GFRP reinforcement. Lift bundles of GFRP reinforcement at multiple pickup points. Do not drop or drag GFRP reinforcement.

If visual inspection reveals discoloration due to UV exposure or loss of grit on GFRP reinforcement, the GFRP reinforcement is rejected.

00531.41 Placing and Fastening - Place all reinforcement within the tolerances recommended in the *CRSI Manual of Standard Practice* unless otherwise specified. Hold reinforcement firmly during the placing and setting of concrete. If GFRP reinforcement is not adequately supported or tied to resist settlement, floating upward, or movement in any direction during concrete placement, halt concrete placement until corrective measures are taken.

(a) Ties and Supports - Keep reinforcement properly positioned during placement of concrete according to the following:

- Use precast mortar or plastic blocks to support GFRP reinforcement. When precast mortar blocks are used, furnish mortar blocks that have the same or greater compressive strength as the concrete to be placed and have cast-in wire ties meeting the requirements of 02513.60 mortar blocks.
- Furnish plastic/nylon zip tie or stainless steel tie wire meeting the requirements of 02513.60.
- For bridge decks, use precast mortar or plastic blocks to support the bottom mat of GFRP deck reinforcement from deck formwork. Use stainless steel reinforcement supports to support the top mat of deck reinforcement as shown. Place all reinforcement in designated position and securely hold in position while placing and consolidating concrete.
- Wire bars together with ties at all intersections for both top and bottom mats.

(b) Clearances:

- Unless otherwise specified, furnish concrete cover for GFRP reinforcement as shown.
- Provide the same surface clearance for ties and splices as shown or specified for the reinforcement.

US101: Butte Creek Culvert Project

- Maintain clearance distance from the forms and between layers of reinforcement as shown or specified with stays, precast concrete blocks, ties, hangers, or other approved supports.
- Ensure bridge deck clearances meet the requirements of 00540.48(g).

(c) Approval - After placing GFRP reinforcement for each section of work or in any member, have it inspected and approved by the Engineer before placing concrete. Concrete placed in violation of this provision may be rejected and removal required.

00531.42 Splicing - Do not use mechanical splices for GFRP reinforcement.

(a) General - Furnish full length bars for the specific length shown or the calculated length for those designated "full length".

If specific locations are designated for splices, make splices only at those locations, or use full-length bars.

In the absence of other directions, including bars designated "continuous", furnish GFRP reinforcement to provide the minimum practical number of bars.

(b) Lapped Splices - In lapped splices, place the bars in contact and fasten together according to 00531.41 with at least three ties per splice.

00531.43 Field Cutting and Bending - Field cut GFRP reinforcement only when specifically permitted using high speed grinding cutter, fine blade saw, diamond blade, or masonry blade. Do not use shear or flame cutting. Seal cut ends according to GFRP bar manufacturer's recommendations. Allow the Engineer to inspect all surface damage due to cutting. Repair the damage according to the manufacturer's recommended method. Do not field bend or straighten GFRP reinforcement.

00531.44 Damage and Repair of GFRP Reinforcement - GFRP reinforcement with the following damage is rejected:

- Visible fibers (other than at cut ends).
- Cut deeper than 0.04 inches.
- Damage area is larger than 2% of the surface area in that linear foot of bar.

For damage not exceeding the list above, lap splice a new GFRP reinforcing bar adjacent to the damaged portion with the appropriate lap length on either side of the damage area.

Measurement

00531.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

When laps are made for splices for the convenience of the Contractor, the extra reinforcement will not be included in the pay quantities.

The estimated quantity of GFRP reinforcement is:

US101: Butte Creek Culvert Project

Structure	Bar Size	Quantity (Foot)
Bridge No. 24348	#5	24200
Bridge No. 24348	#6	22200

Payment

00531.90 Payment - The accepted quantities of GFRP Reinforcement will be paid for at the Contract lump sum amount for the item “___ GFRP Reinforcement”.

The bar diameter of GFRP reinforcement is inserted in the blank.

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 providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

No separate or additional payment will be made for clips, wire, separators, chairs, and 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 - Replace the title of this subsection with “**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.

00535.10(a) Resin Bonded Anchor System - Replace the paragraph that begins “Furnish a polyester ...” with the following paragraph:

Furnish a polyester, vinyl ester, or epoxy resin bonding system from the QPL that sustains the minimum pullout force shown. Furnish resin used for installation of the anchor system as shown from the same lot used for testing according to 00535.45(a)(1).

Replace the paragraph that begins “Unless shown otherwise, galvanize all ...” with the following paragraph:

Unless shown otherwise, galvanize all anchors that have any portion of the anchor exposed. Galvanize according to AASHTO M 232 (ASTM A153) or AASHTO M 298 (ASTM B695), Class 50. When within 25 aerial miles of the Pacific Ocean, galvanize according to

US101: Butte Creek Culvert Project

AASHTO M 232 (ASTM A153) only. Anchors that become completely encased in concrete will not require galvanizing.

00535.10(b) Mechanical Anchor System - Replace this subsection, except for the subsection number and title, with the following:

Furnish a mechanical anchor system from the QPL that sustains the minimum pullout force and is not longer than the embedment depth shown. Furnish anchors used for installation from the same lot used for testing according to 00535.45(a)(2). Unless shown otherwise, furnish galvanized mechanical anchors according to AASHTO M 232 (ASTM A153).

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.

Replace the paragraph that begins "Provide components connected ..." with the following paragraph:

Furnish components connected to the installed anchors with the same metal type or provide electrical isolation when metal type of the components is dissimilar or unknown.

Add the following subsection:

00535.45(c) Anchor Test Summary - Test the installed anchors according to Table 00535-2 and Section 00165.

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)
24348	J11	Resin	bolt	1/2"	A307	No	Yes	No

Replace anchors that fail at no additional cost to the Agency.

00535.45 Testing - Replace the paragraph that begins "Do not incorporate demonstration ..." with the following paragraph:

Do not incorporate demonstration test anchors into the Work. Do not begin installing the anchor system until the installation process is approved. Test results with the average load

US101: Butte Creek Culvert Project

meeting or exceeding the minimum pullout force are acceptable. If any test anchor has a capacity less than 95 percent of the minimum pullout force, the anchor lot is rejected.

00535.45(a) Demonstration Tests - Replace the paragraph that begins "Install three test anchors ..." with the following paragraph:

Install three test anchors using the same Materials and methods that is used for installing the anchor system. One demonstration test includes 3 test anchors.

00535.45(b) Production Tests - Replace the paragraph that begins "Use anchors from the same ..." with the following paragraph:

Use anchors from the same lot used for the demonstration tests. Perform production tests during installation of the anchor system, after the installation is finished, and for the resin bonded anchor system the resin has cured according to the manufacturer's recommendations. One production test includes 1 test anchor. Maintain the test load at the required load level for a minimum of 10 seconds. Measurable displacement is a failure. If the Engineer suspects improper installations, more testing may be required.

SECTION 00540 - STRUCTURAL CONCRETE

Comply with Section 00540 of the Standard Specifications modified as follows:

00540.03 Required Submittals for Deck Sidewalk and Curb Ramps - Replace the title of this subsection with "**Submittals for Deck Sidewalk and Curb Ramps**"

Replace the paragraph that begins "Material ordered or Work ..." with the following paragraph:

Material ordered or Work done before the Engineer reviews and returns the documents are at the Contractor's risk.

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

US101: Butte Creek Culvert Project

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, according to SAE AMS-STD-595C color #36375.

Dark Gray, according to SAE AMS-STD-595C color #36176.

00540.15 Form Materials - Replace this subsection, except for the subsection number and title, with the following:

Furnish wood, minimum nominal 5/8-inch-thick APA exterior grade plywood, minimum nominal 5/8-inch-thick APA plyform, metal, or other suitable form material. For round concrete columns, furnish either metal or other approved form material that produces a smooth and true surface free from fins, joints and other irregularities. Use APA plyform for all decks and slabs.

00540.17 Acceptance of Concrete - Replace the paragraph that begins "Acceptance of concrete ..." with the following paragraph:

Acceptance of concrete is according to Section 00165 and the following:

00540.17(a) Aggregate - Replace the paragraph that begins "Acceptance of Aggregate ..." with the following paragraph:

Acceptance of Aggregate is according to 02690.12.

00540.17(b) Plastic Concrete - Replace the paragraph that begins "Acceptance of plastic concrete ..." with the following paragraph:

Acceptance of plastic concrete is based on tests performed by the Contractor's QCT, according to the Tolerances and limits of 02001.20.

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.

00540.17(c)(1) General - Replace the paragraph that begins "For all classes of concrete ..." with the following paragraph:

For all classes of concrete, acceptance of hardened concrete is based on an analysis of compressive strength tests of cylinders cast by the QCT. Test cylinders at an ODOT certified laboratory.

00540.17(c)(2) Acceptance - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Hardened concrete with an ASTV meeting or exceeding the specified design strength, f'_c is accepted for strength. If the ASTV is less than f'_c but at least 85 percent of f'_c , the Engineer may review the results to determine if the concrete represented by the cylinders is suitable for the intended purpose. Remove concrete that has an ASTV less than 85 percent of f'_c unless otherwise authorized, in writing, by the Engineer. If the concrete is removed, the cost of removal, replacement and all related Work is the Contractor's responsibility. If the Engineer determines that the concrete is suitable for the intended purpose, the concrete may be allowed to remain in place, subject to a price adjustment according to 00150.25.

If an ASTV falls below f'_c , the Contractor may submit a written plan outlining a proposed alternate method of evaluating compressive strength. Submit the plan for review by the Engineer within 3 Days of the test. Provide evidence that a reasonable f'_{cr} (over-design) was maintained and that there is credible evidence (besides low strength) that warrants consideration of this option. The Engineer may allow an alternate method of acceptance if the compressive strength test results are determined to be suspect from definable external factors.

00540.24(a) Deck Finishing Machine Support System - Replace this subsection, except for the subsection number and title, with the following:

Provide calculations and detailed drawings of the proposed deck finishing machine support system according to 00540.41.

00540.25 Straightedge - Replace this subsection, except for the subsection number and title, with the following:

Provide a 12-foot metal straightedge for checking bridge deck roadway and sidewalk surface Tolerances.

00540.40(b)(3)(c) - Replace this subsection, except for the subsection number and title, with the following:

On ramps, sidewalks and intersections the gap below a 12-foot unlevelled straightedge resting on high spots does not exceed 1/4 inch in any direction.

00540.40(b)(3)(d) - Replace this subsection, except for the subsection number and title, with the following:

On bridge decks, the gap below a 12-foot unlevelled straightedge does not vary from the testing edge by more than 1/8 inch in any direction.

00540.41(b) General Design Loads - Replace the paragraph that begins "Ensure design loads ..." with the following paragraph:

Ensure design loads used are the maximum loadings. Ensure deflections used on manufactured devices and assemblies do not exceed the manufacturer's recommendations. Provide catalog data that lists the manufacturer's recommendations.

00540.41(c)(2) On Piles - Replace the paragraph that begins "For Falsework supported ..." with the following paragraph:

US101: Butte Creek Culvert Project

For Falsework supported on piles, show on the Working Drawings the pile type, size and spacing. Accompany these drawings with calculations that show the assumptions and methods used to design the piles and the bearing values that the piles need to be driven to support the calculated loads.

00540.41(d) Requirements at Highway and Railroad Traffic Openings - Replace the bullet that begins "Increase the vertical post ..." with the following bullet:

- Increase the vertical post load 150 percent. If the load on the Falsework is increased by load transfer due to prestressing, increase the vertical post load by the additional load due to prestressing or by 150 percent, whichever is greater.

00540.42 Falsework Construction - Replace the paragraph that begins "Construct Falsework according ..." with the following paragraph:

Construct Falsework according to the current edition of AASHTO *Construction Handbook for Bridge Temporary Works*, except where in conflict with the Specifications. Assure that Falsework is constructed according to the Falsework design and on Soils equal to or exceeding design assumptions. Within 2 Days of notice of the falsework design engineer's pending inspection, the Engineer will provide a list of construction concerns. Do not place concrete until the falsework design engineer of record, accompanied by the Engineer, field inspects that portion of the Falsework proposed for use. Do not place concrete until all construction concerns have been addressed, the falsework design engineer provides the Engineer a written statement that the Falsework conforms to the design and will serve the intended use, and the Engineer agrees in writing that the Falsework will serve the intended use.

00540.43(a) Construction Joints - Replace the paragraph that begins "Apply a concrete surface ..." with the following paragraph:

Apply a concrete surface retarder according to the manufacturer's recommendations. Remove surface mortar within the time period recommended by the manufacturer and clean the joint surface and reinforcing steel by removing loosened particles of Aggregate, damaged concrete, unconsolidated concrete and surface laitance with a high pressure washer according to 00540.28 to the extent that clean Aggregate (free of surface mortar) is exposed on 50 percent of the surface. Clean the joint surface again immediately prior to the concrete placement to remove any subsequent deposits of dirt, debris or other foreign materials. Saturate the joint surface with potable water immediately before resuming concrete placement. Remove standing water in depressions or hollows of the joint surface.

00540.43(e) Construction Joints Between Existing and New Concrete - Replace the paragraph that begins "Sand-blast or water-blast existing ..." with the following paragraph:

Sand-blast or water-blast existing concrete surfaces where shown or directed. Roughen surface to a uniformly distributed 1/4-inch minimum amplitude surface profile. If approved, bush hammers or scabbler may be used for roughening existing concrete surfaces. Use pneumatic hammers, chipping guns, manual picks and chisels for area with limited access. Do not use pneumatic hammers heavier than a nominal 15-pound class. Remove loosened particles of Aggregate and damaged concrete with a high-pressure washer according to 00540.28.

US101: Butte Creek Culvert Project

00540.45 Construction of Forms - Replace the bullet that begins "Are retightened before ..." with the following bullet:

- Are retightened before depositing new concrete on or against concrete that has hardened.

00540.48(a) General - Replace the bullet that begins "Through pumps, chutes ..." with the following bullet:

- Through pumps, chutes or trunks according to 00540.22, when placement requires dropping concrete more than 5 feet. Place the bottom of pump hose, chutes, pipes or trunks as close to final placement position as practicable.

Replace the bullet that begins "In layers not more ..." with the following bullet:

- In layers not more than 18 inches thick, except for seal concrete placement, unless shown otherwise. Place and consolidate each layer before the preceding layer has taken initial set to avoid surfaces of separation between the layers.

00540.48(b) Pumping Concrete - Replace this subsection, except for the subsection number and title, with the following:

Pump concrete with pumping Equipment according to 00540.22. Pump a cement-water slurry through the lines before starting the mix through the pump. Operate the pump in a manner that produces a continuous stream of concrete without air pockets or segregation. When a placement nears completion, if concrete remaining in the pipeline is to be used, remove it in a manner that will not cause contamination of the concrete already in place.

There is no extra payment for additional cement or additives required to ensure a mix is pumpable.

00540.48(c) Vibrating Concrete - Replace the paragraph that begins "Apply vibration at the point ..." with the following paragraph:

Apply vibration at the point of freshly deposited concrete. Apply vertically at points uniformly spaced not farther apart than 1 1/2 the radius over where the vibration is visibly effective. Penetrate into previously placed plastic layers.

Replace the paragraph that begins "Do not use vibrators to ..." with the following paragraph:

Do not use vibrators to make concrete flow or to move concrete from one point to another in the Forms. Do not apply directly on or through the reinforcement to sections or layers of concrete that have hardened to the degree that the concrete ceases to be plastic under vibration.

00540.48(g) Bridge Decks - Replace the paragraph that begins "Use deck finishing machines ..." with the following paragraph:

Use deck finishing machines according to 00540.24 and set to run parallel to the skew of the bent lines. Place screed rails outside the finishing area. Extend screed rails beyond both ends

US101: Butte Creek Culvert Project

of the scheduled placement length for a distance that allows the finishing machine to reach all of the concrete.

Replace the paragraph that begins "Before placing concrete, operate ..." with the following paragraph:

Before placing concrete, operate the finishing machine the length of the proposed placement, and check the deck thickness and clearance from the screed to the reinforcing steel in the presence of the Engineer, by an approved method. The permissible variation from the clearance indicated is plus or minus 1/4 inch. Make necessary corrections before beginning the placement.

Replace the bullet that begins "Provides wind breaks, fog ..." with the following bullet:

- Provides wind breaks, fog spray, or other approved methods when the concrete surface is exposed to conditions that may cause premature drying during placement operations.

00540.49(a)(2)(a) General - Replace the paragraph that begins "To place concrete when the ..." with the following paragraph:

To place concrete when the temperature is below 40 °F, submit a Cold Weather Plan that identifies the methods that are used to prevent the concrete temperature from falling below 50 °F. Methods include heated enclosures and insulated Forms. Also include in the plan measures that are taken if the concrete temperature falls below 50 °F. Provide a 24-hour continuous recording thermometer to verify the concrete temperature.

00540.49(a)(2)(b) Enclosures - Replace the bullet that begins "Furnish and use, within ..." with the following bullet:

- Provide and use, within the enclosure, a 24-hour continuous temperature/humidity recorder to record the air temperature and relative humidity every hour during the cure period.

00540.50(b) Deck Roadway Finish - Replace the paragraph that begins "After the deck roadway concrete ..." with the following paragraph:

After the deck roadway concrete has been screeded with a finishing machine according to 00540.24, float, if necessary, to produce a uniform surface, according to 00540.55. If the Work does not conform to the prescribed limits, stop the operation until revised methods, changes in Equipment, or correction of procedures are approved for trial. Also stop the revised operation if it does not produce a specified surface.

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.

US101: Butte Creek Culvert Project

00540.51(a) General Requirements - Replace the paragraph that begins “If the ambient temperature falls ...” with the following paragraph:

If the ambient temperature falls below 50 °F, or is forecasted to be below 50 °F, provide a 24-hour continuous recording thermometer and place it directly on the surface of the concrete. Once placed, leave the thermometer in place for the duration of the cure period. Use methods approved by the Engineer to maintain a concrete temperature of at least 50 °F during the cure period.

00540.51(b) Curing Concrete Bridge Decks - Replace the bullet that begins “Provide wind breaks or ...” with the following bullet:

- Provide wind breaks or other approved methods when exposed to conditions that may cause premature drying during placement operations. Premature drying is defined as an evaporation rate equal to or greater than 0.10 pounds per square foot per hour, as determined from Figure 00540-1, or as the loss of surface sheen when the evaporation rate at the surface exceeds the bleed rate.

Replace the bullet that begins “Maintain a continuous water...” with the following bullet:

- Except for HPC(IC), maintain a continuous water cure of the concrete surface for 14 Days. For HPC(IC), maintain a continuous water cure of the concrete surface for 7 Days.

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 are 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) that is equivalent to the most unfavorable field conditions for the portions of the concrete that the cylinders represent.

Replace the paragraph that begins “² Where continuous spans ...” with the following paragraph:

- ² Where continuous spans are involved, the time for all spans is determined by the last concrete placed affecting any span.

00540.53(b) Class 1 Surface Finish (Ground, Sacked, and Coated) - Replace the paragraph that begins “After completion of the general ...” with the following paragraph:

After completion of the general surface finish, grind the surface with a power grinder or an equivalent method to remove laitance and surface film. Sack the surface to fill all holes using a paste of fine mortar sand, cement, water, and bonding agent. The ratio of bonding agent to water is one part bonding agent to two parts water, or as recommended by the manufacturer. Apply coating according to 00540.53(d).

US101: Butte Creek Culvert Project

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)(1) Concrete Paint - Replace the paragraph that begins “Thoroughly saturate the surface ...” with the following paragraph:

Thoroughly saturate the surface with water and coat it, while damp, with a coating Material according to 02210.30. Apply a minimum of two coats of coating Material. Apply coating according to the manufacturer's instructions. The second coat may be applied any time after the previous coat, when touched lightly, does not adhere to the finger. Additional coats may be required to provide uniformity in coverage and color. Mortar sand may be added to the coating Material to help achieve a uniform surface.

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.

00540.54 Crack Inspection and Deck Sealing - Replace the paragraph that begins “Perform crack sealing Work ...” with the following paragraph:

Perform crack sealing Work at no additional cost to the Agency. Complete all crack sealing Work before opening to traffic. If the Bridge is opened to traffic at the Contractor's request before completing crack sealing, all additional traffic control to complete crack sealing is at no additional cost to the Agency.

00540.55 Final Acceptance of Bridge Deck Surface - Replace the paragraph that begins “Ensure the finished ...” with the following paragraph:

Ensure the finished bridge deck roadway surface meets the Tolerance specified in 00540.40(b)(3)(d) at every point. Provide a 12-foot straightedge and use it under the Engineer's direction.

00540.80(a)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of concrete is:

Bridge No. 24348

Type and Class	Quantity (Cu. Yd.)
Deck Concrete, Class HPC4500	135

US101: Butte Creek Culvert Project

General Structural Concrete, Class 3300	65
General Structural Concrete, Class 4000	95

00540.80(b) Sawcut Texturing - Replace this subsection with the following subsection:

00540.80(b) Surface Texturing - The quantities of surface texturing will be measured on the area basis and is the area of each bridge deck or approach slab as shown, less 16 inches along each curb and 6 inches from joint blockouts and bridge ends. Field measurement of surface texturing will not be made.

00540.90 Payment – Replace the Pay Item Sawcut Texturing with the following Pay Item:

Pay Item	Unit of Measurement
(d) Surface Texturing	Square Yard

Replace the paragraph that begins “In items (a), (b) ...” with the following paragraph:

In items (a), (b), and (c), the class of concrete is inserted in the blank.

Replace the paragraph that begins “Payment will be payment ...” with the following paragraph:

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

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?	_____	_____	_____

US101: Butte Creek Culvert 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?

US101: Butte Creek Culvert 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

US101: Butte Creek Culvert 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? _____

US101: Butte Creek Culvert 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
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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
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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? _____

US101: Butte Creek Culvert 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?	_____	_____	_____

US101: Butte Creek Culvert 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 00545 - REINFORCED CONCRETE BRIDGE APPROACH SLABS

Comply with Section 00545 of the Standard Specifications modified as follows:

00545.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

This Work consists of constructing reinforced portland cement concrete bridge approach slabs and sleeper slabs at the locations shown or as directed, and in close conformity to the lines, grades and dimensions shown or established.

00545.10 Materials - Replace the bullet that begins "When pipe under approach ..." with the following bullet:

- When pipe under approach slabs are shown, furnish one of following types:

Replace the bullet that begins "For pipe under approach ..." with the following bullet:

- For pipe under approach slabs, furnish pipe bedding, pipe zone material, and backfill meeting the requirements of 00405.12, 00405.13, and 00405.14.

Replace the bullet that begins "Provide granular structure ..." with the following bullet:

- Furnish granular structure backfill meeting the requirements of 00510.13.

SECTION 00550 - PRECAST PRESTRESSED CONCRETE MEMBERS

Comply with Section 00550 of the Standard Specifications modified as follows:

00550.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

This Work consists of the manufacture, storage, transportation and installation of precast prestressed concrete girders, box girders, slabs or other concrete members. Precast prestressed concrete members in this Specification are referred to as members.

00550.12(a) Aggregate - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of Aggregate is based on the Contractor's quality control testing, if verified, according to Section 00165.

US101: Butte Creek Culvert Project

00550.12(b) Plastic Concrete - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of plastic concrete is based on tests performed by the QCT, according to Section 02001.

00550.12(c)(1) General - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of hardened concrete is based on analysis of compressive strength test results of cylinders cast and cured by the Contractor and tested according to AASHTO T 22 by a CSTT at an ODOT certified laboratory and verified according to Section 00165.

00550.12(c)(2) Sampling and Testing - Replace this subsection, except for the subsection number and title, with the following:

Obtain a sample from a delivery vehicle, selected at random, during placement in each bed. Test the sample for temperature, slump, density and air content and cast at least three cylinders for testing at 28 Days. Cure the cylinders in a manner similar to the members they represent. Alternately, the cylinders may be cured in a curing chamber correlated in temperature with the concrete in the beds. Leave the cylinders in the bed with the member or in the curing chamber until the member is stripped. After the member is stripped, place the acceptance cylinders in storage in a moist condition according to AASHTO R 100.

00550.12(c)(3) Acceptance - Replace the paragraph that begins "Hardened concrete members ..." with the following paragraph:

Hardened concrete members with an ASTV meeting or exceeding the specified design strength, f'_c , is acceptable for strength.

00550.20 Prestressing Equipment - Replace the paragraph that begins "Provide hydraulic jacks ..." with the following paragraph:

Provide hydraulic jacks equipped with calibrated pressure gauges. Calibrate the jack and gauge combination and provide a graph or table showing the calibration to the Engineer.

Replace the paragraph that begins "If other types of jacks ..." with the following paragraph:

If other types of jacks are used, provide calibrated proving rings or other devices that accurately indicate the jacking forces.

00550.43(b) Consolidation - Replace the bullet that begins "Vibrate at points uniformly ..." with the following bullet:

- Vibrate at points uniformly spaced and not further than twice the radius where vibration is visibly effective.

00550.46 Release of Prestress - Replace the paragraph that begins "Transfer bond stress to ..." with the following paragraph:

US101: Butte Creek Culvert Project

Transfer bond stress to the concrete, or release end anchors, only when the concrete has attained the minimum compressive strength shown or specified for such transfer of load. Cut or release the elements according to the sequence shown on the reviewed Working Drawings so lateral eccentricity of prestress is at a minimum.

Replace the paragraph that begins "Determine the compressive strength ..." with the following paragraph:

Determine the compressive strength of the concrete to establish time for detensioning by testing standard cylinders cast and cured identically with the member. Cast and test cylinders used to determine release time according to AASHTO T 22 and AASHTO R 100.

00550.47(b) Class 1 Surface Finish (Ground and Coated) - Replace the bullet that begins "Thoroughly saturate the ..." with the following bullet:

- Thoroughly saturate the surface with water and coat while damp with a coating material according to 02210.30.

00550.49(a) Lifting - Replace the bullet that begins "Members will be ..." with the following bullet:

- Members are rejected if not handled correctly as specified.

00550.49(c) Transporting - Replace the paragraph that begins "Damaged members will be..." with the following paragraph:

Damaged members are rejected. Replace damaged members, or if allowed by the Engineer, repair damaged members to the Engineer's satisfaction at no additional cost to the Agency.

00550.51 Keyway Grouting for Slabs, Box Beams, and Integral Deck Members -

Replace the paragraph that begins "After forms have been removed from..." with the following paragraph:

After forms have been removed from slabs, box beams and integral deck bulb tees, sandblast all keyways. Visually verify the surface profile of all prepared surfaces according to International Concrete Repair Institute (ICRI) Guideline 310.2R-2013 *Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair* - surface profile CSP 3. After the members are in place and the tie rods are tensioned (for slabs and box beams) or welded connections are made (integral deck bulb tee girders), clean the keyways of all foreign material and keep moist for 24 hours before grouting. For slabs and box beams, after the tie rods are tensioned, seal the space remaining at the bottom of the keyways with a backer rod as shown before grouting.

SECTION 00582 - BRIDGE BEARINGS

Comply with Section 00582 of the Standard Specifications modified as follows:

US101: Butte Creek Culvert Project

00582.20 Composite Bearings - Replace the paragraph that begins "Provide only one type..." with the following paragraph:

Furnish only one type of Composite Bearing from the QPL for each Bridge, subject to the following requirements:

Replace the bullet that begins "Provide rotational elements between ..." with the following bullet:

- Furnish rotational elements between upper and lower units to meet the following:

Replace the bullet that begins "**Upper Unit** - The upper unit ..." with the following bullet:

- **Upper Unit** - The upper unit consists of a distribution plate that is permanently attached to the Superstructure and a sole plate attached to the distribution plate with cap screws. For a Guided or Nonguided bearing, weld a stainless steel sheet to the bottom surface of the sole plate.

Replace the bullet that begins "**Lower Unit** - The lower unit ..." with the following bullet:

- **Lower Unit** - The lower unit consists of a masonry plate permanently anchored to the structural support and a base plate attached to the masonry plate with cap screws. A separate masonry plate and base plate are not necessary for Fabric Pad Bearings fabricated as outlined in 00582.27, third paragraph.

Replace the bullet that begins "The base pot of a Pot ..." with the following bullet:

- Weld the base pot of a Pot Bearing, the lower bearing plate of a Disc Bearing, or the convex plate of a Spherical Bearing to the base plate.

Replace the bullet that begins "For Guided or Nonguided ..." with the following bullet:

- For Guided or Nonguided bearings, furnish a polytetrafluoroethylene (PTFE) sheet recessed into and bonded to the top surface of the piston of a Pot Bearing, the upper bearing plate of a Disc Bearing, the top surface of the concave plate of a Spherical Bearing, or a steel backing plate bonded to the top surface of a fabric pad forming a sliding surface with the stainless steel surface of the sole plate.

Replace the bullet that begins "For Fixed bearings ..." with the following bullet:

- For Fixed bearings, weld the piston of a Pot Bearing, the upper bearing plate of a Disc Bearing, or the concave plate of a Spherical Bearing to the sole plate.

Replace the paragraph that begins "Provide bearings that accommodate ..." with the following paragraph:

Furnish bearings that accommodate the loads, movements, and rotations as shown.

0582.21 Disc Bearings - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Design Disc Bearings according to the following:

- Furnish the shear restriction mechanism that allows free rotation but prevents any shear being applied to the rotational element.
- Furnish guided bearings that resist the total horizontal load at the bent or hinge where it is located.

00582.25(b) Polytetrafluoroethylene Rotational Surface for Spherical Bearings - Replace this subsection, except for the subsection number and title, with the following:

Use only woven PTFE having a minimum thickness of 1/8 inch. Recess the PTFE 1/16 inch into the spherical element.

Furnish PTFE fabric having a minimum thickness of 1/16 inch when measured according to ASTM D1777.

00582.25(c) Stainless Steel Sliding Surfaces - Replace the paragraph that begins "Provide a flat stainless ..." with the following paragraph:

Provide a flat stainless steel sliding surface that completely covers the PTFE surface in all operating positions, plus at least 2 inches more in every direction of possible movement.

00582.26 Guide Bars for Composite Bearings - Replace the paragraph that begins "Provide a sliding surface ..." with the following paragraph:

Provide a sliding surface between the Guide Bars and the guide element made of polished stainless steel against virgin PTFE. Bond and mechanically fasten the virgin PTFE to the Guide Bars. Provide Guide Bars that:

00582.27 Sole, Base, Distribution, and Masonry Plates for Composite Bearings - Replace the paragraph that begins "For Fabric Pad Bearings ..." with the following paragraph:

For Fabric Pad Bearings, fasten keeper bars at least 1/4 inch thick to the top surface of the base plate, around the perimeter of the fabric pad, with high-strength cap screws. Provide a gap at all bar ends to allow drainage.

Replace the paragraph that begins "Provide studded anchors ..." with the following paragraph:

Furnish studded anchors or threaded bolts, as shown or specified, to anchor the masonry plates to the supported and supporting members. Locate anchoring devices to avoid conflict with metal reinforcement and prestressing systems.

00582.32(a) Steel Backing Plate - Replace the paragraph that begins "Minimum thickness of ..." with the following paragraph:

The minimum thickness of the steel backing plate is 3/8 inch.

US101: Butte Creek Culvert Project

00582.35(a) Polytetrafluoroethylene Sliding Surfaces - Replace the paragraph that begins "After completion of the ..." with the following paragraph:

After completion of the bonding operation, ensure the PTFE surface is smooth and free of bubbles.

00582.36 Guide Bars for Composite Bearings - Replace the paragraph that begins "Construct Guide Bars parallel ..." with the following paragraph:

Construct Guide Bars parallel to the surface where they bear and to other Guide Bars to within a tolerance of plus or minus 1/32 inch for the full length of the bar.

00582.39(a) Pads - Replace this subsection, except for the subsection number and title, with the following:

Pads 1/2 inch and less in thickness are to be made entirely of elastomer. Pads over 1/2 inch in thickness consist of alternate laminations of elastomer and metal.

00582.39(b) Pad Sizing - Replace this subsection, except for the subsection number and title, with the following:

Mold pads individually to the sizes required. No shearing to size or drilling of holes is allowed except pads 1/2 inch and less in thickness may be sheared.

00582.39(c) Tolerances and Finishes - Replace this subsection, except for the subsection number and title, with the following:

Provide tolerances and finishes according to 02571.20(d).

00582.50(b) Elastomeric Bearings - Replace the paragraph that begins "Construct bearing seats ..." with the following paragraph:

Construct bearing seats for Elastomeric Bearings parallel to the bottom surfaces of the members that will bear on them. Install as follows:

00582.90 Payment - Replace the paragraph that begins "In item (a) ..." with the following paragraph:

In item (a), the type "disc", "fabric pad", "pot", "spherical" of Composite Bearing device is inserted in the blank.

Replace the paragraph that begins "In item (b) ..." with the following paragraph:

In item (b), for steel-reinforced elastomeric bearing pads, the width of bearing pad is inserted in the first blank, the length of the bearing pad is inserted in the second blank, and the thickness of the bearing pad is inserted in the third blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

US101: Butte Creek Culvert Project

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

SECTION 00587 - BRIDGE RAILS

Comply with Section 00587 of the Standard Specifications modified as follows:

00587.00 Scope - Replace the paragraph that begins "Bridge rails will be ..." with the following paragraph:

Bridge rails are classified as concrete or steel according to the predominant Material used in the rail.

00587.42(a) General - Replace the bullet that begins "Construct expansion joints ..." with the following bullet:

- Construct expansion joints that permit freedom of movement. After all other Work is completed, use a sharp chisel to remove all loose or thin shells of concrete likely to spall under movement at expansion joints.

00587.42(b) Fixed Forms - Replace this subsection, except for the subsection number and title, with the following:

Provide forms that are smooth and tight fitting, rigidly held in line and grade, and removed without damage to the concrete. Make form joints in vertical planes. Construct all moldings, panel Work, and bevel strips as shown. Make corners in the finished Work true, sharp and free from cracks, spalls or other defects.

00587.42(c) Slipformed - Replace the paragraph that begins "Concrete rails may be ..." with the following paragraph:

Concrete rails may be slipformed if the Plans contain details for slipforming. Before slipforming any permanent rail, meet one or both of the following requirements (1) and (2) as directed:

00587.42(c)(2) Replace the bullet that begins "Provide concrete with ..." with the following bullet:

- Furnish concrete with a slump of 1 inch $\pm$ 1/2 inch.

00587.43(a) Construction - Replace this subsection, except for the subsection number and title, with the following:

Furnish structural steel tubing, tube or metal thrie beam rail as shown or specified. Fabricate and erect metal rails according to Section 00560. Adjust metal rails before fixing in place to ensure proper matching at abutting joints and correct alignment and Camber throughout their length.

US101: Butte Creek Culvert Project

00587.80 Measurement - Replace the paragraph that begins "No measurement of quantities ..." with the following paragraph:

No measurement of quantities will be made for bridge rails performed under this Section.

Add the following to the end of this subsection:

The estimated quantity of bridge rail is:

Structure	Rail Type	Quantity (Foot)
Bridge No. 24348	3-Tube Curb Mount	284

SECTION 00593 - POWDER COATING METAL STRUCTURES

Comply with Section 00593 of the Standard Specifications modified as follows:

00593.01(b) Definitions - Replace the paragraph that begins "Substrate ..." with the following paragraph:

Substrate - A surface where a Coating is to be applied. This may be the prepared surface of the metal Structure or a previous Coating.

00593.03 Required Submittals - Replace the title of this subsection with "**Submittals**"

00593.03(a) Powder Coating Plan - Replace the bullet that begins "A letter from the firm ..." with the following bullet:

- A letter from the firm performing galvanizing, if other than the Contractor, certifying that neither water quenching nor a chromate conversion coating is used on the surfaces that are to be powder coated.

00593.10(a)(1) Steel Substrates - Replace the paragraph that begins "Provide a two-coat system ..." with the following paragraph:

Provide a two-coat system for steel substrates consisting of a zinc-rich epoxy primer and a polyester topcoat, according to the following:

00593.10(a)(2) Galvanized and Other Non-Steel Metallic Substrates - Replace the paragraph that begins "Provide a two-coat system ..." with the following paragraph:

Provide a two-coat system for galvanized and non-steel metallic substrates consisting of an epoxy primer and polyester topcoat, according to the following:

US101: Butte Creek Culvert Project

00593.10(c) Slip-Critical Connections - Replace this subsection, except for the subsection number and title, with the following:

Furnish a primer coat on steel-to-steel contact surfaces at all slip-critical bolted joints using high strength bolts that conforms to Class B (slip coefficient of 0.5) Coating requirements in *Test Method to Determine the Slip Coefficient for Coatings Used in Bolted Joints*, as adopted by the Research Council on Structural Connections.

00593.11 Blasting Abrasives - Replace this subsection, except for the subsection number and title, with the following:

Furnish abrasives that have no corrosion products, water, oil, or any other material detrimental to the application and adherence of the Coatings. Furnish abrasives that conform to SSPC-AB 1. When directed, test cleanliness according to ASTM D7393 and ASTM D4940. Do not exceed 100 microsiemens per centimeter conductivity results from ASTM D4940.

00593.12 Caulking - Replace the paragraph that begins "Furnish structural steel ..." with the following paragraph:

Furnish structural steel caulking from the QPL and approved for use by the Coating manufacturer. Unless the caulking is to be over coated, furnish a clear caulking color or the approximate the color of the top Coating.

00593.42(a) Steel Structures - Replace this subsection, except for the subsection number and title, with the following:

Clean new steel Structure surfaces to be coated according to SSPC-SP 10 / NACE No. 2 *Near White Metal Blast Cleaning*, except as modified by the Specifications. Closely approximate the appearance of the final blast-cleaned surface to Pictorial Standard SP 10 of SSPC-Vis 1 and have a 1.0 to 2.5 mil profile finish.

00593.42(b)(2) Aluminum, Stainless Steels, and Non-Ferrous Metals - Replace the bullet that begins "Solvent clean surfaces ..." with the following bullet:

- Solvent clean surfaces to be coated according to SSPC-SP 1, followed by a light brush blast according to SSPC-SP 16 *Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals* with a maximum nozzle pressure of 75 psi. Ensure the prepared surface has a 1.0 to 2.5 mil profile finish.

00593.42(c)(1) Cleaning Methods - Replace the paragraph that begins "Surfaces shall be ..." with the following paragraph:

Dry surfaces before Cleaning. Use methods specified in SSPC-SP 1, *Solvent Cleaning*, SSPC-SP 2, *Hand Tool Cleaning*, SSPC-SP 3, *Power Tool Cleaning*, and SSPC-SP 15 *Commercial Grade Power Tool Clean*, as necessary to augment blast-cleaning.

00593.42(c)(2) Abrasives - Replace the paragraph that begins "Perform blast-cleaning ..." with the following paragraph:

Perform blast-cleaning using an abrasive of a size that will continually produce an angular Surface Profile of at least 1 mil, but not more than 4 mils, as measured according to

US101: Butte Creek Culvert Project

ASTM D4417 using replica tape on the prepared surface. Perform blast-cleaning that results in a roughened steel surface comparable to a Keane-Tator Surface Profile Comparator for sand or grit using ASTM D4417.

Replace the paragraph that begins "Use abrasives conforming..." with the following paragraph:

Use abrasives meeting 00593.11. Wet abrasives are allowed if wet sandblasting methods are used.

00593.43(c)(2) Coating Thickness and Coverage Requirements - Replace this subsection, except for the subsection number and title, with the following:

Each Coat consists of as many applications as necessary to cover the Work and achieve the minimum thickness specified. Apply each Coat in sufficient thickness to achieve uniform and complete coverage and appearance. If all thickness measurements are not within the specified minimum dry film thickness, or if the visual inspection does not satisfy the Engineer, make additional applications, as necessary, to meet the thickness and coverage required. Film thickness is measured above the peaks of the profile of the anchor pattern in the substrate.

The dry film thickness is measured for acceptance using a Type 2 gauge according to SSPC-PA 2. If a question arises about an individual Coat thickness or coverage, it will be verified using a Tooke gauge, according to ASTM D4138. If the Tooke gauge shows a prime Coat to be less than the specified minimum thickness the total Coating System is rejected even if the thickness of the total system equals or exceeds the total specified thickness.

00593.44 Inspecting - Replace the paragraph that begins "Provide documentation of the QA/QC ..." with the following paragraph:

Provide documentation of the QA/QC testing to the Engineer. Assemblies failing these tests are rejected. Repair and recoat the rejected assemblies as directed.

00593.45(c) Handling, Shipping, or Surface Damage - Replace the paragraph that begins "After erection, repair ..." with the following paragraph:

After erection, repair marred and damaged coated surfaces due to the Contractor's shipping, storage, handling, and erection operations according to 00593.60 at no additional cost to the Agency.

00593.90(b) Existing Metal Structures - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL

Comply with Section 00620 of the Standard Specifications modified as follows:

00620.40(b) Depth 1 inch to 2 inches - Replace this subsection, except for the subsection number and title, with the following:

If the depth of the existing Pavement to be removed is 2 inches or less, but more than 1 inch and the section is under traffic, schedule the Work so the full width and length of travel lanes Pavement can be removed during the same shift. Remove the Shoulder area within 24 hours.

00620.40(c) Depth over 2 inches - Replace this subsection, except for the subsection number and title, with the following:

If the depth of the existing Pavement to be removed is over 2 inches and the section is under traffic, schedule the Work so the full width and length of the travel lanes and Shoulders can be removed, leaving no longitudinal or transverse drop-offs, during the same shift.

00620.41 Surface Tolerance - Replace this subsection, except for the subsection number and title, with the following:

Test with a 12-foot straightedge furnished and operated by the Contractor, as directed. The maximum variation of the top of the ridges from the testing edge of the straightedge, between any two ridge contact points, is 1/4 inch.

00620.43 Maintenance Under Traffic - Replace this subsection, except for the subsection number and title, with the following:

If the cold planed Pavement surface is exposed to traffic, sweep and clean prior to allowing traffic to use the Roadway.

Traffic is not allowed on the cold planed surface. Before opening the area to traffic, pave the surface according to 00744.51).

SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

Comply with Section 00641 of the Standard Specifications modified as follows:

00641.10(a) Base and Shoulder Aggregate - Replace the paragraph that begins "Aggregate for Bases ..." with the following paragraph:

US101: Butte Creek Culvert Project

Furnish Aggregate for Bases and Shoulders meeting sizes as specified. Furnish dense-graded Base Aggregate unless otherwise specified. For Shoulder Aggregates use either 1" - 0 or 3/4" - 0 size as the Contractor elects.

In the paragraph that begins "Aggregate for bases...", add the following sentence after the first sentence:

Furnish Base Aggregate sized either 1" - 0 or 3/4" - 0.

00641.10(b) Subbase Aggregate - Replace this subsection, except for the subsection number and title, with the following:

Furnish crushed or uncrushed Aggregate, including Sands, reasonably well graded from coarse to fine for Subbases.

The maximum size Aggregate is not to exceed 75 percent of the compacted thickness of the layer that it is incorporated in. Furnish Aggregates passing the 1/4-inch sieve not less than 10 percent nor more than 50 percent of the whole, by weight. Furnish Aggregate with not more than 10 percent of the Aggregate passing the No. 100 sieve. Within these limits, furnish Subbase Aggregate with a gradation adequate to produce a dense, firm Base when placed and compacted.

(1) Grading - All of the grading requirements are given as percentages by weight. The gradation is determined by sieve analysis according to AASHTO T 27.

(2) Abrasion - Do not exceed 45 percent wear when tested according to AASHTO T 96 for the source materials for Aggregate Subbase unless otherwise approved.

(3) Sand Equivalent - Aggregate Subbase is tested according to AASHTO T 176, with a Sand equivalent of not less than 25.

00641.12 Limits of Mixture - Replace the paragraph that begins "Furnish a mixture ..." with the following paragraph:

Furnish a mixture of Aggregate and water having a uniform moisture content sufficient to obtain the required compaction. Proportions are in percentages by weight and is known as the Mix Design. Determine the proportion of Aggregate and water according to Section 00165. The amount of water for the Mix Design is based on the dry weight of the Aggregate.

00641.15(b) Preproduced Aggregate - Replace the paragraph that begins "Compliance of Aggregates ..." with the following paragraph:

Compliance of Aggregates produced and stockpiled before issuance of Notice to Proceed is determined according to (1) or (2) below.

00641.16 Acceptance of Aggregates - Replace the paragraph that begins "Acceptance will be ..." with the following paragraph:

Acceptance is according to Section 00165.

US101: Butte Creek Culvert Project

00641.16(a) Stockpiled Aggregate for Aggregate Base and Shoulders - Replace the paragraph that begins "Acceptance will be ..." with the following paragraph:

Acceptance is based on the Contractor's quality control testing, if verified, as required in Section 00165.

00641.16(a)(2) Non-specification Aggregate Gradation - Replace this subsection, except for the subsection number and title, with the following:

Stockpiled Aggregates having non-specification Aggregate gradation are rejected unless the non-specification material is removed from the stockpile. Do not add additional material to the stockpile until enough non-specification material has been removed so that the QL for each sieve size is equal to or greater than the QL in Table 00165-2 for a 1.00 PF.

No payment is made for non-specification materials.

00641.16(b) Aggregate Base and Shoulder Mixture - Replace this subsection, except for the subsection number and title, with the following:

Acceptance testing is performed on random samples obtained immediately following mixing with water according to Section 00165. For non-specification mixture the Engineer will determine the appropriate price reduction or order its removal from the Work according to 00150.25.

00641.16(c) Aggregate Subbase - Replace this subsection, except for the subsection number and title, with the following:

Aggregate Subbase is accepted based on the Engineer's visual inspection. Samples are obtained and tested for compliance with 00641.10 by the Engineer if it is suspected that the material does not meet Specifications.

00641.20 Mixing Plant - Replace the sentence that begins "Mix Aggregate and water..." with the following two sentences:

Mix Aggregate and water according to subsection 00641.20(a). Road mix is not allowed on this Project.

00641.20(a) Mixing Plant - Replace the bullet that begins "Discharges water into ..." with the following bullet:

- Discharges water into the mixer by weighing or metering. Provide an adjustable device and assure uniform water content in the mixture.

00641.24 Compacting Equipment - Replace this subsection, except for the subsection number and title, with the following:

Provide self-propelled rollers and compactors capable of reversing without backlash. Use rollers and compactors with a gross static weight of at least 8 Tons, and capable of compacting to specified density while the mix is still moist.

US101: Butte Creek Culvert Project

00641.40 Preparation of Foundation - Replace this subsection, except for the subsection number and title, with the following:

Provide a firm surface or material, where Aggregates are to be placed, according to Sections 00320, 00330, or 00610 as applicable.

00641.41 Mixing, Hauling, and Placing - Replace the sentence that begins "Add water to the Aggregate..." with the following sentence:

Add water to the Aggregate while mixing to provide a moisture content meeting the requirements of 00641.12.

Replace the sentence that begins "Add water to the Aggregate..." with the following two sentences:

Add water to the Aggregate while mixing to provide a moisture content according to 00641.12 and subsection 00641.41(a). Road mix is not allowed on this Project.

00641.43(a) Aggregate Base Courses - Replace the paragraph that begins "If the required ..." with the following paragraph:

If the required compacted depth of the Base Course exceeds 6 inches, construct it in two or more layers of nearly equal thickness. The maximum compacted thickness of any one layer is 6 inches unless approved.

00641.43(b) Aggregate Subbase Courses - Replace this subsection, except for the subsection number and title, with the following:

The maximum compacted thickness of any one layer is 9 inches unless approved.

00641.43(c) Shoulder Courses - Replace this subsection, except for the subsection number and title, with the following:

Place Aggregates in Shoulder areas, other than as part of the Base Course, in one layer, or in two or more layers of nearly equal thickness. The maximum compacted thickness of any one layer is 9 inches.

00641.44(a)(2) Open-graded Aggregates - Replace the paragraph that begins "Compact the surface ..." with the following paragraph:

Compact the surface of each layer of open-graded Aggregates using rollers according to 00641.24. Roll until there is no appreciable reaction or yielding under the compactor.

00641.45 Surface Tolerance - Replace this subsection, except for the subsection number and title, with the following:

Parallel the finished surface of the Aggregate and the surface of each underlying layer with the established grade and Cross Section for the finished surface within 0.04 foot.

US101: Butte Creek Culvert Project

Do not vary the finished surface of the compacted Aggregate, when tested with a 12-foot straightedge, from the testing edge by more than 1/2 inch at any point. Provide and operate the straightedge as directed.

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.

00641.90 Payment - Replace the paragraph that begins "In items (c) and (e) ..." with the following paragraph:

In items (c) and (e), the designated size of Aggregate to be used is inserted in the blank.

Replace the paragraph that begins "In item (g) ..." with the following paragraph:

In item (g), the depth of Aggregate Base is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications modified as follows:

00730.11 Emulsified Asphalt - Replace the paragraph that begins “Excessive delay in the ...” with the following paragraph:

Excessive delay in the use of the Emulsified Asphalt or excessive pumping of the Emulsified Asphalt may significantly reduce the viscosity and may make the material unsuitable for tack coat use. For this reason limit pumping between the bulk storage tank, hauling transportation, field storage tanks and distributor to an absolute minimum to maintain proper viscosity. Final acceptance of Emulsified Asphalt is at the point of application.

Replace the paragraph that begins “Obtain samples according to ...” with the following paragraph:

Obtain samples according to AASHTO R 66 prior to dilution with water, if allowed, according to Section 00165. Samples are tested at the ODOT Materials Laboratory, or other laboratory as designated by the Agency. Emulsified Asphalt is tested within 30 Calendar Days from the date it is sampled.

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*.

00730.22 Asphalt Distributor - Replace this subsection, except for the subsection number and title, with the following:

Provide an asphalt distributor designed, equipped, maintained and operated so the Emulsified Asphalt Material may be applied uniformly at even heat. Provide a distributor capable of applying the asphalt on variable surface widths up to 16 feet, at readily determined and controlled rates from 0.05 to 2.0 gallons per square yard, and with uniform pressure. Do not vary any specified rate by more than 0.02 gallons per square yard. Provide distributor Equipment that includes a tachometer, pressure gauges, accurate volume measuring devices and a thermometer for measuring temperature of tank contents. Provide distributors equipped with a positive power unit for the asphalt pump, and full circulation spray bars adjustable both laterally and vertically. Set the bar height for triple lap coverage.

US101: Butte Creek Culvert Project

00730.41 Traffic Control - Replace this subsection, except for the subsection number and title, with the following:

Do not apply the tack to more than one-half the width of the travel way at one time. Allow the remaining width to remain open to traffic. Do not close the open lane until traffic controlled by pilot car is operating on the new surface.

00730.42 Preparation of Underlying Surfaces - Replace this subsection, except for the subsection number and title, with the following:

Immediately before applying the tack coat, provide a clean and dry surface to be tacked. Clean all loose material by brooming, flushing with water or other approved methods.

00730.44 Applying Tack Coat - Replace the paragraph that begins "Apply the Emulsified Asphalt ..." with the following paragraph:

Apply the Emulsified Asphalt with a pressure distributor according to 00730.22, unless otherwise allowed. Apply the Emulsified Asphalt to the prepared surface at a rate between 0.05 and 0.20 gallons per square yard as directed and with the Emulsified Asphalt temperature between 140 °F and 185 °F as recommended by the manufacturer. Application rates for tack coat diluted according to 00730.11 are increased as necessary to provide the same amount of residual asphalt as the application rates specified above.

00730.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing, mixing with water, and placing the Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

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 3.5 Tons of Emulsified Asphalt in tack coat is required on this Project.

SECTION 00740 - COMMERCIAL ASPHALT CONCRETE PAVEMENT (CACP)

Comply with Section 00740 of the Standard Specifications modified as follows:

00740.12 Asphalt Cement - Replace this subsection, except for the subsection number and title, with the following:

Use PG 64-22 or PG 64-28 unless otherwise specified in the Contract Documents or approved. Furnish asphalt cement according to ODOT's publication *Standard Specifications for Asphalt Materials*. Copies of the publication are available from the ODOT Pavement

US101: Butte Creek Culvert Project

Services Engineer. The applicable Specifications are those contained in the current publication on the date the Project is advertised.

00740.14 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

All Materials are accepted by visual inspection by the Engineer.

00740.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

Comply with Section 00744 of the Standard Specifications modified as follows:

00744.10(a) New Coarse and Fine Aggregates - Replace the paragraph that begins "Testing of Aggregates ..." with the following paragraph:

Testing of Aggregates for soundness, durability, and harmful substances is at the discretion and expense of the Agency.

00744.10(a)(1) Soundness - Replace the paragraph that begins "Provide Coarse ..." with the following paragraph:

Furnish Coarse and Fine Aggregate with a weighted loss not exceeding 12 percent when subjected to five cycles of the soundness test using sodium sulfate solution according to AASHTO T 104.

00744.10(a)(2) Durability - Replace the paragraph that begins "Provide Aggregate ..." with the following paragraph:

Furnish Aggregate not exceeding the following maximum values:

00744.10(a)(3) Fractured Faces - Replace the paragraph that begins "Provide crushed Aggregate ..." with the following paragraph:

Furnish crushed Aggregate with not less than the minimum number of fractured faces as determined by AASHTO T 335 as follows:

00744.10(b) Reclaimed Asphalt Pavement - Replace this subsection, except for the subsection number and title, with the following:

RAP Material used in the production of new ACP is optional. No more than 30 percent RAP Material is allowed in the new ACP Pavement. Use RAP Aggregates in the ACP that are no

US101: Butte Creek Culvert Project

larger than the specified maximum allowable Aggregate size before entering the cold feed. Blend the RAP Material with new Aggregate to provide a mixture according to the JMF within the tolerances specified.

00744.10(c)(5) Establishing Mix Design Inputs - Replace the paragraph that begins "Blend the RAS ..." with the following paragraph:

Blend the RAS or RAM with new Aggregate to provide a mixture according to the JMF within the tolerances specified.

00744.11(a) Asphalt Cement - Replace this subsection, except for the subsection number and title, with the following:

Furnish asphalt cement according to ODOT's publication *Standard Specifications for Asphalt Materials*. The applicable Specifications are those contained in the current publication on the date the Project is advertised. Use the grade of asphalt that is specified in the Special Provisions.

Provide PG 58-22 grade asphalt cement for this Project.

00744.13 Job Mix Formula Requirements - Replace the paragraph that begins "Develop the JMF ..." with the following paragraph:

Develop the JMF according to the ODOT *Contractor Mix Design Guidelines for Asphalt Concrete*; or verify according to the ODOT mix design verification process. Submit the proposed JMF and supporting data to the Engineer for review and approval at least 10 Calendar Days before anticipated use. Perform a new TSR if the source of the asphalt cement changes.

00744.14 Tolerances and Limits - Replace the paragraph that begins "Develop the JMF ..." with the following paragraph:

When a JMF tolerance applies to a constituent, full tolerance is given even if it exceeds the control points established in 00744.12(b). Full tolerance is given for RAP, RAS, or RAM content even if it exceeds the limits established in 00744.10.

00744.16 Sampling and Testing - Replace this subsection, except for the subsection number and title, with the following:

For each 1,000 Tons of placement, have a CAT I perform a minimum of one of each of the following test methods as modified in the MFTP:

- Asphalt Content - AASHTO T 308 with ODOT TM 323 determined Calibration Factor
- Gradation - AASHTO T 30
- Mix Moisture - AASHTO T 329
- Maximum Specific Gravity - AASHTO T 209
- Field Compacted Gyratory Specimens - ODOT TM 326

US101: Butte Creek Culvert Project

When less than 1,000 Tons of mix is placed in a Day, perform a minimum of one series of tests per Day. Provide test results to the Engineer by the middle of the following work shift. The Engineer may waive the requirement for any of AASHTO T 308, AASHTO T 30, AASHTO T 329, and ODOT TM 326 on a daily basis. The Engineer may waive the requirement for AASHTO T 209 when less than 500 Tons of ACP is placed in a single work shift.

Provide samples or split samples to the Engineer when requested.

00744.17 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

If the test result for each mix gradation constituent, asphalt content, and density measurement is within the Specification limits, the Material is accepted. If the asphalt content, one or more gradation constituents, or the density measurement are not within the specification limits, the Material that is not within the Specification limits is accepted according to 00150.25.

00744.41 Mixing Temperature - Replace the table with the following:

Type	Temperature, °F	
	Maximum at Mixer	Minimum Behind Paver
HMAC	350	240
WMAC	350	215

00744.23 Pavers - Replace the bullet that begins "Self-contained, self-propelled ..." with the following bullet:

- Self-contained, self-propelled, supported on tracks or wheels, that does not contact the mixture being placed.

Replace the bullet that begins "Equipped with augers ..." with the following bullet:

- Equipped with augers and a screed or strike-off assembly, heated if necessary, that:

Replace the bullet that begins "Equipped with a paver ..." with the following bullet:

- Equipped with a paver control system that:

00744.41 Mixing Temperatures- Replace the paragraph that begins "Establish the allowable ..." with the following paragraph:

Establish the allowable mixing and placement temperature ranges by the JMF. Measure the mixture temperature at the discharge of the mixer. Measure the placement temperature behind the paver. The allowable production temperatures may be adjusted based on the asphalt cement Supplier's recommendation if approved by the Engineer. The maximum mixture temperature and the minimum placement temperature is as follows:

00744.42 Tack Coat - Replace the paragraph that begins "Treat all paved surfaces ..." with the following paragraph:

US101: Butte Creek Culvert Project

Treat all paved surfaces on and against where ACP is to be placed with an asphalt tack coat according to Section 00730. Before applying the tack coat, clean and dry the surface to be tacked.

Replace the paragraph that begins "Treat all waterproofing membranes ..." with the following paragraph:

Treat all waterproofing membranes on and against where ACP is to be placed with an asphalt tack coat meeting the requirements of 00744.11(a) or as recommended by the membrane manufacturer.

00744.43(a) Hauling - Replace the paragraph that begins "ACP will be ..." with the following paragraph:

ACP is rejected before placing if one or more of the following occurs:

00744.44 Longitudinal Joints - Replace the paragraph that begins "At longitudinal joints ..." with the following paragraph:

At longitudinal joints, bond, compact and finish the new ACP equal to the ACP against where it is placed.

00744.44(a) Location - Replace the paragraph that begins "Place the ACP ..." with the following paragraph:

Place the ACP in Panel widths that hold the number of longitudinal joints to a minimum. Offset the longitudinal joints in one Panel by at least 6 inches from the longitudinal joints in the Panel immediately below.

00744.44(b) Drop-Offs - Replace the bullet that begins "Construct, maintain, remove ..." with the following bullet:

- Construct, maintain, remove, and dispose of the temporary wedge at no additional cost to the Agency. ACP for the temporary wedge is paid for at the Contract unit price.

00744.45(a)(1) Temporary End Panel - Replace the bullet that begins "For wedges that will be under traffic for less ..." with the following bullet:

- For wedges that are under traffic for less than 24 hours, construct an 8-foot-long wedge (1V:50H taper rate).

Replace the bullet that begins "For wedges that will be under traffic for 24 ..." with the following bullet:

- For wedges that are under traffic for 24 hours or longer, construct a 25-foot-long wedge (1V:160H taper rate).

Replace the bullet that begins "Construct, maintain, remove ..." with the following bullet:

- Construct, maintain, remove, and dispose of the temporary wedge at no additional cost to the Agency. ACP for the temporary wedge is paid for at the Contract unit price.

00744.45(a)(3) Excess Asphalt Concrete Pavement - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

After completing a temporary end Panel as specified, dispose of unused, remaining ACP as directed. Payment is made for the entire load of ACP, but is limited to only one load for each joint of each Panel.

00744.45(a)(5) Joint Requirements - Replace this subsection, except for the subsection number and title, with the following:

Compact both sides of the joint to the specified density. Test the joint surface according to 00744.70 with a straightedge placed across the joint.

00744.49 Compaction - Replace the paragraph that begins "Determine compliance with..." with the following paragraph:

Determine compliance with density Specifications by random testing of the compacted surface with calibrated nuclear gauges. Determine the density by averaging QC tests performed by a CDT with the nuclear gauge operated in the backscatter mode according to AASHTO T 335 at one random location for each 100 Tons of asphalt concrete placed, but take no less than three tests each shift. Do not locate the center of a density test less than 1 foot from the Panel edge. Calculate MAMD according to ODOT TM 305. The Engineer may waive compaction testing requirements when less than 500 Tons of ACP is placed in a single work shift.

Replace the bullet that begins "**Thin Pavements** - Leveling ..." with the following bullet:

- **Thin Pavements** - Leveling, patches, or where the nominal compacted thickness of a Course of ACP is less than 2 inches.

00744.51 Opening Sections to Traffic - Schedule work so that, during the same shift, the surfaces being paved are paved full width and length through the wearing Course before opening to traffic.

00744.70 Pavement Smoothness - Replace this subsection, except for the subsection number and title, with the following:

Provide a 12-foot straightedge. Test with a 12-foot straightedge parallel to and perpendicular to the centerline, as directed. Do not vary the Pavement surface by more than 1/4 inch. Mark areas not meeting the surface tolerance.

00744.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of ACP incorporated into the Project, whether or not recycled Materials are used, will be paid for at the Contract unit price, per Ton, for the item "Level ____, ____ ACP Mixture ____".

The following is inserted in the blanks:

- The level of ACP "1", "2", "3" is inserted in the first blank.
- The type of ACP "3/4 inch", "1/2 inch", "3/8 inch", is inserted in the second blank.

US101: Butte Creek Culvert Project

- The words "in Leveling", "in Temporary", or "in Leveling and Temporary" is inserted in the third blank when applicable.

Payment will be payment in full for furnishing and placing 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:

- Asphalt cement, mineral filler, lime, and anti-stripping or other additives
- Sawing, cleaning, and filling joints on bridge deck overlays

SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

Comply with Section 00749 of the Standard Specifications modified as follows:

00749.00 Scope - Replace the paragraph that begins "This Work consists of ..." with the following paragraph:

This Work consists of furnishing and placing asphalt concrete in road approaches, street connections, driveways, guardrail flares, mailbox turnouts, raised traffic islands, sidewalks, footpaths, gutters, ditch linings, spillways, dikes, and other miscellaneous or minor items of asphalt concrete except asphalt curbs as shown, specified, or directed. These items in this Section are collectively referred to as "Structures". See Section 00480 for asphalt curbs.

00749.13 Asphalt Concrete - Replace this subsection, except for the subsection number and title, with the following:

Unless another class is shown, furnish Level 2, 1/2-inch ACP according to Sections 00744 and 00745, as applicable. When conditions justify, the mixture may be varied, if approved. Acceptance is based on testing the Engineer deems appropriate. Statistical analysis will not apply.

00749.14 Concrete - Delete this subsection.

00749.42 Foundations - Replace the bullet that begins "Use new Aggregate ..." with the following bullet:

- Use new Aggregate Base Materials meeting the requirements of 00749.11.

00749.43 Foundation Preparation - Replace the paragraph that begins "Bring areas ..." with the following paragraph:

Bring areas where Structures are to be constructed to established grade, and make firm, dry and free of Unsuitable Material before placing asphalt concrete.

00749.45 Compacting Asphalt Concrete - Replace the bullet that begins "Along curbs and walls ..." with the following bullet:

US101: Butte Creek Culvert Project

- Along curbs and walls, on walks, irregular areas, and other areas not practically accessible to rollers meeting the requirements of 00744.24 or 00745.24, compact the mixture with small, self-propelled rollers, mechanical tampers, hot hand tampers, or hand rollers. On depressed areas a trench roller may be used, or cleated compression strips may be used under the roller to transmit compression to the depressed area.

00749.46 Pavement Smoothness - Replace the paragraph that begins "Bring areas ..." with the following paragraph:

Test top surfaces with a 12-foot straightedge provided and operated by the Contractor under the Engineer's direction. Do not vary the surface by more than 1/4 inch from the straightedge except at grade changes.

00749.47 Concrete Curbs - Construct concrete curbs associated with asphalt islands and traffic separators, as shown and according to Section 00759.

Add the following subsection:

00749.48 Tactile Surfaces Indicators - Construct tactile surface indicators according to Section 00765 to the slopes, lines, grades, and dimensions as shown or established.

00749.80 Measurement - Replace the paragraph beginning "Work performed under ..." with the following:

Work performed under this Section will be measured by one of the methods described in 00749.81 and 00749.82. Street connections that occur at the beginning or end of the Project, or that have a line designation, Typical Section and profile, and are not noted on the Plans as being Pay Items will not be measured for payment.

00749.90 Payment - Add the following sentence to the end of this subsection:

Tactile surface indicators will be paid for according to Section 00765.

Item (e) includes raised traffic islands and raised traffic separators. Concrete curbs necessary for the islands will be paid according to 00759.90.

SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications modified as follows:

00759.02 Definitions - Delete this subsection.

00759.03 Required Submittals - Replace the title of this subsection with "**Submittals**"

Replace the paragraph that begins "Material ordered or Work ..." with the following paragraph:

US101: Butte Creek Culvert Project

Material ordered or Work performed before the Engineer reviews and returns the documents is at the Contractor's risk.

00759.03(d) Corrective Action Plan - Replace the paragraph that begins "At least 21 Calendar Days ..." with the following paragraph:

At least 21 Calendar Days before concrete Structures Work is scheduled to begin, submit a corrective action plan. Address procedures to correct deficient Structures through minor corrective action or replacement according to 00759.55(a) in the corrective action plan, and include:

Replace the bullet that begins "List of minor ..." with the following bullet:

- List of minor corrective actions that are used to correct deficiencies, according to 00759.50 and 00759.55.

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.

00759.21 Concrete Extruding Machine - Replace this subsection, except for the subsection number and title, with the following:

Provide concrete extruding machines that operate under sufficient restraint to forward motion to produce a well consolidated mass of concrete.

00759.22(a) Qualified Smart Levels - Replace this subsection, except for the subsection number and title, with the following:

Measure Slopes with the use of a 24-inch SmartTool level model 92379 or model 92500, and a 6-inch SmartTool level model 92346 or 92510.

00759.23 Concrete Resurfacing Equipment - Replace this subsection, except for the subsection number and title, with the following:

Provide power-operated scarifying Equipment capable of uniformly removing and preparing the existing surface to depths required. For concrete grinding operations, provide 12 segment grinders, fine-toothed scarifying Equipment, or other approved grinding Equipment.

00759.42 Foundations - Replace this subsection with the following subsection:

00759.42 Aggregate Base - Before placing concrete, prepare underlying Aggregate Base surfaces according to Section 00641.

US101: Butte Creek Culvert Project

00759.43 Foundation Preparation - Replace the paragraph that begins "Bring areas ..." with the following paragraph:

Bring areas where Structures are to be constructed to established line, and make firm, dry and free of all Unsuitable Material before placing concrete. Provide clean and moist existing concrete surfaces at the time of placing new concrete.

00759.45 Reinforcement, Dowels, and Tie Bars - Replace the paragraph that begins "Provide dowels ..." with the following paragraph:

Furnish dowels with "slip sleeves" and place as load transfer devices where shown. Place dowels without "slip sleeves" as fastenings or ties between new and existing underlying concrete when shown.

00759.48 Expansion Joints - Replace the bullet that begins "Not less than ..." with the following bullet:

- Not less than 1/2 inch wide, except where abutting or underlying concrete joints are larger, then match those joints' width.

Replace the bullet that begins "Which completely ..." with the following bullet:

- That completely separate the concrete segments.

00759.48(a) Curbs, Islands, and Traffic Separators - Replace the paragraph that begins "Provide expansion ..." with the following paragraph:

Construct expansion joints:

00759.48(b) Driveways, Walks, Monolithic Curbs and Sidewalks, and Surfacing - Replace this subsection, except for the subsection number and title, with the following:

Do not construct expansion joints within the curb ramp, and between separate concrete pours on the same Project.

Construct expansion joints:

- Between driveways and concrete Pavement.
- Transversely in walks opposite expansion joints in adjoining curbs and elsewhere so the distance between joints does not exceed 45 feet.
- Transversely in walks at a distance of 16 feet to 8 feet from ends of walks that abut curbs.
- Around poles, posts, boxes, and other fixtures that protrude through or against the Structures.

00759.48(c) Stairs - Replace this subsection, except for the subsection number and title, with the following:

Construct expansion joints for stairs at the top and bottom landings as shown.

US101: Butte Creek Culvert Project

00759.49(c) Requirements - Replace this subsection, except for the subsection number and title, with the following:

Construct contraction joints that:

- Are not less than 1/8 inch or more than 1/4 inch wide.
- Have a depth of one-third the thickness of the concrete.
- Have clean, unfilled grooves (if preformed expansion joint filler is not used).

00759.50(a) General - Replace the paragraph that begins “The top and face...” with the following paragraph:

Construct the top and face of Structures true and straight, free from humps, sags, or other irregularities. Do not vary the surface by more than 1/4 inch from the edge of 12-foot-long straightedge laid on the top or face of the Structure, except in curves. Provide and operate the straightedge as directed. Unless otherwise shown or directed, tool edges to 1/4-inch radius.

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.

00759.50(c) Driveways, Walks, and Surfacing - Replace the paragraph that begins “The 24-inch smart ...” with the following paragraph:

The 24-inch smart level is used to measure driveway and sidewalk cross slopes on the pedestrian access route.

00759.50(d) Curb Ramps - Replace the paragraph that begins “The 6-inch smart ...” with the following paragraph:

Use the 6-inch smart level to measure the curb running Slope. Use the 6-inch smart level to measure Slopes on portions of the curb ramp, gutter pan, or adjacent surfaces that cannot accommodate a 24-inch smart level. All other curb ramp locations will use a 24-inch smart level to measure Slopes.

00759.53 Welding - Replace this subsection, except for the subsection number and title, with the following:

Conform welding, welder qualifications, prequalification of weld details and inspection of welds to AWS D1.1. Submit all welding procedure specifications to the Engineer for approval.

00759.54(b) Accuracy of Punched Holes - Replace this subsection, except for the subsection number and title, with the following:

Locate all holes punched full size so accurately that when multiple anchor plates are stacked with the edges even, a cylindrical pin 1/8 inch smaller in diameter than the nominal size of

US101: Butte Creek Culvert Project

the punched hole may be entered perpendicular to the face of the plate without drifting in each of the connecting holes in the same plane. Non-conforming pieces are rejected.

00759.55(a)(2)a. Keyway - Replace this subsection, except for the subsection number and title, with the following:

Sawcut a keyway at the boundaries of repair areas that are not already defined by panel control joints. Sawcut the keyway 1/8 inch wide and 1/4 inch deeper than the edge of the repair area. Bevel inside edge of keyway at a 45-degree angle.

00759.55(a)(2)d. Resurface - Replace this subsection, except for the subsection number and title, with the following:

Furnish concrete resurfacer from the QPL according to 02015.60; refer to QPL remarks to select an appropriate material based on allowable installation depths. Furnish resurfacer in a color that closely matches the color of surrounding concrete surfaces. Mask boundaries of the repair area. Use hand tools to work resurfacer into keyways and match existing grade at boundaries. Apply a light broom-finish to achieve non-slip surface.

00759.55(b) Acceptance of Structures - Replace this subsection, except for the subsection number and title, with the following:

Once the corrective work or replacement has been completed, acceptance is based on the Engineer's inspection and approval of the Structure.

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.

Replace the paragraph that begins "In item (a) the type ..." with the following paragraph:

In item (a) the type of curb is inserted in the blank, if appropriate. Item (a) includes the curb runs constructed adjacent to the curb ramps.

Replace the paragraph that begins "In item (g)..." with the following paragraph:

In item (g), the specified thickness, or type, of concrete Surfacing is inserted in the blank, if appropriate.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

Delete the paragraph that begins "Item (k) includes..."

US101: Butte Creek Culvert Project

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 00810 - METAL GUARDRAIL

Comply with Section 00810 of the Standard Specifications modified as follows:

00810.00 Scope - Replace the paragraph that begins "Metal guardrail and metal ..." with the following paragraph:

Metal guardrail and metal Median barrier is referred to in this Section as "guardrail". The types of guardrail are shown.

00810.11 Wood Posts - Furnish wood guardrail posts meeting the requirements of 00810.10.

00810.12 Median Barrier on Bridges - Replace this subsection, except for the subsection number and title, with the following:

Furnish metal Median barrier on bridge decks comprised of metal beam rail, metal posts, and hardware meeting the requirements of 00810.10.

At expansion joints on bridge decks, construct special dimension slots in the rail member for post bolt and rail joint bolts as shown.

00810.14 Condition of Materials - Replace this subsection, except for the subsection number and title, with the following:

All Materials are subject to inspection of condition at the latest practical time available before or during incorporation of Materials in the Work.

00810.15(b) Metal Beam Rail Members - Replace this subsection, except for the subsection number and title, with the following:

Furnish metal beam rail members unpainted, straight and free of breaks, kinks, dents, damage to galvanized coating, or any other damage that would affect the integrity of the member. If paint is removed from metal beam rail members salvaged from the Project, remove the paint at a location outside of the Highway Right-of-Way, and in a manner that will not damage the galvanizing. Repair minor damage to galvanizing according to 00810.43.

00810.40 Timing and Coordination of Work - Replace the paragraph that begins "Do not leave posts ..." with the following paragraph:

Do not leave posts installed for guardrail and Median barrier exposed to traffic for more than 24 hours before installing the rail members, rail end pieces and anchors and tightening all bolts. Install replacement rail according to 00310.40(a).

00810.43 Erection of Rails and Other Components - Replace the paragraph that begins "Normally, all fabrication ..." with the following paragraph:

Fabricate metal beam rail members and other components in the shop or by the manufacturer. Limit field cutting, drilling and other field fabrication to the minimum and

US101: Butte Creek Culvert Project

perform in a manner that will not impair the appearance or structural quality of the material. Burning new holes in metal beam rail members is not allowed.

Replace the paragraph that begins "Draw tight all ..." with the following paragraph:

Draw tight all bolts. Furnish bolts of sufficient length to extend slightly beyond the nuts.

00810.90 Payment - Replace the paragraph that begins "In item (a), the ..." with the following paragraph:

In item (a), the type of guardrail is inserted in the blank. Item (a) includes all posts including steel, base plates, and base plate concrete anchors.

Replace the paragraph that begins "Items (a), (b), and (k) include ..." with the following paragraph:

Items (a), (b), and (k) include constructing the respective items except for:

- End pieces
- Anchors
- Transitions
- Extra costs involved in constructing guardrail connections to existing Bridges
- Terminals
- Guardrail height conversions

Replace the paragraph that begins "In item (c), the ..." with the following paragraph:

In item (c), the type of anchor is inserted in the blank.

Replace the paragraph that begins "In item (d), the ..." with the following paragraph:

In item (d), the type of guardrail end piece is inserted in the blank.

Replace the paragraph that begins "In item (g) the ..." with the following paragraph:

In item (g), the type of terminal is inserted in the blank. Item (g) includes guardrail terminals, posts, anchors, rails, guards, end pieces, struts, Soil tubes, and all necessary appurtenances and hardware.

Replace the paragraph that begins "In item (h) the ..." with the following paragraph:

In item (h), the length of post is inserted in the blank. Item (h) includes installing 8 foot long or longer posts instead of standard 6-foot-long posts. The extra costs for the longer posts are costs that are not covered and included in the unit price for one or more of the other listed Pay Items.

Replace the paragraph that begins "In item (k), the ..." with the following paragraph:

US101: Butte Creek Culvert Project

In item (k), the type of guardrail is inserted in the blank. Item (k) includes all posts including steel, base plates, and base plate concrete anchors.

Replace the paragraph that begins "In item (l), the ..." with the following paragraph:

In Item (l), the type of guardrail is inserted in the blank. Item (l) includes posts, rails, and all necessary appurtenances and hardware to construct the guardrail height conversion.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00820 - CONCRETE BARRIER

Comply with Section 00820 of the Standard Specifications modified as follows:

00820.11(a) Concrete - Replace this subsection, except for the subsection number and title, with the following:

Furnish concrete meeting the requirements of Section 00440, except modify Aggregates as follows:

(1) Fine Aggregate - Furnish Fine Aggregate meeting the test requirements of 02690.30(c) and 02690.30(d) with test results less than 1 year old.

(2) Coarse Aggregate - Furnish Coarse Aggregate meeting the test requirements of 02690.20(b) and 02690.20(c) with test results less than 1 year old.

00820.11(b) Hardware - Replace this subsection, except for the subsection number and title, with the following:

Furnish pins, bolts, and dowels according to ASTM A449 and hot-dip galvanized according to AASHTO M 232 (ASTM A153).

00820.12(b) Barrier Used on Previous Projects - Replace this subsection, except for the subsection number and title, with the following:

Precast concrete barriers used on previous projects may be reused in permanent installations, provided they meet all the requirements of this Section. Prior to delivery to the Project Site provide documentation required by 00165.10(b) and barriers:

- Are restored to like-new condition, without visible cracks, chips, spalls or corroded loops.
- Present a surface of uniform texture and appearance.

US101: Butte Creek Culvert Project

- Are free of markings, except as required by 00820.11(e).

Apply two coats of a water-based coating Material meeting the requirements of 02210.30 after installation in final position.

00820.41 Line and Grade - Replace this subsection, except for the subsection number and title, with the following:

Place precast barrier sections on the Pavement surface. Ensure new Pavement surfaces placed as a part of this Project meet the appropriate smoothness requirement prior to placing the barrier. If corrective work is required for existing surfaces to receive concrete barrier, it is paid according to 00195.20.

Place the barrier sections so that the joints offset no more than 1/4 inch transversely and no more than 1/2 inch vertically.

Construct the top and face of finished barriers true and straight. Construct the top surface of the barriers to uniform width and free from humps, sags, or other irregularities. When a 12-foot straightedge is laid on the top or face of the barrier, do not vary the surface more than 1/4 inch from the edge of the straightedge, except at grade breaks or curves. To compensate for variations in the Roadway grade and cross Slope, adjust the height of the barrier at no additional cost to the Agency.

00820.43(a)(2) Latex Paint Cure - Replace the paragraph that begins "Barriers cured in this ..." with the following paragraph:

Barriers cured in this manner are considered to have met the surface finishing requirements of 00820.45 except that additional coats may be necessary to provide uniform coverage and appearance to correct construction damage.

00820.43(b)(2) Steam Cure - Replace the paragraph that begins "Steam curing can be ..." with the following paragraph:

Steam curing can be substituted for water curing if done under a suitable enclosure constructed to contain live steam and to minimize moisture and heat loss. Steam cure at 100 percent relative humidity to prevent loss of moisture and to provide excess moisture for proper hydration of cement. Do not apply the steam directly to the concrete.

00820.45 Surface Finishing - Replace the paragraph that begins "After stripping forms ..." with the following paragraph:

After stripping forms and while the concrete is still green, remove all fins and form marks, and repair all rock pockets and holes having a surface opening over 3/8 inch in diameter with portland cement grout meeting the requirements of 02080.40. Prevent grout from drying prematurely. Additional finishing after precast concrete barrier is set in its permanent position may be required to present a surface of uniform texture and appearance.

00820.49(a) Test Section - Replace this subsection, except for the subsection number and title, with the following:

Cast a test section at least 25 foot long that:

US101: Butte Creek Culvert Project

- Is placed off the final barrier location site
- Has the same section and reinforcement as detailed
- Includes one typical contraction or expansion joint.
- Is removed and disposed of at no additional cost to the Agency

00820.49(b) Prior Performance - Replace the paragraph that begins "Identify at least two ..." with the following paragraph:

Identify at least two recent projects where the Contractor installed slipformed single-slope concrete barrier. For each project, provide the name and phone number of a person the Engineer may contact to determine the success of the installation. The Engineer will determine whether to allow slipforming on the current project.

00820.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

Replace the paragraph and bullets that begins "No separate or additional ..." with the following paragraph and bullets:

No separate or additional payment will be made for:

- Excavating and backfilling buried ends of concrete barrier
- Securing concrete barrier to the Roadway by means of grout or keyways
- Moving, stockpiling, handling, and pinning removed and reinstalled concrete barrier.

SECTION 00840 - DELINEATORS AND MILEPOST MARKER POSTS

Comply with Section 00840 of the Standard Specifications modified as follows:

00840.11(a) General - Replace the paragraph that begins "* As defined in U.S...." with the following paragraph:

- * As defined in U.S. Department of Commerce Commercial Standard 1CS 150-48, furnish rail steel products rolled from standard tee-section steel rails. Do not substitute other materials, such as those known by the terms "rerolled", "rail steel equivalent", and "rail steel quality".

00840.11(b) Multiple Punching - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Milepost marker posts with holes in addition to those called for on the Plans are acceptable provided that the critical net width of the section measured on the frontal plane projection of the post is not less than 2 1/2 inches.

00840.11(d) Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of milepost marker posts is according to 00165.35. Accompany each shipment of support posts with a quality compliance certificate.

00840.90 Payment - Replace the paragraph that begins "In item (a) the...." with the following paragraph:

In item (a), the type of delineator is inserted in the blank regardless of the color or number of reflectors and targets.

Replace the paragraph that begins "Payment will be payment...." with the following paragraph:

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

SECTION 00842 - FACILITY IDENTIFICATION MARKERS

Comply with Section 00842 of the Standard Specifications modified as follows:

00842.10(a)(2) Type S2 Markers - Replace the paragraph that begins "Furnish white markers ..." with the following paragraph:

Furnish white markers made of aluminum alloy meeting the requirements of ASTM B209 approximately half-hard temper, suitable for enameling by continuous roller or other acceptable method. Fabricate from aluminum sheet having a nominal thickness of 0.050 inch, subject to standard manufacturer's tolerances and free of burrs, irregularities, and turned edges. When resting on a plane surface, ensure the markers do not show warp, twist, or variation from the surface in excess of 1/4 inch. Finish the markers as follows:

00842.10(b)(2) Type 2 Drainage Markers - Replace the paragraph that begins "Furnish white markers ..." with the following paragraph:

Furnish white markers made of aluminum alloy meeting the requirements of ASTM B209 approximately half-hard temper, suitable for enameling by continuous roller or other acceptable method. Fabricate the aluminum sheet having a nominal thickness of 0.050 inch, subject to standard manufacturer's tolerances and free of burrs, irregularities, and turned edges. When resting on a plane surface, ensure the markers do not show warp, twist, or variation from the surface in excess of 1/4 inch. Finish the markers as follows:

US101: Butte Creek Culvert Project

00842.40(a) Stormwater Control Field Facility Markers - Add the following to the end of this subsection:

Install field markers as indicated in Table 00842-1.

Table 00842-1

Facility Station	HWY/MP	DFI Number	Type S1 Marker Red (Beginning of Facility)	Type S1 Marker Green (End of Facility)	Type S2 Marker Begin	Type S2 Marker End	Type S3 Marker
Sta. "L" 51+65 LT	US10197.00	D01511	X		X		
Sta. "L" 37+90LT	US10197.00	D01511		X		X	

00842.90 Payment - Replace the paragraph that begins "In item (a), ..." with the following paragraph:

In item (a), the type of facility field marker is inserted in the blank.

Replace the paragraph that begins "In item (b), ..." with the following paragraph:

In item (b), the type of culvert drainage marker is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications modified as follows:

00850.11 Flexible Bituminous Adhesive - Replace this subsection, except for the subsection number and title, with the following:

At least 2 weeks before using, submit for Agency testing and approval a 15-pound brick sample of flexible bituminous adhesive for each manufacturer lot number, including previously tested and approved lot numbers that are over 1 year old, that are used on the Project. All previously rejected lot number samples will not be retested. Agency testing and approval is only for acceptance of use of the adhesive.

00850.44 Alignment Layout – Replace the paragraph that begins "Place control points for lines every ..." with the following paragraph:

US101: Butte Creek Culvert Project

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.

00850.45 Installation - Replace the sentence that begins "Apply pavement marking ..." with the following sentence:

Apply pavement marking Materials to clean dry Pavement surfaces and according to the following:

Replace the bullet that begins "The Pavement surface ..." with the following bullet:

- Ensure the Pavement surface is not visible through the pavement marking.

Replace the bullet that begins "The top of pavement ..." with the following bullet:

- Provide a smooth and uniform top of pavement marking.

Replace the bullet that begins "Skip line ends ..." with the following bullet:

- Provide square and clean skip line ends.

00850.46 Placement Tolerance - Replace the bullet that begins "**Skip Cycle** ..." with the following bullet:

- **Skip Cycle:** A tolerance of 1/10 of the skip line length on the first skip line of a run, but on cycle within one skip

00850.47(c) Retroreflectivity - Replace the paragraph that begins "Except for paint applications ..." with the following paragraph:

Except for paint applications, evaluate longitudinal and transverse marking retroreflectivity according to ODOT TM 777. Acceptance is according to the following:

In the bullet that begins "**Longitudinal Markings**", replace the paragraph that begins "Each longitudinal marking ..." with the following paragraph:

- Each longitudinal marking subplot is accepted if the average of the measurements and at least 90 percent of the individual measurements within the subplot meet or exceed the required minimum initial retroreflectivity.

In the bullet that begins "**Transverse Markings**", replace the paragraph that begins "Each transverse marking ..." with the following paragraph:

- Each transverse marking subplot is accepted if the average of the measurements and at least 90 percent of the individual measurements within the subplot meet or exceed the required minimum initial retroreflectivity.

SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications modified as follows:

00855.40(b) Surface Preparation - Replace the paragraph that begins "Remove contaminants from ..." with the following paragraph:

Remove contaminants from the wearing Course surface that would adversely affect the bond of the adhesive.

00855.41(a) Surface Preparation - Replace this subsection, except for the subsection number and title, with the following:

Construct grooves in the Pavement to Neat Lines according to width, length and depth shown, and prepare the surface according to 00855.40(b).

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 is inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for providing 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 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 00865 of the Standard Specifications modified as follows:

US101: Butte Creek Culvert Project

00865.45 Installation - Replace the bullet that begins "For grooved markings, grind ..." with the following bullet:

- For grooved markings, grind the slot depth as shown. Apply the specified marking Material centered in the slot as shown. Ensure the top of the marking is flat or slightly convex.

00865.75 Manufacturer Warranty - Replace the paragraph that begins "Furnish a manufacturer ..." with the following paragraph:

Provide a manufacturer warranty that unconditionally warrants to the Agency the product(s) and installation under this Section against failure, according to this Subsection and 00170.85(c)(1). Use Agency-supplied warranty forms, available from the Engineer.

00865.90 Payment - Replace the paragraph that begins "In items (a) and (b), ..." with the following paragraph:

In items (a) and (b), the word "Surface" or "Grooved" is inserted in the first blank and the word "Profiled" or "Non-Profiled" is inserted in the second blank.

Replace the paragraph that begins "In items (e) and (f), ..." with the following paragraph:

In items (e) and (f), "Rolled-In" or "Grooved" is inserted in the first blank and "Patterned" or "Non-Patterned" is inserted in the second blank.

Replace the paragraph that begins "In items (g) and (h), ..." with the following paragraph:

In items (g) and (h), the word "Surface" or "Grooved" is inserted in the first blank and the word "Profiled" or "Non-Profiled" is inserted in the second blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications modified as follows.

00867.45 Installation - Replace the paragraph that begins "Transverse joints ..." with the following paragraph:

Transverse joints are allowed with no overlap or gap allowed at the joint.

US101: Butte Creek Culvert Project

Replace the paragraph that begins "Minimum initial retroreflectivity ..." with the following paragraph:

Meet the following minimum initial retroreflectivity:

Replace the bullet that begins "**Type A: Liquid, Hot-Laid Thermoplastic Material ...**" with the following bullet:

- **Type A: Liquid, Hot-Laid Thermoplastic Material** - For pavement bars, apply the thermoplastic material to the Pavement by a spray or extrusion method, to the full width shown, in a single application. For pavement legends, apply the thermoplastic material to the Pavement by a spray method, to the full width shown, in a single application. Apply Pavement markings 90 mils to 120 mils in thickness, exclusive of projecting surface-applied reflective elements, with a continuous and uniform cross sectional configuration, and with the upper surface slightly arched.

Separately apply reflective elements to the material as it is placed at a sufficient rate to obtain an initial reflectivity reading of 250 mcd/m²/lx. Locate the dispenser behind the pavement marking extrusion die and uniformly distribute the reflective elements over the entire width of the thermoplastic material.

Replace the bullet that begins "**Type D: Methyl Methacrylate ...**" with the following bullet:

- **Type D: Methyl Methacrylate** - Apply the methyl methacrylate material to the Pavement by a gravity and extrusion method, to the full width shown, in a single application. Apply Pavement markings 90 mils to 120 mils in thickness, exclusive of projecting surface-applied reflective elements, with a continuous and uniform cross-sectional configuration, and with the upper surface slightly arched. Provide intermixed reflective elements.

00867.75 Manufacturer Warranty - Replace the paragraph that begins "Furnish a manufacturer ..." with the following paragraph:

Provide a manufacturer warranty that unconditionally warrants to the Agency the product(s) and installation under this Section against failure, according to this Subsection and 00170.85(c)(1). Use Agency-supplied warranty forms, available from the Engineer.

00867.90 Payment - Replace the paragraph that begins "In items (a) through (s), ..." with the following paragraph:

In items (a) through (s), the type of pavement marking materials is inserted in the first blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing and placing all Materials, and for providing 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 modified as follows:

00905.40 General - Replace the paragraph that begins "Do not remove signs ..." with the following paragraph:

Do not remove signs from existing supports until new supports are in place, ready to receive the signs. Install the signs on the new supports immediately after removing from existing supports. Furnish temporary supports as required. Furnish permanent supports according to Sections 00910, 00920, and 00930 as required.

Replace the paragraph that begins "Protect specific service signs ..." with the following paragraph:

Protect specific service signs (business logos) and TODS from damage, whether the signs are to remain in place or are placed on temporary supports, until reinstalled on permanent supports. Repair or replace damaged signs at no additional cost to the Agency. Liquidated damages are assessed against the Contractor in the amount of \$200 per Day for each sign out of service for more than 5 Calendar Days.

00905.90 Payment - Replace the paragraph that begins "Payment will be ..." with the following paragraph:

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

SECTION 00910 - WOOD SIGN POSTS

Comply with Section 00910 of the Standard Specifications modified as follows:

00910.90 Payment - Replace the paragraph that begins "Secure temporary concrete barrier to bridge ..." with the following paragraph:

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

SECTION 00920 - SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications modified as follows:

US101: Butte Creek Culvert 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
Perforated Steel Square Tube Slip Base Sign Supports	0.18 cu. yd.
Perforated Steel Square Tube Anchor Sign Supports	0.27 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.

00930.02 Working Drawings - Replace the paragraph that begins "Submit six copies..." with the following paragraph:

Submit six copies of unstamped Working Drawings according to 00150.35 for all structural metal Work. Submit six copies of stamped designs, details, Plans, and calculations according to 00150.35 for all engineered details and drawings that are not prepared by the Agency but are required by the Contract Documents and Specifications for the Project prior to fabrication. Include the Field Verification of Post Lengths form, available from the Engineer. Material

US101: Butte Creek Culvert Project

ordered or Work performed before the Engineer finishes and returns the documents is at the Contractor's risk.

Replace the paragraph that begins "Working Drawings for these supports..." with the following paragraph:

Working Drawings for these supports are provided by the Engineer. Use the Field Verification of Post Lengths form, available from the Engineer, to provide the necessary site data for the engineer of record to use in producing Working Drawings. Work performed, or Materials ordered, before receiving Working Drawings from the Engineer is at the Contractor's risk.

Replace the paragraph that begins "Include the completed Field Verification..." with the following paragraph:

Include the completed Field Verification of Post Lengths forms that are available from the Engineer for these intelligent transportation systems supports. Material ordered or work performed before receiving approved Working Drawings from the Engineer is at the Contractor's risk.

00930.09 Identifying Tags - Replace this subsection, except for the subsection number and title, with the following:

Furnish stainless steel or brass identifying tags for overhead and butterfly sign support Structures, except structure mounts. Attach tags to all posts, arms, and truss sections. Furnish tags that are at least 1/16 inch thick with lettering at least 1/4 inch in height, and stamped into the tag. Attach the tags with stainless steel pop rivets of at least 3/16-inch nominal body diameter. Do not locate pop rivet holes within 6 inches of welds. Locate post tags approximately 5 feet above the baseplate. Drill holes for pop rivets prior to hot-dip galvanizing. Remove excess hot-dip galvanizing from holes and repair according to ASTM A780.

Include the following information on the tags:

- Structure number
- Manufacturer
- Month and year of manufacture
- Highway number and mile point

00930.10 Materials - Replace the paragraph that begins "Except for Perforated Steel Square ..." with the following paragraph:

Except for Perforated Steel Square Tube Slip Base Sign Supports and for Perforated Steel Square Tube Anchor Sign Supports, galvanize according to the requirements of Section 02530. Galvanize Perforated Steel Square Tube Slip Base Sign Supports and Perforated Steel Square Tube Anchor Sign Supports according to ASTM A653 G90, zinc coat corner seam weld after scarfing, apply a conversion coating, and apply a final clear polymer coating.

00930.30 Fabricators - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Fabricators of metal sign supports are required to have either a current AISC Simple Steel Bridge Structures (Sbr) certification or a current AISC Major Steel Bridges (Cbr) certification.

00930.40(a) General - Replace the paragraph that begins “Except for Perforated Steel Square ...” with the following paragraph:

Where two or more posts are required to support a sign, orient and position both posts so that no twist or warp is imparted to the sign panels.

00930.40(b) Assembly of Metal - Replace this subsection, except for the subsection number and title, with the following:

Accurately assemble the parts as shown and follow any match marks. Handle the material carefully so that no parts are bent, broken or otherwise damaged. Clean bearing surfaces and surfaces to be in permanent contact before the members are assembled. Roughen faying surfaces of slip-critical structural connections utilizing high strength bolts by means of hand wire brushing after galvanizing. Power wire brushing is not allowed.

Furnish faying surfaces of plates flat to within a tolerance of 1/32 inch in 12 inches and a tolerance of 1/16 inch overall. Furnish base plates with leveling nuts that are flat to within a tolerance of 1/8 inch in 12 inches and a tolerance of 3/16 inch overall.

00930.40(c) Welding - Replace the paragraph that begins “The fabricator shall ...” with the following paragraph:

Complete the welding inspection by the fabricator according to the details and requirements called out on the Contract Documents. This requirement overrides all appropriate weld inspection requirements called out in Section 5.15 WELDED CONNECTIONS in *AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*. Submit all Procedure Qualification Records, Welding Procedure Specifications, and testing procedures for Engineer's review prior to starting manufacturing. Submit certified copies of inspection reports to the Engineer for review.

Replace the paragraph that begins “If requested by the Engineer ...” with the following paragraph:

If requested by the Engineer, additional weld inspection may be required upon arrival of the material at the Project Site. If defects are found by this additional inspection, the Contractor is responsible for the additional testing and repair costs. If no defects are found, the Engineer is responsible for the additional inspection costs.

00930.40(d) Bolt Installation - Replace the paragraph that begins “Provide all high ...” with the following paragraph:

Furnish all high strength bolts with hardened washers under the element (nut or bolt head) turned in tightening. If a high strength bolt is installed in an oversized or short slotted hole in an outer ply, use a hardened washer. If a high strength bolt is installed in a long slotted hole in an outer ply, use a plate washer or a continuous bar made of structural grade steel at least 5/16 inch thick with standard holes. Make the washer or bar sufficiently large to completely cover the slot after installation.

00930.40(d)(1) Bolt Installation for Slip Bases (Breakaway) - Replace the paragraph that begins "Furnish, at no additional ..." with the following paragraph:

Provide, at no additional cost to the Agency, a calibrated torque wrench of a capacity appropriate to the size of the high-strength bolts installed and tightened. Confirm the accuracy of the calibrated torque wrench through calibration by an approved testing agency at least once a year.

00930.40(e)(1) General - Replace this subsection, except for the subsection number and title, with the following:

Notify the Engineer in writing at least 24 hours before starting installation. The Engineer will observe the installation and tightening of bolts to determine that the selected tightening procedure is properly used and that all bolts are tightened, and in the case of direct tension indicators that the correct indication of tension has been achieved. Bolts may reach tensions substantially above the value given in Table 00560-1, but this will not be cause for rejection. The installation is rejected if the geometry does not satisfy the requirements of 02560.05.

00930.40(e)(2) Direct Tension Indicator Method - Replace this subsection, except for the subsection number and title, with the following:

Upon completion of a bolted joint, the Engineer will determine that all bolts have been tightened. A minimum of 10 percent, but not less than two bolts in each joint, are inspected. The joint is accepted as properly tightened when one open space allows entry of a 0.005-inch feeler gauge. If there is more than one space between the direct tension indicator protrusions that allow entry of a 0.005-inch feeler gauge, re-inspect all bolts, retighten bolts in the joint as required, and resubmit the joint for inspection. If no spaces exist between the direct tension indicator protrusions that allow entry of a 0.005-inch feeler gauge, replace bolt assembly, tighten bolts in the joint as required, and resubmit the joint for inspection. For connections with all bolts fully tightened, one bolt at a time may be replaced without providing crane support of the mast arm.

00930.40(e)(3) Turn-of-Nut Method - Replace the bullet that begins "In the presence ..." with the following bullet:

- In the presence of the Engineer, use an inspection wrench, that may be a calibrated torque wrench.

Replace the bullet that begins "Tighten each bolt specified ..." with the following bullet:

- Tighten each bolt specified in the paragraph above in the calibration device by any convenient means to an initial condition equal to 20 percent of the required tension, and then to a tension not less than 5 percent greater than specified for its size in Table 00560-1 in Section 00560. Do not produce greater nut rotation than 1.5 times that allowed in Table 00560-3 in Section 00560 when tightening beyond the initial condition. Then apply the inspecting wrench to the tightened bolt and determine the torque necessary to turn the nut or head 5 degrees, approximately 1 inch at 12 inches radius, in the tightening direction. Take the average torque measured in the tests of three bolts as the job inspecting torque to be used in the manner specified in the next paragraph.

US101: Butte Creek Culvert Project

Replace the bullet that begins "Test bolts that have been ..." with the following bullet:

Test bolts that have been tightened in the Structure and are represented by the sample prescribed above with the inspecting wrench. Apply the job inspecting torque to 10 percent of the bolts, but not less than two bolts selected at random. If no nut or bolt head is turned by this application of the job inspecting torque, the connection is accepted as properly tightened. If any nut or bolt head is turned by the application of the job inspecting torque, test all bolts in the connections. Retighten all bolts whose nut or head is turned by the job inspecting torque, and re-inspect. Retighten all of the bolts in the connection and then resubmit the connection for the specified inspection.

00930.40(f) Tube Bending - Replace this subsection, except for the subsection number and title, with the following:

For Major sign supports, bend tube using induction heating methods according to TPA-IBS-98 *Recommended Standards for Induction Bending of Pipe and Tube*. Provide written bend qualifications that include bending procedures, essential variables, material group, and destructive testing results. Destructive testing results includes yield strength, tensile strength, and elongation at locations indicated in Table 2-1 of the TPA-IBS-98.

00930.41 Adjustable Sign Mounts - Replace this subsection, except for the subsection number and title, with the following:

Furnish adjustable sign mounts that allow vertical adjustment for positioning the sign and allow rotation to plumb the sign. Use galvanized or stainless steel nuts, bolts and washers for fasteners.

00930.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Item	Quantity (Pound)
Minor Sign Supports	
Perforated Steel Square Tube Slip Base Sign Supports	227.00
Perforated Steel Square Tube Anchor Sign Supports	192.00

00930.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

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

US101: Butte Creek Culvert Project

- 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:

00940.03 Drawings - Replace this subsection, except for the subsection number and title, with the following:

Copies of Working Drawings for non-standard signs are made available to the Contractor by the Engineer. Construct standard signs called for in the Contract Documents using drawings available in FHWA's *Standard Highway Signs* (FHWA English Version) or ODOT's *Sign Policy and Guidelines for the State Highway System*. The ODOT sign policy is available on the ODOT Traffic Roadway Section website.

00940.10 Materials - Replace the paragraph that begins "Use sign sheeting colors..." with the following paragraph:

Use sign sheeting colors according to the Federal Highway Administration *Color Specifications for Retroreflective Sign and Pavement Marking Materials*. The Engineer will visually determine if all panels in any one sign match the specified color(s).

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

Digital graphic files for the following sign type may be available from the State Sign Engineer. Find more information at:

<https://www.oregon.gov/ODOT/Engineering/Pages/Signing.aspx>

- Oregon Scenic Byway signs

00940.40 General - Replace the paragraph that begins "Finished signs shall..." with the following paragraph:

Construct finished signs to the designs shown or specified.

00940.41(a) General - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Fabricate aluminum panel signs as shown or specified. Do not round corners of panels outside the border. Reinforced sheet aluminum signs are not allowed. Furnish new Material for all aluminum used for sign panels.

00940.41(b) Extruded Aluminum - Replace this subsection, except for the subsection number and title, with the following:

Furnish a continuous section for each panel of extruded aluminum panel signs. Apply the sign sheeting to the extrusion a sufficient distance around the edge to ensure that no aluminum surface is visible on the face of the sign.

00940.41(c) Sheeting - Replace this subsection, except for the subsection number and title, with the following:

Apply the sign sheeting background color of the sign to the extrusions.

00940.42(a) General - Replace the paragraph that begins "Cut the sheet..." with the following paragraph:

Cut the sheet aluminum sign to size and shape as shown or specified. Furnish signs free of buckles, warps, dents, cockles, burrs and defects resulting from fabrication.

00940.42(b)(1) On Posts - Replace this subsection, except for the subsection number and title, with the following:

Signs having a vertical dimension of less than 48 inches and mounted on wood or metal posts are required to have at least two mounting holes. Signs having a vertical dimension of 48 inches or greater are required to have three mounting holes. Place the third mounting hole near the center of the sign. Locate mounting holes so the mounting hardware will not cover any portion of the legend unless otherwise shown.

00940.44 Retroreflective, Reflective, or Nonreflective Sheeting Application - Replace this subsection, except for the subsection number and title, with the following:

Apply the sheeting according to the sheeting manufacturer's recommendations on extruded aluminum panel signs. Up to 25 percent of the extruded aluminum panel signs required in the Plans are allowed one manufacturer's splice for each sign. One patch is allowed for each 50 square feet of sign to a maximum of three patches for each sign. Furnish patches that are between 3/4 inches and 3 3/8 inches in diameter. Contractor splices are not allowed.

On all other signs, manufacturer's splices are not allowed except as noted on approved shop drawings, or when sign dimensions exceed the sheeting manufacturer's capabilities. Make these splices horizontal with the upper section of sheeting overlapping the lower by a minimum of 3/8 inch on encapsulated lens sheeting, and butt splice prismatic lens sheeting with no appreciable substrate visible. The use of overlaid transparent paste or electronic cuttable film is not allowed on overlapped splices. Contractor splices are not allowed.

00940.45(a) General - Replace the paragraph that begins "Spacing between letters or ..." with the following paragraph:

US101: Butte Creek Culvert Project

Ensure spacing between letters or numbers meet the requirements of the FHWA *Standard Alphabets for Highway Signs manual*.

Replace the paragraph that begins "Spacing between words for Series..." with the following paragraph:

Spacing between words for Series "E" (modified) legend are 1.5 times the upper case letter height. Spacing between words for other fonts is as tabulated below unless otherwise shown:

Replace the paragraph that begins "Spacing between symbols ..." with the following paragraph:

Follow the FHWA *Standard Highway Signs* for spacing between symbols, unless otherwise shown.

00940.45(b) Attachment - Replace this subsection, except for the subsection number and title, with the following:

Attach removable legend to aluminum panels using aluminum, domed head, 1/8-inch diameter, self-plugging blind rivets. Remove aluminum shavings from the sign face before attaching the legend. The entire sign is rejected if any shavings are left beneath the legend. Drill 0.128-inch diameter holes in the removable legend and sign panel as shown on the *Mounting Details for Removable Legend Standard Drawings*.

Apply screened legend according to the sheeting manufacturer's recommendations. Apply cut-out legend according to 00940.44.

Attach 1-inch retroreflective removable border sections by placing two rivets 1/2 inch from the end of each border section with additional rivets spaced at a maximum of 6 inches apart, centered in the section. Attach corner border sections with a minimum of five rivets, two rivets 1/2 inch from each end, and the remaining rivet centered in the middle of the section.

Attach 2-inch retroreflective removable border sections by placing two rivets 1/2 inch from the end of each border section with additional rivets spaced at a maximum of 6 inch apart, along the top and bottom edge of the section. Attach corner border sections with a minimum of five rivets, two rivets 1/2 inch from each end, and the remaining rivet centered in the section.

00940.46 Inspection - Replace this subsection, except for the subsection number and title, with the following:

The Engineer will inspect signs at the fabrication shop or at the Project Site or both. Inspection is for conformance to the Plans and Specifications, for conformance to nighttime visibility, and for rejectable defects. Rejectable defects include scratches, scuffs, tears, or any defect that impacts reflectiveness, readability, or performance. Signs not meeting inspection criteria are to be replaced at no additional cost to the Agency. The Contractor's expense for sign inspection is according to 00165.91.

00940.47 Sign Erecting - Replace the paragraph that begins "The closest edge of any..." with the following paragraph:

US101: Butte Creek Culvert Project

The closest edge of any column or overhead sign Structures is as shown.

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 paragraph(s) to the end of this subsection:

Trimming and removal of branches, vegetation, or other materials will be paid for according to 00320.90.

SECTION 01014 - STORMWATER CONTROL, WATER QUALITY FILTER STRIP

Section 01014 is not a Standard Specification and is included for this Project by Special Provision.

Description

01014.00 Scope - This Work consists of furnishing and installing a water quality filter strip as shown.

Materials

01014.10 Water Quality Mixture - Furnish medium compost meeting the requirements of Section 03020. Furnish clean excess soil from the Project Site, collected within 2 – 5 feet from original surface, clean from debris, stockpiled, to be utilized for water quality soil.

Blend the medium compost and soil so that the mixture:

- Is composed of between 20 percent and 25 percent medium compost material and between 75 percent and 80 percent soil material.
- Has a pH between 5.5 and 8.0.
- Does not have clumps greater than 3 inches in any direction.

01014.11 Facility Field Markers - Furnish field markers meeting the requirements of 00842.10.

Construction

01014.40 General - Construct water quality filter strip facility as shown. Perform excavation, fine grading, and placement work only when the facility area is dry and only from the perimeter of the filter strip area. Do not stockpile excavated material in the facility area. Scarify the subsoil area a minimum 12 inches deep. After scarification, place the water quality mixture in maximum 12-inch Lifts. Compact each Lift with a water filled landscape roller. Seed according to 01030.13.

01014.41 Facility Field Markers - Install field markers as shown and according to Section 00842.

Maintenance

01014.70 Cleaning - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

US101: Butte Creek Culvert Project

Measurement

01014.80 Measurement - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Filter Strip D01511 Quantities:

Item	Quantity
Excavation	310 Cu. Yd.
Water Quality Mixture	310 Cu. Yd.

Field facility markers will be measured according to 00842.80.

Payment

01014.90 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 Filter Strip, ____".

The drainage facility identification number is inserted in the blank.

Field facility markers will be paid for according to 00842.90.

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

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.02 Definitions - Replace the paragraph that begins "**Noxious Weed** - All Weed ..." with the following paragraph:

Noxious Weed - All Weed designated by the Oregon State Weed Board as injurious to public health, agriculture, recreation, wildlife, or all public or private property. The Oregon Department of Agriculture (ODA) is the authority in determination of Noxious Weed species.

01030.13(d) Inspection - Replace this subsection, except for the subsection number and title, with the following:

Each lot of seed is subject to inspection upon delivery to the Project. Seed that is not labeled or that does not conform to the Specifications is rejected. Replace rejected seed at no additional cost to the Agency.

US101: Butte Creek Culvert Project

01030.13(f) Types of Seed Mixes - Replace the paragraph that begins "Seed mixes, quantities ..." with the following paragraph:

Seed mixes, quantities, standards, seeding rates, and other information is included in the Special Provisions for each type of seed mix.

Replace the bullet that begins "**Plant Seeding** ..." with the following bullet:

- **Plant Seeding** - Seeding that typically includes more than just grass species, such as seeds of woody or herbaceous plants.

Add the following to the end of this subsection:

Provide the following seed mix formulas:

- **Temporary Seeding:**

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
---	---

Achillea millefolium (Western Yarrow)	0.01
--	------

Agrostis exarata (spikegrass)	.50
----------------------------------	-----

Asclepias speciosa (Showy milkweed)	0.76
--	------

Beckmannia syzigachne (Sloughgrass)	0.76
--	------

Clarkia amoena (farewell to spring)	0.10
--	------

Danthonia californica (California oatgrass)	0.52
--	------

Dactylis glomerata (California oatgrass)	2.6
---	-----

Eriophyllum lanatum (Oregon sunshine)	1.0
--	-----

Deschampsia cespitosa (slender hairgrass)	0.35
--	------

Festuca rubra 'rubra' (red fescue)	3.48
---------------------------------------	------

Hordeum brachyantherum	
------------------------	--

US101: Butte Creek Culvert Project

(meadow barley) 10.25

Hordeum vulgare 'Poco'
(poco barley) 52.27

Lupinus albicaulis
(sickle-leaved lupine) 0.5

- **Permanent Seeding:**

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
---	---

Achillea millefolium (Western Yarrow)	0.01
--	------

Agrostis exarata (spikegrass)	.50
----------------------------------	-----

Asclepias speciosa (Showy milkweed)	0.76
--	------

Beckmannia syzigachne (Sloughgrass)	0.76
--	------

Clarkia amoena (farewell to spring)	0.10
--	------

Danthonia californica (California oatgrass)	0.52
--	------

Dactylis glomerata (California oatgrass)	2.6
---	-----

Eriophyllum lanatum (Oregon sunshine)	1.0
--	-----

Deschampsia cespitosa (slender hairgrass)	0.35
--	------

Festuca rubra 'rubra' (red fescue)	3.48
---------------------------------------	------

Hordeum brachyantherum (meadow barley)	10.25
---	-------

Hordeum vulgare 'Poco' (poco barley)	52.27
---	-------

Lupinus albicaulis

US101: Butte Creek Culvert Project

(sickle-leaved lupine) 0.5

01030.13(g) Availability - Replace this subsection, except for the subsection number and title, with the following:

Provide a list of seed sources for all specified seeds within 60 Calendar Days after execution of the Contract. Verify that all specified seed has been located and is available for use on the Project. Submit the seed and seed mixes to be used on the project according to 00150.37.

01030.14(b) Type of Fertilizer - Replace the paragraph that begins "Provide the following ..." with the following paragraph:

Furnish the following fertilizer:

01030.14(b)(3) Statewide, Near Water - Replace this subsection, except for the subsection number and title, with the following:

For application within 50 feet of open water, furnish 22-2-11 low-phosphorus fertilizer analyzing 22 percent nitrogen, 2 percent phosphorus, and 11 percent potassium that releases slowly over an eight-to-nine-month period. Furnish fertilizer containing a minimum of 60 percent available water-insoluble, controlled-release nitrogen derived from one of the three sources stated for west of the Cascades above. Furnish phosphorus and potassium that is coated to allow a minimum of 95 percent controlled-release.

01030.15 Mulch - Replace the paragraph that begins "Furnish mulch Materials ..." with the following paragraph:

Furnish mulch Materials free of all Weed or plant seeds and containing no substances detrimental to plant life. The kind of mulch materials acceptable for use is shown, listed in the Special Provisions, or as approved. Furnish mulch meeting the following requirements:

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

Furnish mulch for seeding according to the following:

- Compost Erosion Blanket

01030.15(b) Straw - Replace the paragraph that begins "Straw mulch for ..." with the following paragraph:

Straw mulch for non-hydroseeding applications from bentgrass, bluegrass, fescue or ryegrass singly or in combination. Cereal grain straw from barley, oat or wheat may be allowed upon approval of the Agency. Furnish straw that is not moldy, caked, decayed or of otherwise low quality. Submit certification from the Supplier that the straw is free of Noxious Weed seeds or plant parts. Acceptable documentation is any one of the following:

01030.16(a) Liquid Stabilizer Emulsion - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Tackifier with a base material of liquid, polyvinyl acetate polymers, using emulsion resins and containing not less than 55 percent total solids by weight. Furnish tackifier containing no polyacrylates or polyvinyl acrylics. Furnish an emulsion that, when diluted with water and upon drying, allow exchange of air and moisture to the seeds and have an effective life of 1 year or more.

01030.16(b) Dry Powder Tackifier - Replace the paragraph that begins "Tackifier base consisting ..." with the following paragraph:

Tackifier base consisting of one or more active hydrocolloids from natural plant sources, that hydrates in water and blends with other slurry materials, and upon application and drying tacks the slurry particles to the Soil surface, and exhibits no growth or germination inhibiting factors. Furnish stabilizing emulsion in a dry powder form that may be re-emulsifiable, and consisting of a processed organic adhesive derivative of one of the following:

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
- 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

01030.40 General - Replace the paragraph that begins "Remove all non-approved ..." with the following paragraph:

Remove all non-approved plants resulting from the seed mixes furnished for the Project at no additional cost to the Agency, including erosion protection required during reseeding.

US101: Butte Creek Culvert Project

01030.42 Weed Control - Add the following paragraph and bullets after the paragraph that begins "If a pesticide has been approved for..." and before subsection (a):

The Specified Weeds and plant species to be removed include the following:

- Oregon Department of Agriculture listed A and B noxious weeds

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.

01030.42(c)(2) Sensitive Areas - Replace the bullet that begins "Inside Sensitive Areas ..." with the following bullet:

- Inside Sensitive Areas, obtain approval before using wheeled or tracked construction Equipment. Requests are approved only when all vegetation in the area is cleared, such as under new Roadways or slopes.

Replace the bullet that begins "The Engineer..." with the following bullet:

- The Engineer is the authority in the determination of Sensitive Areas.

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.

US101: Butte Creek Culvert Project

Adhere to the adjuvant application limitations in Table 01030-2. Regulated work area (RWA) is defined in 00290.34(a).

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

US101: Butte Creek Culvert Project

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

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

01030.43(a) Temporary Seeding - Replace this subsection, except for the subsection number and title, with the following:

Temporarily seed disturbed Soils and slopes that are not at finished grade and are exposed for 2 months or longer before being disturbed again. Provide fertilizer, mulch, water, and other amendments necessary to ensure establishment. Ensure that temporary seeding Work achieves the coverage of live plants required by 01030.60 by the end of the next permanent seeding date stated in 01030.43(b). If this coverage is not achieved, or if the Agency determines that it is not effective in stabilizing the Soil from erosion, stabilize the area with other temporary stabilization methods as described in 00280.42 at no additional cost to the Agency.

US101: Butte Creek Culvert Project

01030.48(a)(1)b.2. Step 2 - Replace this subsection, except for the subsection number and title, with the following:

Apply mulch and tackifier. Hydromulch, if used as a tracer in Step 1, is included as part of the specified hydromulch rate specified in 01030.48(a)(3).

01030.48(b)(2)a Straw Mulch - Replace the paragraph that begins "Place straw mulch approximately ..." with the following paragraph:

Place straw mulch approximately 2 inches deep, in loose condition, that requires approximately 2 1/2 Tons per acre of dry mulch, depending on moisture content. Do not use straw mulch on Slopes of 1V:1.5H or steeper.

01030.61(b) All Other Seeding - Replace the bullet that begins "The seeding Establishment Period..." with the following bullet:

- The seeding Establishment Period will end 45 Days after the beginning of the Establishment Period, if the area was seeded within the seeding dates according to 01030.43, and all establishment responsibilities have been met.

Replace the bullet that begins "If the original seeding construction..." with the following bullet:

- If the original seeding construction is completed and accepted outside the permanent seeding dates, the Establishment Period will end 45 Calendar Days after all necessary reseeding is completed and accepted during the following seeding dates according to 01030.43.

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.

Replace the paragraph that begins "In items (c) through (i), ..." with the following paragraph:

In items (c) through (i), the type of seed mix, such as Mix No. 1, if applicable, is inserted in the blank.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

Replace the paragraph and bullets that begins "No separate or additional ..." with the following paragraph and bullets:

US101: Butte Creek Culvert Project

No separate or additional payment will be made for:

- Mobilization for application by blowers, mechanical spreaders, or hand spreading
- Inspections or maintenance
- Seeding mobilization if it is not included in the Contract Schedule of Items

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

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.

Replace the paragraph that begins "**Permanent Wilting Point** ..." with the following paragraph:

Permanent Wilting Point - The level of Soil wetness at the point a plant wilts and can no longer recover its sustainable turgidity when placed in a saturated atmosphere for 12 hours.

Replace the paragraph that begins "**Root Protection Zone** ..." with the following paragraph:

Root Protection Zone - A generally circular area around an existing plant to be protected from disturbance or compaction by the use of temporary fencing or other means. The zone as actually staked may exceed the current root area to allow for future growth of the plant. Root Protection Zones are shown or staked before construction activities begin.

01040.03(b) Pesticide Applicators License and Chemical Registration - Replace this subsection, except for the subsection number and title, with the following:

Provide evidence to the Agency that each applicator is licensed for the specific class of chemical being applied. Also, provide evidence that any chemical is registered for the proposed use by the Oregon Department of Agriculture according to ORS Chapters 452, 561, 570, and 634.

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

US101: Butte Creek Culvert Project

Add the following subsection:

01040.05 Submittals – Submit the following for review and approval:

- Contract Growing Plan according to 01040.19(g)
 - Include watering schedule from May 15th – September 15th..
- 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. Provide 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.

01040.10 General - Replace this subsection, except for the subsection number and title, with the following:

Submit a list of Project Materials for approval according to 01040.04(a) before arranging for procurement of any Materials. For materials not approved, submit a list of alternate Materials for approval. Materials installed without approval are subject to removal and replacement with acceptable Material at no additional cost to the Agency.

Substitute Materials may be allowed if proof of equivalent quality, suitable product specifications, manufacturer's literature and other detailed information is provided to the Agency according to 00140.70.

01040.13(a) Soil Fertility Test and Soil Amendment Report - Replace the paragraph that begins "Prior to planting ..." with the following paragraph:

Prior to planting, provide a Soil fertility analysis of existing Soils performed by a certified testing lab. Prior to planting, adjust Soil amendment and fertilizer applications as recommended by the Soil amendment report and as approved by the Agency.

01040.13(a)(1) Sampling - Replace this subsection, except for the subsection number and title, with the following:

Take five samples per acre of each Soil type. Mix the five samples into one test sample for each Soil type. Provide Soil fertility test results that provide information on available nutrient content and fertility status of the Soil. Conduct sampling procedures according to the Oregon State University Extension Service handout EC 628, *How to Take a Soil Sample... and Why*.

01040.13(a)(3) Soil Amendment Report - Replace this subsection, except for the subsection number and title, with the following:

Provide a report from the testing laboratory summarizing sampling locations and procedures with printed results, and that makes recommendations for fertilizers and Soil amendments to effectively develop productive Soil.

US101: Butte Creek Culvert Project

01040.14 Topsoil - Replace the bullet that begins "Provide one 20..." with the following bullet:

- Furnish one 20-pound representative Soil sample of each Topsoil type for testing of particle size range and organic matter by the Agency, unless otherwise specified.

01040.14(a) Selected Topsoil - Replace the paragraph that begins "Furnish native Topsoil ..." with the following paragraph:

Furnish native Topsoil from the required excavations meeting the requirements of 00330.10 or from other Agency-Controlled Lands. The general limits of Topsoil Materials are indicated on the Plans. The Agency will make the final determination of the areas where the most suitable materials exist. Furnish Topsoil that is the fertile part of a Soil profile commonly referred to as the "A" horizon, typically ranging in depth from 3 inches to 12 inches. Do not take material for Topsoil from a depth greater than 12 inches below existing ground, unless approved.

01040.14(c) Wetland Topsoil - Replace the paragraph that begins "Furnish a native..." with the following paragraph:

Furnish a native, naturally hydric Wetland Topsoil consisting of Silts, Clays, and organic matter in combination that is free from substances detrimental to plant growth, such as Noxious Weeds, undesirable plant roots, refuse, sticks, or lumps. Furnish Wetland Topsoil that is from a Wetland with an existing, well established, healthy growth of the desired Wetland plants. Obtain approval of the source before excavation of Wetland Topsoil begins.

01040.15 Soil Conditioners - Replace the paragraph that begins "Soil conditioners..." with the following paragraph:

Soil conditioners are for modifying Soil structure and improving Soil aeration characteristics, as distinguished from plant foods, mulch, and Soil organism amendments. Furnish Soil conditioners free of Noxious Weeds, living plants and rhizomes, and substances detrimental to plant life. For mushroom compost and Peat moss only, submit a 15-pound sample for approval by the Agency prior to construction. Furnish Soil conditioners that are free of weed seeds, excessive salts, chemicals detrimental to plant growth, and pest organisms. Soil conditioners proposed for use are subject to testing at any time or place the Agency deems appropriate.

01040.16 Soil Amendments - Replace the paragraph that begins "Soil amendments..." with the following paragraph:

Soil amendments are intended to improve Soil nutrition. Furnish Soil amendments that are free of materials detrimental to plant life. Provide manufacturer or Supplier quality compliance certification according to 00165.35. Ensure that material testing methods meet the requirements of the Oregon Department of Agriculture appropriate to that material. Obtain approval for use before beginning Work. Soil amendments may include the following:

01040.17 Soil Bio-Amendments - Replace the paragraph that begins "Soil bio-amendments..." with the following paragraph:

US101: Butte Creek Culvert Project

Soil bio-amendments are intended to increase beneficial Soil organism numbers or Soil organic nutrient content. Furnish bio-amendment products or materials that are free of substances or life forms detrimental to plant life and receive approval prior to use on the Project. Provide manufacturer or Supplier quality compliance certification according to 00165.35. Ensure that material testing methods meet the requirements of the Oregon Department of Agriculture appropriate to that material. The following are typical Soil bio-amendments that may be identified in the Soil bio-amendment report:

01040.18(b) Plant Bags and Tablets - Replace the paragraph that begins "Furnish plant bags..." with the following paragraph:

Furnish plant bags or tablets that are controlled-release with a minimum one-year release period. Chemical formulation, rates and are approved by the Agency.

01040.19(a) Nomenclature - Replace this subsection, except for the subsection number and title, with the following:

Use the most current edition of *Hortus Third*, by Bailey for botanical identification and nomenclature of plant materials. The Agency may authorize use of other references such as the *Sunset Western Garden Book*, the *Flora of the Pacific Northwest*, by Hitchcock, or the *Manual of California Plants*, by Jepson.

Furnish plants according to the applicable requirements of the current issue of the *American Standard for Nursery Stock*, published by the American Association of Nurserymen. When a conflict exists between this publication and the Specifications, the Specifications will prevail.

01040.19(b) Quality - Replace the paragraph that begins "Provide plants that are healthy..." with the following paragraph:

Furnish plants that are healthy, first-class representatives of their species or variety, free from disease and insect pests, with top growth that is well developed and free of disfiguring knots, sun scalds, bark abrasions, wind or frost injury or any other objectionable features.

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.

Replace the paragraph that begins "Furnish plants that possess..." with the following paragraph:

Furnish plants that possess top growth and root systems typical to their variety. Furnish trees with central leaders that have a symmetrical, well-branched, straight trunk. Trees with a damaged or missing leader, multiple leaders or Y-crotches, or sheared conifer trees are rejected.

01040.19(c) Certification - Replace the paragraph that begins "Furnish a State..." with the following paragraph:

US101: Butte Creek Culvert Project

Provide a State inspection certificate and shipping certificate for each load or lot of plant material that includes the following information:

01040.19(d) Inspection - Replace this subsection, except for the subsection number and title, with the following:

Plants are subject to inspection by the Agency, at any time and place. The Agency will make no plant material inspection at the source, except as it may elect. Notify the Agency of each delivery of plants to the Project site no less than 24 hours ahead of delivery. Do no planting until the plants have been inspected and approved for use. Any planting done without prior approval of the plants is considered in violation of the Specifications.

The presence of Noxious Weeds in the Soil accompanying plants or at the nursery source is cause for rejection of any or all plants from that source.

01040.19(e) Availability - Replace this subsection, except for the subsection number and title, with the following:

Provide a list of nursery sources for all specified plants within 90 Calendar Days after execution of the Contract. Verify, by this list, that all specified plant material has been located and is available for use on the Project. If applicable, see 01040.19(g) for alternate requirements.

01040.19(f) Plant Substitution - Replace this subsection, except for the subsection number and title, with the following:

No substitution of plant materials is allowed unless written evidence is submitted that a specified plant or material cannot be obtained and has been unobtainable since the execution of the Contract. If substitution is allowed, it is by written approval from the Agency for the nearest acceptable variety, size and grade. Make any request for substitution in writing to the Agency with ample time for approval without delaying the Work.

This Project requires a contract growing agreement.

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)(3) Transplanted Specimen Plants - Replace this subsection, except for the subsection number and title, with the following:

Unique or large plants typically used in low numbers on projects. See the Plans for specimen type, size, and location. Deliver trees to the site that are dormant and with buds that have not yet swelled. Furnish plants that have an unbroken root ball sufficient to sustain continued growth. Ensure that the root ball size conforms to the current edition of the American Standard for Nursery Stock. Furnish plants with no broken limbs or bark abrasions, and cleanly cut off any frayed roots or damaged limbs. Deliver trees that are balled and burlapped, boxed or moved by commercial tree spade.

US101: Butte Creek Culvert Project

01040.19(h)(4) Balled and Burlapped (B&B) Plants - Replace the paragraph that begins "Furnish plants with ..." with the following paragraph:

Furnish plants with root balls securely wrapped in burlap or similar mesh fabrics not harmful to plants, and bound with removable twine or wire. Furnish root balls that are firm, intact and held solidly together by a fibrous root system consisting of only the earth where the plant was growing. "Made" balls are rejected.

01040.19(h)(6) Container Grown Plants - Replace this subsection, except for the subsection number and title, with the following:

Plants that are grown and delivered in containers that possess well-formed top growth and whose root growth is typical to the variety.

Furnish plants that are resident in their delivery containers long enough to have established new fibrous roots, have a root mass that will retain its shape, and hold 90 percent (visual estimate) of the root ball material when removed from their containers. Some root growth should be visible along the outer edges of the container. Root-bound container grown plants and "made" container plants are rejected.

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. Furnish seedlings labeled with age and certification (class number) that shows the length 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 of 2 years old.

01040.19(h)(9) Plant Cuttings - Replace this subsection, except for the subsection number and title, with the following:

Living, freshly cut branches from certain woody shrub or tree species that readily propagate when embedded in damp Soil. Furnish plant cuttings of regionally native species and dimensions as shown. Obtain written approval of the cutting stock sources before taking any cuttings and provide a brief, written description of the cutting sites and the date and time the cuttings were taken to the Agency. Take cuttings in such a manner so as to leave no long-term damage to the source population. If willow species are called for, select the local native shrub variety.

01040.19(h)(10) Fascines -Add the paragraph to the beginning of this section: Provide fascines as shown. Refer to A02 Hydraulic series.

01040.19(h)(15) Wetland Plants - Replace this subsection, except for the subsection number and title, with the following:

Plants that meet the definition of hydrophyte, that is any macrophyte that grows in water, or on a substrate, that is at least periodically deficient in oxygen as a result of excessive water content.

01040.19(h)(16) Bulbs - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

For the purposes of this section, these will typically include the forms known as bulbs, corms, culms, plantlets, rhizomes, runners, small offsets, stolons and tubers. These plants are collectively referred to as "Bulbs". The appropriate propagule (plant part that can be separated and used to grow another plant) will vary depending on the plant species.

01040.19(h)(17) Sod Lawn - Replace this subsection, except for the subsection number and title, with the following:

Grass sod grown on agricultural land that is commercially cultivated specifically for turf sod. Furnish sod that is free of Weeds, diseases, harmful nematodes and insects. Furnish sod that is mature, not less than 10 months old, and machine cut to a uniform thickness of 5/8 inch or more, excluding top growth and thatch. Broken pieces and torn or uneven ends will not be accepted. Plant sod within 36 hours of harvest.

01040.20 Mulch - Replace this subsection, except for the subsection number and title, with the following:

Furnish plant bed mulch Materials free of Noxious Weed seeds or plants and that contain no substance detrimental to plant life. Mulches are subject to inspection at any time and place at the discretion of the Agency. The following are some types of Materials that fall under the category of "mulch", and may be used on projects:

(a) **Bark Mulch** - Ground, shredded or broken particles from the bark of fir, pine or hemlock trees that are free of non-bark debris, harmful bacteria, disease spores, pests and substances toxic to plant growth. Furnish mulch that is the standard trade size known as "medium fine mulch".

(b) **Cinder Mulch** - Crushed lava cinders, screened to an approximate size between 3/16 inch to 5/8 inch. Furnish cinders free of fines and other non-cinder material.

(c) **Straw Mulch** - Furnish straw mulch according to 01030.15.

(d) **Rock Mulch** - Round 3/8" - No. 4 pea gravel or round 2" - 3/8" Rock. Furnish Material that is free of fines and other non-gravel material. Rock colors may vary.

(e) **Wood Chip Mulch** - Mulch that is chipped from cleared site vegetation. Ensure that chipped material is free of any Noxious Weeds or invasive vegetation.

(f) **Compost Mulch** - Commercially manufactured medium compost material meeting the requirements of Section 03020, unless otherwise approved.

01040.21 Herbicides - Replace the paragraph that begins "The use of herbicide ..." with the following paragraph:

The use of herbicide chemicals is allowed only upon approval of the Agency. Select and apply chemical herbicides according to all applicable Federal, State and local laws, as well as the WCWP requirements of the PWP. The following are standard herbicide functional categories:

US101: Butte Creek Culvert Project

01040.22(b) Moisture Retention Chemicals - Replace this subsection, except for the subsection number and title, with the following:

Granular chemical that are typically cross-linked potassium based polyacrylate or polyacrylamide copolymers. Furnish commercial quality product from the QPL.

01040.23 Miscellaneous Items - Replace the paragraph that begins "Furnish miscellaneous items ..." with the following paragraph:

Furnish miscellaneous items meeting the following requirements or furnish commercial-quality products from the QPL. Obtain approval from the Agency prior to use.

01040.23(g) Tree Stakes and Ties - Replace this subsection, except for the subsection number and title, with the following:

Rough sawn tree stakes of 1 1/2 inches x 1 1/2 inches Douglas fir or pine, construction grade or better. Use stakes 6 feet long for trees less than 8 feet tall, and stakes 8 feet long for trees 8 feet or taller. Stain all tree stakes with an approved, dark green penetrating oil stain. Furnish tree trunk protection of guying material of either a commercially available tree tie or a section of garden hose. Furnish tree guying material of a commercial product manufactured for this use, such as plastic chain, or stainless steel woven-wire with clamp fasteners. Size the guying material appropriate to the size of the tree and the wind factors of the area.

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)**".

01040.44(c) Hauling and Spreading - Replace this subsection, except for the subsection number and title, with the following:

Transport select Wetland Topsoil to the site by any means that meets all applicable regulations related to hauling potentially wet or moist materials. Spread the Topsoil to a depth of 6 inches minimum to 24 inches maximum, or to meet the finished elevations as specified on the Plans. Make as smooth as practicable without excessive Soil compaction. After spreading, have the area inspected and approved by the Agency prior to planting.

01040.45 Soil Amendments - Replace this subsection, except for the subsection number and title, with the following:

Incorporate Soil amendments into the Topsoil when required by the Soil fertility test and Soil amendment report. The application rate is verified by checking settings on the spreading or application Equipment.

01040.46 Bio-Amendments - Replace the bullet that begins "Mycorrhizal Inoculation (Injection) ..." with the following bullet:

- Mycorrhizal Inoculation (Injection) - Furnish pre-measured packets containing live endomycorrhizal and ectomycorrhizal fungi.

Replace the paragraph that begins "The application rate ..." with the following paragraph:

US101: Butte Creek Culvert Project

The application rate is verified by visual inspection of application rates. A one-time application should be adequate, as long as pesticides, fertilizers or other toxic materials are not used at the same time. If it becomes necessary to apply pesticides that have non-target organism effects, or to apply fertilizer at rates greater than 13 pounds per acre, re-inoculate the organisms about 1 month after the pesticide or fertilizer was applied.

01040.47 Fertilizers - Replace the paragraph that begins "The application rate ..." with the following paragraph:

The application rate is verified by visual inspection. Provide manufacturer or Supplier quality compliance certification according to 00165.35. Ensure that material testing methods meet the requirements of the Oregon Department of Agriculture appropriate to that material.

01040.48 Planting Area Preparation - Replace the paragraph that begins "All planting areas ..." with the following paragraph:

Provide Weed Free planting areas before planting or seeding operations begin. Identify, kill, and remove Weeds according to 01030.62(b)(3).

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.

01040.48(c) Method "C" (Sod Lawn and Seeded Lawn Areas) - Replace the paragraph that begins "Furnish the Agency ..." with the following paragraph:

Provide the Agency with sod mixture information and a quality compliance certificate from the sod grower, certifying sod compliance with mixture requirements, according to 01040.10.

01040.49 General Planting - Replace the bullet that begins "Apply bark or wood chip ..." with the following bullet:

- Apply bark or wood chip mulch of the type and depth as shown. Correct contamination of new mulch due to the Contractor's operations at no additional cost to the Agency. Feather mulch into plant material trunks, stems, canes or root collars, and leave 1 inch below the top of junction and valve boxes, curbs and Pavement edges. Any mulch placed to a thickness greater than specified is at no additional cost to the Agency.

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

US101: Butte Creek Culvert Project

bark. Refill the original hole after transplanting. Do not move Oregon White Oak (*Quercus garryana*) by this method.

01040.50(c) Seedling Trees - Replace the paragraph that begins "No pre-staking of planting ..." with the following paragraph:

No pre-staking of planting locations is required. The Agency will be present as planting begins and will approve the spacing, planting method, and areas to be planted before Work can begin. Vary plant spacing in order to allow seedlings to be planted in suitable Soil. During the planting process, remove one tree at a time from the planting bag or other container to prevent drying of roots.

01040.50(g) Plant Cuttings - Replace this subsection, except for the subsection number and title, with the following:

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.

Plant stock within 4 hours of harvest. If plants are a willow species, plant in the riparian zone on that portion of the slope where the plant stem ends are in contact with year-round moist Soil as determined by the Agency. Make planting holes by forcing a steel bar or similar tool into the ground about 12 inches deep. Place the cuttings into the holes and tamp Soil firmly around the stems, leaving a minimum of 6 inches showing. Vary these dimensions as required for larger plant cuttings.

01040.50(h) Live Fascine Planting Requirements: Add the following paragraphs to the end of this subsection:

Install fascines into stream embankment as shown and as follows;

Install fascines at the time that stream enhancement material is being placed. Create fascines by bundling dormant, live Willow cuttings of 1-1.5-inch diameter size, with twelve cuttings per bundle. Place tied bundles of dormant willow cuttings on benches created during placement of stone embankment on contour along the ordinary high water elevation. During placement, cover each fascine with stream bank material and tamp. Install enough bundles to cover across the face of embankment horizontally, as shown. Refer to A02 Hydraulic series.

01040.53(a) Ornamental Plant Bed Areas - Replace the paragraph that begins "Submit a 15-pound ..." with the following paragraph:

Submit a 15-pound sample of bark mulch to the Agency for visual inspection and approval. The approved sample is the standard of acceptability for all mulch used on the Project.

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.

US101: Butte Creek Culvert Project

01040.54(a) Pressure Moisture Stress Sensor - Replace the paragraph that begins "When a pressure moisture ..." with the following paragraph:

When a pressure moisture stress sensor is specified, the Agency will test a 1 to 5 percent representative sample to ensure that the moisture stress level is below 20 bars of pressure and inform the Contractor if any material exceeds this limit. Any plant material found to have greater than 25 bars of pressure is considered to be under extreme moisture stress. Provide sufficient water within 24 hours to bring the plant into normal range. The Agency will retest to determine the new representative pressure. Plant material that have 30 bars or greater is considered to have reached its Permanent Wilting Point. Replace all such material during the next planting period. Testing will occur mid-day at the following times until the end of the Establishment Periods:

Replace the bullet that begins "At 1-month intervals..." with the following bullet:

- At 1-month intervals throughout the Summer, up to the first Fall rain or snow.

01040.70 Plant Establishment - Replace this subsection, except for the subsection number and title, with the following:

The Contractor is responsible for the survival of all plant material until the end of a Plant Establishment Period of 1 calendar year. The Plant Establishment Period begins when all the original planting is complete. The original planting is considered complete when all the plant material has been planted to the satisfaction of the Agency.

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.

Establishment Period Work includes removing all plants that have reached their Permanent Wilting Point, are dead, dying, or do not meet Specifications, and replacing them with healthy plants. All plants in place after this replacement are recognized as the original planting and are subject to the establishment Specifications. Repair, restore, and replace all plantings that have been damaged by vehicles, vandalized, and stolen according to 00170.80.

01040.71 Plant Care and Success Criteria - Replace the paragraph that begins "The determination of a successful ..." with the following paragraph:

US101: Butte Creek Culvert Project

The determination of a successful Plant Establishment Period is made at periodic plant establishment inspections. A successful planting establishment for each inspection is defined as follows:

Replace the paragraph that begins "At the discretion of the Agency, ..." with the following paragraph:

At the discretion of the Agency, certain types of regularly spaced plantings such as groundcovers may be measured using an area sampling method. To determine the rate of survival, set out (delineate) representative plots measuring 100 square feet at the completion of the original planting at random locations in each general planting area. The representative plots are mutually agreed upon between the Contractor and the Agency. Mark the plot corners with permanent markers such as re-bar, including date and identification. Delineate a minimum of three plots per acre of new planting area.

Add the following to the end of this subsection:

The following watering frequencies are required:

- Contractor to submit watering schedule as part of PWP to ODOT for approval.

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

Replace the paragraph that begins "Depending on when the Establishment ..." with the following paragraph:

Depending on when the Establishment Period begins, one of the above inspections is the final inspection.

01040.73 Corrective Work - Replace the paragraph that begins "The Contractor will be allowed..." with the following paragraph:

The Contractor is 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.

Replace the paragraph that begins "Furnish plant replacements ..." with the following paragraph:

US101: Butte Creek Culvert Project

Furnish plant replacements of the same variety, size, and quality as specified for the original plants, unless otherwise approved.

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.

01040.77(d) Sod Lawn - Replace the paragraph that begins "Mow, cut and fertilize ..." with the following paragraph:

Mow, cut and fertilize sod lawns as required to maintain a healthy and vigorous condition. A schedule of feeding, mowing, and general treatment, including thatching and aeration is listed in the Special Provisions. Final acceptance of sod lawn areas will depend on its health and condition. Keep sod lawns mowed to a height between 1 1/2 inches to 2 inches.

01040.80(c) Soil Conditioners and Hydraulically Applied Soil Conditioner - Soil conditioners and hydraulically applied soil conditioners will be measured according to one of the following:

- **Area Basis** - Hydraulically applied soil conditioners and other surface applied soil conditioners will be measured on the area basis, along the ground surface.
- **Volume Basis** - Soil conditioners will be measured on the volume basis in the hauling vehicle or in containers delivered to the Project Site.

01040.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

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

Replace the paragraph and bullets that begin "No separate ..." with the following paragraph and bullets:

No separate or additional payment will be made for:

- Soil amendments
- Lime, gypsum, or trace minerals
- Soil bio-amendments
- Fertilizer
- Herbicides
- Anti-transpirants
- Game repellent
- Browsing protectors
- Pesticides
- Trunk wraps

US101: Butte Creek Culvert Project

- Tree stakes and ties
- Water
- Pressure moisture stress sensors
- Mulch materials required as part of replacement planting
- Corrective work during the Plant Establishment Period

01040.90(g) Miscellaneous – Add the following Pay Item to the end of the Pay Item list:

(f) Fascines Each

SECTION 01091 - WATERWAY ENHANCEMENTS

Section 01091 is not a Standard Specification and is included in this Project by Special Provision.

Description

01091.00 Scope - This Work consists of constructing waterway enhancements such as fish Rocks, large woody Material (LWM), engineered streambed Material, and other types of waterway items as shown or directed.

01091.05 Pre-Work Meeting - Attend a pre-work meeting at the Project Site with the Engineer, at a mutually agreed upon time, at least 8 Calendar Days prior to implementation of any waterway enhancement work. Required attendees include:

- Engineer
- Contractor
- Waterway Enhancement Subcontractors
- ODOT Region Environmental Coordinator
- ODOT Hydraulics Designer

The pre-work meeting agenda typically includes the methods of accomplishing all phases of the waterway enhancement work, including:

- temporary water management (TWM)
- fish salvage plan and strategy
- environmental risks discussion
- turbidity monitoring
- energy dissipation
- dewatering and re-watering plan and strategy
- existing streambed Material salvage
- site clean-up expectations
- circumstances when contacting the Engineer is required

US101: Butte Creek Culvert Project

Representatives from interested permitting agencies are invited by the Agency.

Materials

01091.10 Material - Furnish Materials meeting the following requirements:

Streambed Gravels are classified as follows:

- Salvaged streambed Material
- Streambed Sand
- Streambed sediment
- Streambed Cobbles 4 in.
- Streambed Cobbles 6 in.
- Streambed Cobbles 8 in.
- Streambed Cobbles 10 in.
- Streambed Cobbles 12 in.

Furnish a streambed Material mix of the following streambed Gravels with the associated ratios:

Engineered Streambed Material:

Salvaged streambed Material	0% by volume
Streambed sediment:	50% by volume
Streambed Cobbles 4 in.	25% by volume
Streambed Sand:	25% by volume

Thoroughly blend streambed Gravels before placement. Acceptance of the Engineered Streambed Material is based upon visual inspection by the Engineer.

Components of the salvaged streambed Material that meet the criteria for the specific Material may be used to supplement the streambed sediment and streambed Cobbles and is based upon visual acceptance by the Engineer.

(a) Loose Riprap - Furnish loose riprap meeting the requirements of Section 00390.

(b) Engineered Streambed Material - Furnish uncrushed, free of deleterious Material, hard, durable Material that is well graded from the maximum size to the minimum size meeting the following test requirements for quality:

Aggregate Property	Test Method	Requirement
Degradation Factor	ODOT TM 208	15 min,
L.A. Wear, 500 Rev.	AASHTO T 96	50% max
Bulk Specific Gravity	ODOT TM 203	2.55 min.

- **Streambed Sand:** Grade Sand to meet the following requirements expressed as a percentage by weight:

US101: Butte Creek Culvert Project

Sieve	Percent Passing			
	Natural Sand		Manufactured Sand	
	Min.	Max.	Min.	Max.
No. 4	99	100	99	100
No. 8	90	100	90	100
No. 16	60	90	60	90
No. 30	35	70	35	70
No. 50	10	30	20	40
No. 100	0	5	10	25
No. 200	0	3	0	10

- **Streambed Sediment** - Grade streambed sediments according to the following requirements expressed as a percentage by weight:

Sieve Size	Percent Passing
2 1/2" square	100
2" square	65 - 100
1" square	50 - 85
U.S. No. 4	26 - 44
U.S. No. 40	16 max.
U.S. No. 200	5.0 - 9.0

- **Streambed Cobbles** - Grade streambed Cobbles according to the following requirements expressed as a percentage by weight:

Approx. Size ¹	Percent Passing				
	4" Cobbles	6" Cobbles	8" Cobbles	10" Cobbles	12" Cobbles
12"					99-100
10"				99-100	70-90
8"			99-100	70-90	
6"		99-100	70-90		
5"		70-90			30-60
4"	99-100			30-60	
3"	70-90		30-60		
2"		30-60			
1 1/2"	20-50				
3/4"	10 max.	10 max.	10 max.	10 max.	10 max.

¹Approximate size can be determined by taking the average dimension of the three axes of the Rock, length, width, and thickness, by use of the following calculation:

$$\frac{\text{Length} + \text{Width} + \text{Thickness}}{3} = \text{Approximate Size}$$

Length is the longest axis, width is the second longest axis, and thickness is the shortest axis.

US101: Butte Creek Culvert Project

The grading of the Cobbles is determined by the Engineer by visual inspection of the load before it is placed.

(c) Fish Rocks:

Type 1 - 700 pounds to 900 pounds size, hard, durable, angular shaped Rock. Furnish a single Rock with a thickness of not less than one-third its length. Round Rock, non-durable Rock, shale, or Rock with shale seams will not be accepted.

Type 2 - Greater than 900 pounds to 1,800 pounds size, hard, durable, angular shaped Rock. Furnish a single Rock with a thickness of not less than one-third its length. Round Rock, non-durable Rock, shale, or Rock with shale seams will not be accepted.

Type 3 - Greater than 1,800 pounds to 2,200 pounds size, hard, durable, subangular Rock. Furnish a single Rock with a thickness of not less than three-fourths its length. Non-durable Rock, shale or Rock with shale seams will not be accepted.

(d) Large Woody Material - Furnish 18-inch minimum diameter by 20 to 32 feet long conifer trees with rootwad. Furnish structurally sound logs that are free of rot and disease.

(e) Boulder Weirs - Furnish fish Rocks used in the construction of boulder weirs as follows:

Type 1 and Type 2 fish Rocks as shown and placed as directed.

(f) Fascine – Meeting the requirements of 01040.19(h)(10).

Construction

01091.40 General - Obtain all permits and perform Work in and around water according to Section 00290, Section 00245 and the following:

(a) Streambed Excavation - Excavate the foundation for streambed Materials to the elevations and grades as shown. As directed by the Engineer, excavate scour holes in the approximate locations as shown.

(b) Salvaged Streambed Materials - During streambed excavation, salvage and stockpile the existing streambed Materials as directed for re-use.

(c) Loose Riprap - Place loose riprap Material within the stream channel as shown or as directed.

(d) Engineered Streambed Material - Place engineered streambed Material in the stream channel as shown or directed. Place the streambed Material in lifts no thicker than 12 inches. Furnish streambed Material in its final location with a well graded mix of streambed sediments and streambed Cobbles.

Construct streambed Material to ensure that low stream flows are conveyed above the finished channel. Pressure apply water to each placed layer to facilitate filling the interstitial voids of the streambed Materials with streambed Sand. The voids are satisfactorily filled when water equivalent to the flow rate of the stream does not go

US101: Butte Creek Culvert Project

subsurface and there is visual acceptance by the Engineer. If water is not present in the stream, apply water to the stream channel for visual acceptance by the Engineer.

(e) Streambed Sand - Place streambed Sand in the streambed lifts as directed. Do not change the finished channel elevation or affect the channel shape as shown.

(f) Fish Rocks - Place Rocks as shown or as directed.

(g) Large Woody Material - Place LWM as shown or as directed. Place LWM with the rootwad end projecting into the water with the trunk placed at a 45-degree horizontal angle to the bank. Bury the trunk end approximately two-thirds the total length into the embankment.

(h) Boulder Weirs - Install boulder weirs as shown or directed. Arch boulder weirs into the stream flow as shown. Seal weirs with streambed sediments as shown or directed. Acceptance is based on water flowing over the boulder weirs and not through the Boulders.

(i) Fascine – Install Willow Wattles (Fascines) into the stream embankment meeting the requirements of 1040.50.

Measurement

01091.80 Measurement - No measurement of quantities will be made for Work performed under this Section.

The estimated quantities of Materials required for streambed enhancement are:

Item	Quantity
Engineered Streambed Materials	985 cu. yd.
Fish Rocks, Type 1.....	85 each
Fish Rocks, Type 2.....	45 each
Large Woody Material	5 each

01091.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Streambed Enhancement".

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

Fascines will be paid for according to 01040.90.

SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications modified as follows:

02001.15 Concrete Mix Design - Replace the paragraph that begins "Submit current or new mix ..." with the following paragraph:

Submit current or new mix designs, prepared by a CCT, with the information listed in 02001.15(c), for each required class of concrete to the Engineer for review. Allow 21 Calendar Days for the review. Design mixes by the volumetric method in ACI 211.1 to achieve the properties of 02001.20 and 02001.30 when tested according to 02001.15(b). Provide a design that is workable, placeable and finishable given the specific conditions for the Project and Structure. Do not proceed with concrete placement until the Engineer has determined that the mix design complies with the Specifications. Review of concrete mix designs does not relieve the Contractor of the responsibility to provide concrete meeting the Specification and Project Site requirements.

02001.15(a) Current Mix Design - Replace this subsection, except for the subsection number and title, with the following:

Mix designs that meet the requirements for the specified class of concrete and are currently being used or have been used within the past 24 months on any project, public or private may be submitted for review. Provide individual tests results that comprise the average if more than one data point exists. Provide flexural strength testing for paving designs from within the last two years. Provide length change and permeability tests for HPC designs from within the last two years.

02001.15(b) New Mix Designs - Replace this subsection, except for the subsection number and title, with the following:

Make at least one trial batch for each concrete mix design. Notify the Engineer at least 48 hours before making each trial batch. The Engineer may witness preparation and testing. Prepare and test trial batches using the same Materials, at the same proportions, and having the same plastic properties of concrete that are used in the Project. Simulate haul time, batching sequence and mixing conditions to ensure the trial batch is representative of the mixture that is delivered to the Project. Furnish all Materials, Equipment, testing and Work required for designing the mixes at no additional cost to the Agency.

02001.15(b)(1) Trial Batch Plastic Properties - Replace the test method that begins "AASHTO T 23..." with the following test method:

AASHTO R 100 or R 39 ³

02001.15(b)(2)(a) Compressive Strength Tests - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

For each trial batch, cast and cure at least three test cylinders according to AASHTO R 100 or AASHTO R 39, in 6-inch by 12-inch or 4-inch by 8-inch single use plastic molds. The use of unbonded caps according to ASTM C1231 is permitted. Test at 28 Days according to AASHTO T 22.

02001.15(b)(2)(b) Flexural Strength Tests - Replace this subsection, except for the subsection number and title, with the following:

For each paving concrete trial batch, cast and cure at least three flexural beams according to AASHTO R 100 or AASHTO R 39. Test flexural beams at 28 Days according to AASHTO T 97.

02001.15(b)(2)(c) Length Change Tests - Replace this subsection, except for the subsection number and title, with the following:

For all HPC mix designs, except for precast or prestressed elements, make at least three specimens from the trial batch for length change testing. Provide sample prisms having a square, 4-inch by 4-inch Cross Section. Wet cure the samples until they have reached an age of 28 Days, including the period in the molds. Following the wet cure, air store and measure samples according to AASHTO T 160, Section 11.1.2 for 28 Days. Report length change results at total specimen age of 56 Days.

02001.15(b)(2)(d) Permeability Tests - Replace this subsection, except for the subsection number and title, with the following:

For alternate HPC mix designs, select from the following options:

- Make at least three specimens from the trial batch for permeability testing. Prepare, cure, dry and test according to AASHTO T 277. Report permeability in coulombs at 90 Days.
- Make at least two specimens from the trial batch for resistivity testing. Prepare, cure and test according to AASHTO T358 using the sealed conditioning method. Report resistivity in $k\Omega \cdot cm$ at 56 Days.

02001.15(c) Required Submittals for Mix Designs - Replace the title of this subsection with "**Submittals for Mix Designs**"

02001.20 Concrete properties, Tolerances, and Limits - Replace the paragraph that begins "Provide concrete that is..." with the following paragraph:

Furnish concrete that is workable, placeable, uniform in composition and consistency, and having the following properties:

02001.20(a) Strength - Replace the paragraph that begins "Provide concrete meeting ..." with the following paragraph:

Furnish concrete meeting the required classes shown in the Contract Documents. The class of concrete designates the minimum required compressive strength, f'_c at 28 Days.

02001.20(b) Air Entrainment - Replace the paragraph that begins "Provide all concrete..." with the following paragraph:

US101: Butte Creek Culvert Project

Furnish all concrete, except PPCM with cast-in-place decks, seal concrete, and drilled shaft concrete with entrained air in the amounts shown in Table 02001-2. Provide field measured entrained air content within ± 1.5 percent of target air entrainment values.

02001.20(c) Slump - Replace the paragraph that begins "Provide concrete..." with the following paragraph:

Furnish concrete at the appropriate slump shown in Table 02001-3. Take corrective action to maintain a consistent slump at the point of discharge from the delivery vehicle.

02001.20(d) Temperature - Replace the paragraph that begins "Provide concrete..." with the following paragraph:

Provide concrete, at time of placement, at a temperature between a minimum of 50 °F and a maximum of 90 °F, except the maximum bridge deck concrete temperature is 80 °F.

02001.20(e) Durability - Replace this subsection, except for the subsection number and title, with the following:

For HPC designs the following additional requirements apply:

Test	Test Method	Acceptance Value
Length Change	AASHTO T 160	-0.045% ¹
Permeability	AASHTO T 277	1,000 Coulombs (max.) at 90 Days ²

¹ Not required for precast or prestressed elements.

² Only required for alternate HPC designs. See 02001.30(b)(2). A minimum resistivity of 37.0 k Ω ·cm at 56 Days for 4x8 inch cylinders and 29 k Ω ·cm at 56 Days for 6x12 inch cylinders are accepted as equal when tested according to AASHTO T 358 using the sealed conditioning method.

02001.30(a) Portland Cement - Replace this subsection, except for the subsection number and title, with the following:

For structural or paving concrete applications use cement according to 02010.10 or 02010.20, excluding Type III. Use Type III cement for precast prestressed concrete.

02001.30(b)(1) General Limits - Replace the paragraph that begins "*Fly ash + other..." with the following paragraph:

*Furnish fly ash + other Pozzolans at a rate no more than 25% and silica fume at a rate no more than 5% of the total weight of Cementitious Materials.

02001.30(b)(2) HPC Cementitious Composition - Replace this subsection, except for the subsection number and title, with the following:

Cement with SCM proportioned according to 02001.30(b)(1) and with trial batches performed to demonstrate that the proposed alternate mix design provides a maximum of 1,000

US101: Butte Creek Culvert Project

coulombs at 90 Days when tested according to AASHTO T 277 or a minimum resistivity of 37.0 kΩ·cm at 56 Days for 4x8 inch cylinders and 29 kΩ·cm at 56 Days for 6x12 inch cylinders are accepted as equal when tested according to AASHTO T358 using the sealed conditioning method.

02001.30(f) Synthetic Fiber Reinforcing for Concrete - Replace this subsection, except for the subsection number and title, with the following:

Except for precast or prestressed elements, use synthetic fiber reinforcing from the QPL and according to Section 02045 in all HPC. Use synthetic fiber reinforcing according to the manufacturer's recommendations at the rate designated on the QPL. Fiber packaging is not allowed in the mixed concrete.

02001.40 Concrete Production - Replace the paragraph that begins "¹ When haul time or ..." with the following paragraph:

¹ When haul time or placement conditions warrant exceeding the time of discharge, submit a detailed breakdown of the estimated time needed from batching to discharge of a load along with the measures that are taken to ensure slump, temperature and uniformity is maintained. Submit this request in advance and may establish a new time limit at the Engineer's discretion.

02001.40(a) Delivery Tickets - Replace the paragraph that begins "Send a concrete delivery ..." with the following paragraph:

Send a concrete delivery ticket with each load of concrete supplied to the Project. Include the following information on each delivery ticket:

02001.40(b) Adjusting Concrete Proportions - Replace the bullet that begins "Large admixture dosage changes..." with the following bullet:

- Large admixture dosage changes, excluding adjustments for air entraining agents and Type A or D water reducers (± 25 oz/cubic yard).

02001.50 Quality Control - Replace the bullet that begins "The Contractor shall..." with the following bullet:

- Designate a person responsible for accepting and rejecting concrete on-site.

02001.50(c) Concrete Control Technician (CCT) - Replace the bullet that begins "Make adjustments to loads ..." with the following bullet:

- Make adjustments to loads that fail to meet the air content or slump criteria of the Specifications prior to the 90-minute time limit. Make adjustments complying with the provisions of ASTM C94.

02001.60 Acceptance of Concrete - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of concrete is according to Section 00165 and the following:

US101: Butte Creek Culvert Project

(a) Aggregate - Acceptance of Aggregate is according to 02690.12.

(b) Plastic Concrete - Acceptance of plastic concrete is based on tests performed by the Contractor's QCT, according to the tolerances and limits of 02001.20, when discharged within the time allotted in 02001.40.

(c) Hardened Concrete - 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.

(1) General - For all classes of concrete, acceptance of hardened concrete is based on an analysis of compressive strength tests of cylinders cast by the QCT. Test cylinders at an Agency certified laboratory.

(2) Acceptance - Hardened concrete with an ASTV meeting or exceeding the specified design strength, f'_c is accepted for strength. If the ASTV is less than f'_c but at least 85 percent of f'_c , the Engineer may review the results to determine if the concrete represented by the cylinders is suitable for the intended purpose. Remove concrete that has an ASTV less than 85 percent of f'_c unless otherwise authorized, in writing, by the Engineer. If the concrete is removed, the cost of removal, replacement and all related Work is the Contractor's responsibility. If the Engineer determines that the concrete is suitable for the intended purpose, the concrete may be allowed to remain in place, subject to a price adjustment according to 00150.25. If an ASTV falls below f'_c , the Contractor may submit a written plan outlining a proposed alternate method of evaluating compressive strength. Submit the plan for review by the Engineer within 3 Days of the test. Provide evidence that a reasonable f'_{cr} (over-design) was maintained and that there is credible evidence (besides low strength) that warrants consideration of this option. The Engineer may allow an alternate method of acceptance if the compressive strength test results are determined to be suspect from definable external factors.

SECTION 02010 – PORTLAND CEMENT

Comply with Section 02010 of the Standard Specifications modified as follows:

02010.10(b) Specifications - Replace this subsection except for the subsection number and title with the following:

Furnish portland cement according to AASHTO M 85 or ASTM C150 for low alkali cement except as follows:

- Cement having a total alkali content (sodium and potassium oxide calculated as $\text{Na}_2\text{O} + 0.658 \text{ K}_2\text{O}$) not exceeding 0.60 percent.
- All cement types contain a maximum of 8 percent tricalcium aluminate (C_3A).
- The time-of-setting tests are by either the Gillmore test or the Vicat test.

US101: Butte Creek Culvert Project

- Types I and II maximum fineness (specific surface) as determined by AASHTO T 153 air permeability test is 430 m²/kg. If C₃S + 4.75 C₃A is less than or equal to 90, the fineness criteria does not apply.

02010.10(c) Acceptance - Replace this subsection except for the subsection number and title with the following:

Furnish portland cement from the QPL.

02010.20 Blended Hydraulic Cement - Replace this subsection except for the subsection number and title with the following:

Furnish blended hydraulic cement that is either Type IS-portland blast-furnace slag cement, Type IP-portland-pozzolan cement, Type IL-portland-limestone cement, or Type IT-ternary blended cement according to AASHTO M 240.

Furnish blended hydraulic cement from the QPL.

SECTION 02030 – SUPPLEMENTARY CEMENTITIOUS MATERIALS

Comply with Section 02030 of the Standard Specifications modified as follows:

02030.10 Fly Ash - Replace this subsection, except for the subsection number and title, with the following:

Furnish Class C and Class F fly ash from the QPL and according to AASHTO M 295 (ASTM C618).

002030.15 Natural Pozzolans - Replace this subsection, except for the subsection number and title, with the following:

Furnish Class N natural pozzolans from the QPL and according to AASHTO M 295 or ASTM C1945.

02030.20 Silica Fume - Replace this subsection, except for the subsection number and title, with the following:

Furnish silica fume from the QPL and according to the following:

(a) Types - Furnish the silica fume as a slurry containing silica fume, water, and a high range water reducer, or as a densified powder. Ensure the silica fume portion conforms to AASHTO M 307. Allowed total alkalis, as equivalent Sodium Oxide (Na₂O), is 1.5 percent maximum.

(b) Acceptance - Silica fume is accepted for immediate use if accompanied by a test results certificate according to 00165.35. If the silica fume is supplied as a slurry, indicate on the certificate the silica fume content of the slurry as a percent by weight. If the silica

US101: Butte Creek Culvert Project

fume is supplied as a densified powder, do not allow the packaging to enter the concrete mixture.

002030.40 Ground Granulated Blast Furnace Slag (GGBFS) - Replace this subsection, except for the subsection number and title, with the following:

Furnish GGBFS from the QPL and according to AASHTO M 302.

002030.50 High Reactivity Pozzolans - Replace this subsection, except for the subsection number and title, with the following:

Furnish high-reactivity pozzolans from the QPL and according to AASHTO M 321.

Add the following subsection:

002030.55 Ground Glass Pozzolan - Furnish ground glass pozzolans meeting the requirements of ASTM C1866 Type GS.

SECTION 02050 – CURING MATERIALS

Comply with Section 02050 of the Standard Specifications modified as follows:

02050.10 Liquid Compounds - Replace this subsection, except for the subsection number and title, 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 are tested according to ODOT TM 721. Samples are not required for curing compounds used on Commercial Grade Concrete.

Furnish Type 1-D, Type 2, Class A or B compounds.

Only Type 2, Class B resins are allowed for the following concrete Pavement applications:

- Plain concrete Pavement.
- Continuously reinforced concrete Pavement.
- Plain concrete Pavement repair.
- Reinforced concrete Pavement repair.

SECTION 02080 – GROUT

Comply with Section 02080 of the Standard Specifications modified as follows:

US101: Butte Creek Culvert Project

02080.40 Portland Cement Grout - Replace this subsection, except for the subsection number and title, with the following:

Furnish portland cement grout consisting of one-part portland cement and three parts Sand by weight, thoroughly mixed with a minimum amount of water to produce a thick, creamy consistency. Furnish Sand meeting the requirements of 02690.30. Furnish cement meeting the requirements of Section 02010.

Add the following subsection:

02080.80 Rock and Ground Anchor Grout - Furnish rock and ground anchor grout from the QPL.

SECTION 02110 – POSTS, BLOCKS, AND BRACES

Comply with Section 02110 of the Standard Specifications modified as follows:

02110.10(a) General - Replace this subsection, except for the subsection number and title, with the following:

Furnish posts for guardrail and median barrier of the size shown, manufactured from Douglas fir, Hem-fir, or Southern Yellow Pine. A minimum extreme fiber bending stress (F_b) of 1,200 psi is required for wood posts. Only treated posts from approved Suppliers that are listed in the *Nonfield-Tested Materials Acceptance Guide* are allowed.

02110.10(b) Grading - Replace the paragraph that begins "Grading of posts shall..." with the following paragraph:

Furnish posts with grading meeting the following:

02110.10(c) Certificates - Replace this subsection, except for the subsection number and title, with the following:

Provide certificates of lumber inspection by a recognized inspection agency.

02110.10(f) Seasoning and Checking - Replace this subsection, except for the subsection number and title, with the following:

Furnish preservative treated post that show evidence of reasonable amount of seasoning or conditioning having occurred prior to treatment, so that further shrinkage of treated posts will not create checking that would expose untreated wood.

At the time of inspection at the plant and at the time of installation each treated post is subject to inspection for evidence of seasoning having occurred. The presence of checking on the surface of the post will not be cause for rejection unless the width of the widest check, shake, or split exceeds 1/2 inch (surface measurement).

If an otherwise acceptable treated post has a through check, shake, or end split in the same slope of grain or plane as the bolt hole and extending from the top of the post to within 3 inches of the bolt hole, the post is rejected unless it is provided with a tight fastening across the separation, centered on the post, and 2 inches below the top. Fasten with a 1/2-inch diameter galvanized bolt and nut with a galvanized washer under the bolt head and under the nut after final curing of post is achieved. Treat holes for fastenings according to 00570.40.

02110.10(g) Inspection, Rejection and Marking at Plant - Replace this subsection, except for the subsection number and title, with the following:

Posts are subject to inspection at the treating plant at any time before, during or after treatment. Normally, inspection of treated posts is made by the Agency's Inspector not later

US101: Butte Creek Culvert Project

than 10 Calendar Days after treatment, provided the Inspector is notified of the time that treating is to be done.

Inspection of treated posts for compliance with the requirements of 02110.10(e) is according to applicable AWP standards, except as follows:

- The Inspector will choose the number of treated posts from any one charge of the treating cylinder for determining penetration of treatment.
- Each post selected for testing is representative as a basis of acceptance or rejection of a pro rata number of posts in the charge.
- If 20 percent of the posts randomly selected for testing fail to conform to requirements, all of the posts in the entire charge from where they are selected may be classed as unacceptable.

At the Inspector's discretion, each treated post or a representative random selection of treated posts may be inspected for compliance with the requirements of 02110.10(f) "Seasoning and Checking".

Posts that fail to conform to requirements of this Subsection are subject to rejection at the treating plant singly, by partial lots, or by whole lots. (A "lot" comprises the posts in any charge of the treating cylinder.)

Apply a permanent mark or metal tag to each treated post that identifies the Supplier and year of treatment, placed by the Supplier either:

- On the top of the post, or
- On the back of the post, 8 inches to 10 inches below the bolt hole.

02110.10(h) Field Inspection, Acceptance and Rejection - Replace the paragraph that begins "Posts that show a check ..." with the following paragraph:

Posts that show a check, shake, or split exceeding 1/2 inch in width (surface measurement) on any surface are rejected.

Replace the paragraph that begins "Acceptance of Material..." with the following paragraph:

Acceptance of Material is according to 00165.35, 02110.10(g), and the Specifications.

02110.20 Guardrail Blocks - Replace this subsection, except for the subsection number and title, with the following:

(a) General - Furnish wood guardrail blocks of the dimensions shown. Furnish blocks either Douglas fir or Hem-fir meeting the requirements of 02110.10, or pine or Southern Yellow Pine meeting the requirements of 02110.20(b) and 02110.10 except for 02110.10(b). The requirements of marking and branding the treated blocks, according to the last paragraph of 02110.10(g), is waived provided that the Supplier of the treated blocks provides certification with each shipment stating that the blocks conform to Specifications and that the preservative treating was done under the inspection and with the approval of the Engineer.

US101: Butte Creek Culvert Project

(b) Grading - Furnish pine guardrail blocks according to the requirements of paragraph 80.11 of the current WHPA Grading Rules. Furnish Southern Yellow Pine guardrail blocks according to the requirements for No. 1 timber as specified in section 402 of the current SPIB Grading Rules.

(c) Recycled Plastic - Recycled plastic guardrail blocks from the QPL may be used.

(d) Acceptance - Acceptance of Material is according to 00165.35 and this Section.

02110.30 Fence Posts and Braces - Replace this subsection, except for the subsection number and title, with the following:

Furnish fence posts and brace rails of the sizes and dimensions shown and of sound Douglas fir, western hemlock, or western pine free from decay, end splits, and multiple crooks. Seasoning checks of not more than 5/16-inch width (surface measurement) is allowed. Allowable crooks may be in one plane only. Do not allow a line drawn between the centers of the butt and tip of each post and brace rail to fall outside of the actual longitudinal centerline of the post or rail by more than 1.67 percent of its length, with an allowable maximum of 2 inches.

Posts and brace rails may be square, rough, or dressed lumber, or may be peeled round posts, as the Contractor elects. Furnish round members free from bark, protruding knots and irregularities detrimental to a pleasing appearance.

Fabricate posts and brace rails before pressure treatment. Where field boring or field cutting of a treated member is required, field-treat the exposed untreated surface of the member according to 00570.40. Do not allow the size of holes after treatment to exceed the size of the dowels or bolts to be inserted by more than 1/16 inch.

Posts intended to be driven may be machine-pointed on either the small end or the large end, before pressure treatment.

Pressure treat the posts and brace rails according to Section 02190.

Acceptance of Material is according to 00165.35 and the Specifications.

02110.40(a) Grading - Replace the paragraph that begins "Grading requirements..." with the following paragraph:

Furnish wood signposts with grading according to the applicable paragraphs of either the current WCLIB Grading Rules or the current WHPA Grading Rules, as follows:

02110.40(b)(1) Length - Replace the paragraph that begins "The length of the posts..." with the following paragraph:

Furnish posts of the length as shown or, where not shown, a sufficient length to provide proper sign mounting, a proper mounting height and the required foundation depth.

02110.40(b)(4) Cuts and Abrasions - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Treat cuts, abrasions and bolt-holes, prior to shipping, with the same preservative as originally used to treat the post, except that if the post was originally treated with pentachlorophenol - volatile petroleum solvent (LPG) solution, treat cuts, abrasions and bolt-holes with pentachlorophenol - mineral spirits solvent solution according to AWPAs Standard M4.

02110.40(c) Cuts and Abrasions - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of Material is according to 00165.35 and this Section.

SECTION 02190 – PRESERVATIVE TREATMENT OF TIMBER

Comply with Section 02190 of the Standard Specifications modified as follows:

02190.10 General - Replace the paragraph that begins "All preservative treatment..." with the following paragraph:

Provide all preservative treatment according to AASHTO M 133 and its referenced AWPAs Standards, except use the following according to the AWPAs Standard:

02190.20 Drying After Treatment - Replace the paragraph that begins " The maximum moisture..." with the following paragraph:

The maximum moisture content is 19 percent prior to installation.

SECTION 02210 – COATING MATERIALS FOR TIMBER AND CONCRETE

Comply with Section 02210 of the Standard Specifications modified as follows:

02210.10(a) Manufacturing - Replace the bullet that begins "All coats in..." with the following bullet:

- Use the same manufacturer for all coats in the coating system.

Replace the bullet that begins "Multi-component coating Materials..." with the following bullet:

- Furnish manufacturer proportioned multi-component coating Materials with each component in its correct proportion and furnished in separate containers ready for field mixing.

SECTION 02320 - GEOSYNTHETICS

Comply with Section 02320 of the Standard Specifications modified as follows:

02320.10(a)(1) Geotextiles - Replace the bullet that begins "Fibers used in manufacture of..." with the following bullet:

- Use fibers and threads consisting of long-chain synthetic polymers, composed of at least 95 percent by weight of polyolefins or polyesters in the manufacture and joining of geotextiles. Form geotextiles into a stable network such that the filaments or yarns retain their dimensional stability to each other, including selvages.

02320.10(b) Identification - Replace the paragraph that begins "Allow the Engineer to..." with the following paragraph:

Allow the Engineer to visually verify geosynthetic products before installation. Open packaged geosynthetics before use in the presence of the Engineer to confirm the correct product. Geotextile rolls without the product name printed on the geotextile or the product label affixed to the geotextile or roll core by the Manufacturer are rejected. Any other geosynthetics that are unwrapped, missing original packaging or previously opened may not be used unless approved by the Engineer.

02320.10(c) Manufacturer's Test Certification - Replace the paragraph that begins "Furnish test result..." with the following paragraph:

Provide test result certificates according to 00165.35 from the geosynthetic manufacturer, and the following:

02320.10(c)(1) Geotextiles - Replace the bullet that begins "Product name printed..." with the following bullet:

- Product name printed directly on the geotextile by the Manufacturer. For geotextiles that are not marked with a product name, furnish geotextile with product label attached to the geotextile or original packaging by the Manufacturer.

02320.10(d) Manufacturer's Sampling/Testing - Replace this subsection, except for the subsection number and title, with the following:

Provide manufacturer's reported property values based on the following sampling and testing requirements:

- (1) Sampling** - Sample all geosynthetics according to ASTM D4354. Use a roll or sheet for the production unit used for sampling.

US101: Butte Creek Culvert Project

(2) Geotextile Testing - Perform the specified tests to determine geotextile properties for the intended applications. Test the tensile strength requirements in both machine and cross-machine directions.

(3) Geogrid Testing - For mechanically stabilized earth retaining wall geogrid, provide laboratory test results that demonstrate the average roll value for each geogrid product is greater than or equal to the geogrid ultimate wide width tensile strength reported for the initial geogrid product evaluation and approval on the QPL. Determine the ultimate wide width tensile strength (T_{ult}) according to ASTM D6637. If the average roll value for each geogrid reinforcement product is less than the geogrid ultimate wide width tensile strength identified on the QPL, the entire production run is rejected.

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 02340 – ROCK GABION BASKETS

Replace this Section except for the Section number and title with the following:

Description

02340.00 Scope - This Section includes the requirements for Rock gabion baskets of twisted or welded wire mesh.

Materials

02340.10 General - Furnish wire mesh free of breaks in the wire, free of breaks at weld points or other deficiencies. Furnish wires of either twisted or welded wire mesh meeting the following minimum requirements:

Galvanizing 0.80 oz. per sq. ft. minimum
Tensile strength * 60,000 psi minimum
Wire diameter tolerance limit ± 0.004 "

* Tensile area includes galvanizing

US101: Butte Creek Culvert Project

Furnish welded wire according to AASHTO M 55 (ASTM A185) except with minimum weld shears of 600 pounds for 11-gauge, and 800 pounds for 9-gauge wires. All wire sizes are after galvanizing.

Furnish tie wires and internal connecting wires that are galvanized and no smaller than 13-1/2 gauge. Spiral binders may be used as an alternate to tie wire for basket assembly and basket-to-basket connections. Furnish spiral binders that are 9-gauge, galvanized, and have a 3-inch pitch. High tensile fasteners of the locking spring steel clip or clamp-on ring type may be used as alternates to tie wire for basket assembly only. Fabricate high tensile fasteners from 11-gauge steel wire with a minimum tensile strength of 240,000 psi. Furnish a Class 3 zinc coating according to ASTM A764. Furnish high tensile fasteners with a closed position tensile strength of 600 pounds.

Furnish galvanized wire according to ASTM A641.

02340.12 Twisted Wire Mesh Gabion Baskets - Furnish gabion panels of the twisted mesh style manufactured from 11-gauge with 9-gauge selvage wires and a uniform hexagonal pattern and formed with a non-raveling twist. Furnish hexagonal openings such that the major axis (maximum line dimensions) does not exceed 4.75 inches and the area of the hexagonal opening, approximately 3.2 inches by 4.5 inches, does not exceed 9.5 square inches.

02340.20 Welded Wire Mesh Gabion Baskets - Furnish gabion panels of the welded mesh style manufactured from 11-gauge or 9-gauge wire, a nominal 3-inch by 3-inch grid pattern and according to AASHTO M 55 (ASTM A185). Furnish panels with maximum line dimensions of any opening that does not exceed 4.75 inches. Furnish 12-inch and 18-inch high mattresses made from 11-gauge panels. Gabions of square Cross Section (cubical-celled units) may be made with either 9-gauge or 11-gauge panels, except that within the same unit, panels of dissimilar wire sizes may not be mixed.

Galvanized 9-gauge stiffeners, placed diagonally in the baskets at the vertical one-third points, as shown or as recommended by the manufacturer, may be used instead of perpendicular cross ties.

02340.30 PVC Coated Wire Mesh Gabion Baskets - Furnish either twisted wire mesh or welded wire mesh wire type used for PVC coated wire mesh gabions according to 02340.00 and 02340.12 or 02340.20.

Furnish PVC coating for twisted wire mesh gabions extruded onto the wire core before weaving the coated wire into a double twisted hexagonal mesh. The use and minimum diameter of the various wires is as follows:

- Gabion Panel wire core manufactured from galvanized 12-gauge wire core with an overall minimum diameter of the galvanized wire core plus PVC coating of 0.136 inch.
- Selvage and reinforcing wire of heavily galvanized 10-gauge wire core coated with PVC and having an overall minimum diameter (galvanized wire core plus PVC coating) of 0.165 inch.
- Lacing and connecting wire of heavily galvanized 13 1/2-gauge wire core coated with PVC and having an overall minimum diameter (galvanized wire core plus PVC coating) of 0.120 inch.

US101: Butte Creek Culvert Project

02340.40 Fabrication - Fabricate gabions so that the sides, ends, lid and diaphragms can be assembled at the construction site into rectangular baskets of the specified sizes. Dimensions for heights, lengths and widths of gabion baskets are as shown with a tolerance of plus or minus 3 percent. Furnish gabions of single unit construction. Either connect the base, lid, ends and sides into a single unit or connect one edge of these members to the base section of the gabion in such a manner that strength and flexibility at the point of connection are at least equal to those of the mesh.

If the length of the gabion exceeds its horizontal width, equally divide the gabion by diaphragms into cells whose length does not exceed the horizontal width. Furnish the diaphragm Material of the same mesh and size as the body of the gabions. Furnish the gabion with the necessary diaphragms secured in proper position on the base in such manner that no additional tying at this juncture is necessary.

Assemble the wire mesh panels (base, ends, sides, diaphragms and lid) so strength and flexibility at connections are at least equal to those of a single panel.

02340.50 Acceptance - Provide a quality compliance certificate for gabion baskets according to 00165.35.

SECTION 02410 - CONCRETE PIPE

Comply with Section 02410 of the Standard Specifications modified as follows:

02410.10(e) Concrete Pipe Plant Air Test - Replace this subsection, except for the subsection number and title, with the following:

The Engineer may require that each length of concrete pipe 12 inches in diameter and smaller be given an individual air test at the point of manufacture. Use test Equipment approved by the Engineer and a test pressure of at least of 10 psi. Ensure each length shows no appreciable loss of air after 5 seconds.

When individual air testing is performed, no field or shop permeability tests are required.

02410.10(f) Nonreinforced Concrete Pipe - Replace this subsection, except for the subsection number and title, with the following:

Furnish nonreinforced or plain circular concrete pipe and special sections according to the requirements of AASHTO M 86 (ASTM C14) or ASTM C985 and this Section.

02410.10(g) Reinforced Concrete Pipe - Replace this subsection, except for the subsection number and title, with the following:

Furnish reinforced concrete pipe and special sections according to the requirements of AASHTO M 170 (ASTM C76) and this Section, except as follows.

(1) Special Sections - Furnish special sections such as elbows, wyes, tees, crosses, bends and reducers as shown, specified or directed. In the absence of any design or Specifications, furnish special sections of the design recommended by the manufacturer for the intended use and according to the requirements specified for the pipe where it is used.

Fabricate special sections with components from tested and approved lots. Maintain production dates of components.

(2) Load Strength - Reinforced concrete pipe having the same D-load strengths as those specified to be furnished under AASHTO M 170 (ASTM C76) may be furnished according to AASHTO M 242 (ASTM C655).

(3) Acceptance - The basis of acceptance for reinforced concrete pipe manufactured according to AASHTO M 170 (ASTM C76), and AASHTO M 242 (ASTM C655) is Paragraph 5.1.1 of AASHTO M 170.

02410.10(h) Concrete Drain Pipe - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Use circular, nonreinforced perforated concrete pipe and special sections for subsurface drainage according to the requirements of AASHTO M 175 (ASTM C444), Type 1, all applicable requirements of AASHTO M 86 (ASTM C14), except indent the markings required by AASHTO M 86 (ASTM C14) in the outside surface of each section of pipe.

02410.10(i) Concrete Drain Tile - Replace this subsection, except for the subsection number and title, with the following:

Furnish concrete drain tile according to the requirements of AASHTO M 178 (ASTM C412).

02410.80 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Except as provided in 02410.10(g)(3), acceptance of nonreinforced concrete pipe, reinforced concrete pipe, concrete drain pipe, concrete drain tile, and hardware is according to 00165.35 and this Section.

SECTION 02415 - PLASTIC PIPE

Comply with Section 02415 of the Standard Specifications modified as follows:

02415.20 Solid-Wall Polyethylene Pipe – Replace the bullet that begins "Production code from which ..." with the following bullet:

- Production code where the date and place of manufacture can be determined

02415.30 Steel Reinforced Polyethylene Pipe – Replace the paragraph that begins "For Steel Reinforced Polyethylene..." with the following paragraph:

For Steel Reinforced Polyethylene Pipe, furnish either factory installed gaskets on the couplings or manufacturer installed gaskets on the pipes. Furnish at least silt tight joints for culvert pipe and water tight joints for storm sewer pipe. Furnish watertight joints from the QPL and meeting the requirements of ASTM D3212.

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

US101: Butte Creek Culvert Project

(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

02415.50 Polyvinyl Chloride Pipe - Replace the paragraph that begins "Furnish PVC sanitary, storm..." with the following paragraph:

Furnish PVC sanitary, storm, culvert, siphon, and irrigation pipe and fittings with 2 feet or more cover that have a minimum pipe stiffness of 46 psi or a minimum SDR of 35 and meet the requirements of sewer pipe ASTM D3034 or ASTM F794.

02415.80 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of Polyethylene Pipe, polypropylene pipe, polyvinyl chloride pipe and hardware is according to 00165.35 and this Section.

SECTION 02420 - METAL PIPE

Comply with Section 02420 of the Standard Specifications modified as follows:

02420.10(a) Shapes - Replace the paragraph that begins "Provide either full-circle..." with the following paragraph:

Furnish either full-circle or elliptical pipe, as the Contractor may elect, unless otherwise shown or specified. The shapes of pipe fabricated and furnished may include any of the following:

Replace the bullet that begins "**Nestable Pipe** - Fabricate ..." with the following bullet:

- **Nestable Pipe** - Fabricate in two separate half sections designed to fit and fasten together to form a full-circle Cross Section of specified diameter. Fasten the two half sections together by approved means, providing at least 90 percent of the strength of a standard riveted longitudinal seam.

02420.10(b) Connecting Bands - Replace this subsection, except for the subsection number and title, with the following:

Use connecting bands according to the details as shown to make field joints for pipes and pipe arches not requiring watertight joints.

02420.10(c) Special Sections - Replace the paragraph that begins "Generally, special sections shall..." with the following paragraph:

US101: Butte Creek Culvert Project

Generally, furnish special sections according to the requirements specified for the pipe where they are used. Connect special sections to the pipe or to each other with connecting bands specified for use with the pipe where they are connected.

02420.10(d) Repair of Damaged Coating - Replace the paragraph that begins "In addition to the methods ..." with the following paragraph:

In addition to the methods given in AASHTO M 36 (ASTM A760) the Contractor may repair damaged zinc or aluminum coating by removing all loose or cracked coating, removing all welding flux, wire brushing the damaged area, and applying two coats (minimum 2 mils total thickness) of a high zinc dust content paint according to the general requirements of ASTM A780.

02420.10(e) Irrigation Pipe - Replace the paragraph that begins "In irrigation pipe installations..." with the following paragraph:

In irrigation pipe installations, where Type D coating (AASHTO M 190) is not specified, the Contractor is allowed to furnish pipe with Type D coating.

02420.10(e)(2) Field Joints - Replace this subsection, except for the subsection number and title, with the following:

Use connecting bands according to the details shown and make the field joints watertight.

02420.10(f) Siphon Pipe - Replace the paragraph that begins "Field joints shall provide..." with the following paragraph:

Furnish circumferential and longitudinal strength field joints to preserve the pipe alignment, prevent separation of pipe sections and provide a watertight joint. Attach the connecting bands so they lap a nearly equal portion of each pipe section to be connected.

02420.11 Ductile Iron - Replace this subsection, except for the subsection number and title, with the following:

Furnish ductile iron pipe according to the requirements of AWWA C151. Use Pressure Class 150 - 350 or Special Thickness Class 50 - 56, as directed.

02420.20(a) Bituminous Protective Coatings - Replace this subsection, except for the subsection number and title, with the following:

Furnish corrugated metal pipe and connecting bands with bituminous coatings according to the requirements of AASHTO M 190 and the following:

- Before immersion, ensure the metal is free of grease, dirt, dust, moisture or other contaminants.
- Apply the initial bituminous coating by one of the processes under 02420.20(a)(1) or 02420.20(a)(2).
- If a second dip is required to meet the coating thickness requirements of AASHTO M 190, the time and temperature requirements of 02420.20(a)(1) or 02420.20(a)(2) need not be followed for the second dip.

US101: Butte Creek Culvert Project

- Fill the corrugations for at least 40 percent of the circumference of the pipe to form the paved invert for both Type B and Type C coatings on either circular or arch type pipe.

02420.20(a)(1) Pipe Not Preheated - Replace the paragraph that begins "The temperature of the asphalt..." with the following paragraph:

Furnish asphalt at the time of pipe immersion at a temperature of $400^{\circ}\text{F} \pm 5^{\circ}\text{F}$. Provide an immersion duration meeting the following schedule:

02420.20(2) Pipe Preheated - Replace this subsection, except for the subsection number and title, with the following:

Furnish asphalt at the time of pipe immersion at a temperature of $380^{\circ}\text{F} \pm 5^{\circ}\text{F}$ and the pipe preheated to a temperature 300°F to 350°F .

02420.20(b) Type D, Fully-Bituminous Coated, Fully-Lined - Replace this subsection, except for the subsection number and title, with the following:

Furnish a fully-bituminous coated, fully-lined interior lining that is smooth, uniform and free from sags and runs. Slight residual corrugations due to cooling and shrinkage of the lining will not be cause for rejection. At the three-sheet lap an interior nonuniformity equal to the thickness of the sheet is allowed. Maintain the thickness of the lining to the ends of the pipe.

02420.20(c) Optional Paved Invert - Replace this subsection, except for the subsection number and title, with the following:

If an asphalt coated pipe with a paved invert (Type C coating) is shown or specified, a centrifugally-applied interior lining according to Type D coating may be furnished as an alternate, providing the minimum thickness of bituminous coating over the crests of the corrugations is not less than 1/4 inch.

02420.30 Corrugated Steel Pipe for Underdrains - Replace this subsection, except for the subsection number and title, with the following:

Furnish corrugated steel pipe for underdrains according to the requirements of AASHTO M 36 (ASTM A760) Type III - Underdrain Pipes, except as modified in 02420.10(c) and 02420.10(d), and as follows:

(a) Class IV - Semicircular pipe may be used only as an alternate with the 6-inch size of perforated full-circle drain pipe.

(b) Connecting Bands - Furnish connecting bands for underdrain pipe field joints meeting the designs shown.

02420.40 Corrugated Aluminum Alloy Pipe - Replace this subsection, except for the subsection number and title, with the following:

Furnish corrugated aluminum alloy pipe, helical rib pipe, pipe arches and special sections according to the requirements of AASHTO M 196 (ASTM B745), Types I, II and III, except as follows:

US101: Butte Creek Culvert Project

(a) Shapes - The shapes of the pipes to be furnished may include any of the shapes described in 02420.10(a).

(b) Connecting Bands - Use connecting bands according to the requirements of AASHTO M 196 (ASTM B745) and the details shown to make field joints for pipes and pipe arches not requiring watertight joints.

(c) Special Sections - Furnish special sections such as elbows, wyes, tees, crosses, bends, reducers and flared inlets as shown or as directed.

Generally, furnish special sections according to the requirements specified for the pipe where they are used. Connect special sections to the pipe or to each other with connecting bands specified for use with the pipe where they are connected.

For elbows of 30 degrees or greater total angle, use a three-piece section of approximately equal length and equal-angle segments or pieces.

(d) Irrigation Pipe - In irrigation pipe installations where Type D coating is not shown or specified, the Contractor is allowed to furnish pipe with Type D coating.

If pipes are not furnished with Type D coating, ensure all riveted seams meet the applicable provisions of 02420.10(e)(1).

Use connecting bands according to AASHTO M 196 (ASTM B745) and the details shown, and make the field joints watertight for pipe installations used in irrigation.

(e) Siphon Pipe - Fabricate corrugated aluminum alloy pipe used in siphons with watertight seams.

Provide field joints with circumferential and longitudinal strength to preserve the pipe alignment, prevent separation of pipe sections and provide a watertight joint. Fabricate the connecting bands from aluminum alloy according to AASHTO M 196 (ASTM B745). Attach the connecting bands so they lap a nearly equal portion of each pipe section to be connected.

(f) Sloped or Skewed Ends - If the ends of pipe culverts require sloped ends, skewed ends or both, fabricate the ends in a manner that provides good workmanship and a smooth finish. Repair bituminous protective coatings and linings when specified.

02420.50 Corrugated Aluminum Alloy Pipe for Underdrains - Replace this subsection, except for the subsection number and title, with the following:

Furnish corrugated aluminum alloy pipe for underdrains according to the requirements of AASHTO M 196 (ASTM B745) Type III, except as follows:

(a) Special Sections - The provisions of 02420.40(c) apply.

(b) Connecting Bands - Furnish connecting bands for field joints meeting the requirements of AASHTO M 196 (ASTM B745) and the details shown.

US101: Butte Creek Culvert Project

02420.60 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of pipes, underdrains, and protective coatings is according to 00165.35 and this Section.

SECTION 02440 – JOINT MATERIALS

Comply with Section 02440 of the Standard Specifications modified as follows:

02440.10 Preformed Joint Fillers for Concrete - Replace this subsection, except for the subsection number and title, with the following:

Furnish preformed joint fillers for concrete from the QPL according to the requirements of AASHTO M 153 or AASHTO M 213.

02440.15 Lubricant/Adhesive - Replace this subsection, except for the subsection number and title, with the following:

Furnish a lubricant/adhesive according to ASTM D4070 and according to the recommendations of the seal manufacturer.

02440.20 Strip Seals - Replace this subsection, except for the subsection number and title, with the following:

Furnish strip seals from the QPL and according to ASTM D5973.

02440.22 Preformed Compression Joint Seal - Replace this subsection, except for the subsection number and title, with the following:

Furnish preformed compression joint seals from the QPL and according to the requirements of AASHTO M 297.

02440.40(a) Preformed Flexible Joint Sealant - Replace this subsection, except for the subsection number and title, with the following:

Furnish Materials for tongue and groove or key lock manhole joints according to the requirements of ASTM C990.

02440.40(b) Rubber Gaskets - Replace this subsection, except for the subsection number and title, with the following:

Furnish Materials for O-ring manhole and concrete pipe joints according to ASTM C443.

02440.50 Joint Materials for Concrete Precast Manhole Section Joints - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

(a) Mortar - Furnish mortar according to the requirements of ASTM C387, or proportioned one part Type II portland cement to two parts clean, well-graded Sand passing a No. 6 screen. Admixtures may be used not exceeding the following percentages by weight of cement:

Hydrated lime	10%
Diatomaceous earth or other inert materials	5%

Furnish mortar with the consistency such that it will readily adhere to the precast concrete if using the standard tongue-and-groove type joint.

(b) Non-Epoxy (Non-Shrink) Grout - Furnish a non-epoxy (non-shrink) grout according to 02080.20. Place or pack non-epoxy (non-shrink) grouts only with the use of a non-epoxy bonding agent according to 02070.20, applied to all cured concrete surfaces being grouted. Use a bonding agent compatible with the grout used.

02440.60 Plastic Compound for Precast Manhole Section Joints - Replace the bullet that begins "Is pliable at temperatures ..." with the following bullet:

- Is pliable at temperatures between 32 °F and 135 °F. Ensure a specimen at 77 °F and 1/2-inch square in Cross Section stretches at least 1 1/2 inches before rupture when tested with the apparatus described in ASTM D113.

02440.70(a) Plastic - Replace the paragraph that begins "Polyvinyl chloride water stop ..." with the following paragraph:

Manufacture polyvinyl chloride water stop from virgin polyvinyl chloride (PVC) compound. Reclaimed PVC is not allowed. Furnish the water stop having the following properties:

02440.70(b) Rubber - Replace this subsection, except for the subsection number and title, with the following:

Furnish rubber water stops to the dimension shown and according to the requirements of ASTM C923, ASTM C1478, or ASTM F2510 as appropriate for the specific Structure and pipe types.

02440.80 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of joint Materials is according to 00165.35 and this Section.

SECTION 02450 – MANHOLE AND INLET MATERIALS

Replace Section 02450 of the Standard Specifications except for the Section number and title with the following:

US101: Butte Creek Culvert Project

Descriptions

02450.00 Scope - This Section includes the requirements for precast manhole sump sections, metal frames, covers, grates, and manhole steps.

Materials

02450.10 Precast Concrete Manhole Sections - Furnish precast risers, cones, and cover slabs for precast concrete manholes according to the requirements of AASHTO M 199 (ASTM C478).

02450.15 Precast Concrete Catch Basins and Inlets - Furnish precast concrete catch basins and inlet according to the requirements of ASTM C913.

02450.20 Precast Concrete Sump Sections - Furnish precast rings and lids for precast concrete sumps of portland cement concrete according to AASHTO M 199 (ASTM C478).

02450.30 Metal Frames, Covers, Grates, and Steps - Comply with the following:

Projects on State Highways		
Item	AASHTO (ASTM) Designation	Grade
Manhole frames and covers	M 306	Class 35 B
Inlet frames and grates	M 306	Class 35 B
	M 227 (A663)	65
	M 270 (A709) (A36)	36
	M 103 (A27)	65 - 35

All Other Projects		
Item	AASHTO (ASTM) Designation	Grade
Manhole frames and covers	M 105	Class 30 B
Inlet frames and grates	M 227 (A663)	65
	M 270 (A709) (A36)	36
	M 103 (A27)	65 - 35

Furnish steps for manholes that are steel-reinforced plastic according to AASHTO M 199 (ASTM C478) and AASHTO T 280 (ASTM C497). Use deformed reinforcing bar according to AASHTO M 31 (ASTM A615) Grade 60, No. 4 minimum. Use plastic material that is injection molded, with a textured, non-slip surface and a minimum thickness over the steel of 1/16 inch. Voids in the plastic are cause for rejection of the step.

Provide welding according to AWS D1.1. Furnish frames, covers and grates for use one with another with even and uniform bearings. Furnish miscellaneous metal items and hardware according to the appropriate requirements of Section 00560.

Galvanize inlet frames and grates that are fabricated out of steel according to the appropriate requirements of Section 02530.

US101: Butte Creek Culvert Project

02450.40 Damaged Zinc or Aluminum Coating - Repair damaged zinc or aluminum coating according to 02420.10(d).

02450.50 Acceptance - Acceptance of manholes and inlets is according to 00165.35 and this Section.

SECTION 02510 - REINFORCEMENT

Replace Section 02510 of the Standard Specifications except for the Section number and title with the following:

Description

02510.00 Scope - This Section includes the requirements for bars, dowels, and strand reinforcement and tendon ducts.

Materials

02510.10 Deformed Bar Reinforcement - Furnish deformed bar reinforcement from the QPL and according to the requirements of ASTM A706, AASHTO M 31 (ASTM A615), AASHTO M 334, or ASTM A1035. Unless otherwise specified or shown, furnish Grade 60 reinforcing bars.

02510.11 Epoxy Coated Reinforcement:

(a) **Plant Certification** - Apply epoxy coating in a coating plant certified by the Concrete Reinforcing Steel Institute (CRSI).

(b) **Handling** - Provide systems for handling coated bars having padded contact areas for the bars wherever feasible. Pad all bundling bands. Lift all bundles with strong-backs, multiple supports, or platform bridges so as to prevent bar-to-bar abrasion from sags in the bar bundle.

02510.20 Mechanical Splices - 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.

02510.25 Headed Bar Reinforcement - Furnish Class HA headed steel bar from the QPL for concrete reinforcement. Ensure the headed steel bar develops the specified minimum tensile strength of the reinforcing bars, according to ASTM A970. Ferrous-filler coupling sleeves and welded headed steel bars are not allowed for concrete reinforcement.

02510.30 Galvanized Reinforcement:

US101: Butte Creek Culvert Project

(a) **General** - Furnish galvanized reinforcement meeting the requirements of ASTM A767, Class II, including Supplementary Requirement S3, and ASTM A143.

(b) **Fabrication** - The bars may be fabricated before or after galvanizing. If the bars are fabricated after galvanizing, Supplementary Requirements S1 and S2 of ASTM A767 apply.

(c) **Handling** - Handle galvanized bars according to 02510.11(c).

02510.40 Welded Wire Reinforcement - Furnish welded wire reinforcement and deformed welded wire reinforcement meeting the requirements of ASTM A1064.

02510.50 Dowels - Furnish dowels meeting to the requirements of AASHTO M 31 (ASTM A615), for Grades 40 and 60, or AASHTO M 227 (ASTM A663) for Grades 70, 75, and 80.

02510.60 Ties and Supports - Furnish tie wire and supports according to CRSI Manual of Standard Practice.

(a) **Coated Reinforcement Ties and Supports** - Furnish 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. Furnish precast concrete blocks with galvanized ties that support galvanized reinforcement.

02510.70 Acceptance - Acceptance of reinforcement is according to 00165.35 and this Section.

SECTION 02513 – STAINLESS STEEL REINFORCEMENT

Replace Section 02513 of the Standard Specifications except for the Section number and title with the following:

Description

02513.00 Scope - This Section includes the requirements for stainless steel reinforcement bars, mechanical splices, chairs and supports, inserts, dowels, and tie wire.

Materials

02513.10 Deformed Bar Reinforcement - Furnish deformed bar reinforcement meeting the requirements of ASTM A955 except for Section 6, Chemical Composition and Section 15, Finish. Acceptable alloys are listed by Uniform Numbering System for Metals and Alloys (UNS) designation in Table 02513-1 and Table 02513-2. Finish the surface according to Table 02513-1 and the requirements of ASTM A380.

Table 02513-1
Allowable Stainless Steel Alloys for Reinforcing Bars and Dowels

UNS Designation	S31653	S31803	S20910	S24100	S32304
AISI Type	316LN	2205	XM-19	XM-28	2304
Common or Trade Name	Type 316 Low Carbon Nitrogen Added	Type 2205 Duplex	Nitronic 50	Nitronic 32 Enduramet 32 18-Cr-2Ni-12Mn	Type 2304 Duplex SAF 2304 Fe-23Cr-4Ni-0.1N
Required Condition	As rolled	As rolled	As rolled	As rolled	As rolled
Required Finish	Descaled and white pickled	Descaled and white pickled	Descaled and white pickled	Descaled and white pickled	Descaled and white pickled

Table 02513-1
Stainless Steel Alloys Mechanical Properties

Grade and UNS Designation	S31653 GR 60	S31653 GR 70	S31803 GR 60	S31803 GR 75	S20910 GR 60	S20910 GR 75	S24100 GR 60	S24100 GR 75	S32304 GR60	S32304 GR75
Minimum Tensile Strength (ksi)	90	95	90	95	90	95	90	95	90	95
Minimum Yield Strength (ksi)	60	75	60	75	60	75	60	75	60	75
Minimum Elongation in 2 inches (%)	25	20	25	20	25	20	25	20	25	20

02513.20 Mechanical Splices - Mechanical splices for reinforcing bars are systems that connect the bars without raising their temperature above 1,300 °F.

- Furnish mechanical splices that develop at least 90 percent of the specified minimum ultimate strength of the reinforcing bars in compression and in tension. Where bars of different sizes or strengths are connected, match the strength of the smaller or weaker bar.
- Do not allow the spliced reinforcing bars to slip more than 0.040 inch, measured between gauge points clear of the splice sleeve, when the reinforcing bars are loaded in tension to 67 percent of the specified minimum yield strength of the reinforcing bar.

US101: Butte Creek Culvert Project

- Fabricate the splice sleeve and connection hardware from an alloy listed in Table 02513-1. Finish the surface according to Table 02513-1 and the requirements of ASTM A380.

02513.35 Concrete Inserts - Furnish concrete inserts fabricated from an alloy listed in Table 02513-1. Finish the surface according to Table 02513-1 and the requirements of ASTM A380. Furnish concrete inserts with closed-back ferrule threaded to receive UNC threaded bolts or rods of the size shown. Furnish concrete inserts with the following minimum lengths and safe working loads:

Bolt or Rod Diameter (Inches)	Insert Length (Inches)	Safe Working Load in Shear or Tension (Pounds)
3/4	4 1/2	4,000
1	5 1/2	6,000
1 1/4	7 1/2	10,000
1 1/2	9 1/2	16,000

02513.50 Dowels - Furnish dowels meeting the requirements of ASTM A955 except for Section 6, Chemical Composition and Section 15, Finish. Acceptable alloys are listed by Uniform Numbering System for Metals and Alloys (UNS) designation in Table 02513-1. Finish the surface according to Table 02513-1 and the requirements of ASTM A380.

02513.60 Ties and Supports - Furnish 16-gauge tie wire and supports from Type 304 or Type 316 stainless steel according to *CRSI Manual of Standard Practice*.

02513.70 Acceptance - Stainless steel reinforcement is accepted according to 00165.35 and this Section.

SECTION 02515 – PRESTRESSING REINFORCEMENT

Replace Section 02515 of the Standard Specifications except for the Section number and title with the following:

Description

02515.00 Scope - This Section includes the requirements for seven-wire strand, high tensile strength wire, high tensile strength steel alloy bars, tendon duct and couplings.

Materials

02515.10 Seven-Wire Strand - Furnish seven-wire strand (bright wire) meeting the requirements of AASHTO M 203 (ASTM A416), Grade 270, supplement 1 (low relaxation strand), minimum ultimate strength, 270,000 psi.

02515.20 Wire, High Tensile Strength - Furnish high tensile strength wire meeting the requirements of AASHTO M 204 (ASTM A421).

02515.30 Bars, High Tensile Strength - Furnish high strength steel bars meeting the requirements of AASHTO M 275 (ASTM A722).

US101: Butte Creek Culvert Project

02515.40 Seven-Wire Strand Epoxy Coated Reinforcement - Furnish epoxy coated reinforcement meeting the requirements of ASTM A882.

02515.50 Tendon Duct - Furnish rigid galvanized steel ducts meeting the requirements of ASTM A653 with a coating weight of G90 for post-tensioned Structures. Transition couplings connecting rigid ducts in anchoring devices need not be galvanized.

Rigid ducts may be fabricated with either welded or interlocking seams. Galvanizing of the welded seam is not required. Furnish ducts with sufficient strength to maintain their correct alignment during placing of concrete and resist denting during construction.

The minimum wall thickness of ducts is 26 gauge for 2 5/8-inch diameter and smaller ducts, and 24 gauge for ducts that are larger than 2 5/8-inch diameter.

02515.60 Couplings - Furnish couplings that develop at least 95 percent of the minimum specified ultimate strength of the prestressing steel without exceeding anticipated set. Ensure the coupling of tendons does not reduce the elongation at rupture below the requirements of the tendon itself.

02515.70 Shipping Protection - Package prestressing steel to protect the steel against physical damage and corrosion. Place a corrosion inhibitor that prevents rust or other results of corrosion in the package, or use a corrosion inhibitor type packaging material, or when allowed, apply directly to the steel. Provide a corrosion inhibitor that has no deleterious effect on the steel or concrete or bond strength of steel to concrete. Immediately replace or restore damaged packaging.

Mark the shipping package with the type of corrosion inhibitor used, and the date packaged.

02515.80 Acceptance - Acceptance of pre-stressing reinforcement is according to 00165.35 and this Section.

SECTION 02520 – STEEL PILES

Replace Section 02520 of the Standard Specifications except for the Section number and title with the following:

Description

02520.00 Scope - This Section includes the requirements for steel pipe, steel H-beams, and steel sheets used for piling.

Materials

02520.10 Steel Piles:

(a) **General** - Furnish all steel piles, except steel pipe piles, meeting the requirements for Camber and sweep specified in AASHTO M 160 (ASTM A6).

(b) **Steel Pipe Piles** - Furnish either spirally welded or longitudinally welded steel pipe piles that are constant in section. Furnish steel piles meeting the requirements of ASTM A252 or API 5L and the grade shown.

US101: Butte Creek Culvert Project

(c) Steel H-Piles - Furnish steel H-piles that are rolled steel pile sections of the size and weight shown. Furnish steel H-piles meeting the requirements of ASTM A36 or ASTM A572. The manufacturer's name, brand or trademark may be shown by die stamping in the web at intervals not exceeding 20 feet along the length of the pile.

(d) Steel Sheet Piles - Furnish steel sheet piles meeting the requirements of AASHTO M 202 (ASTM A328).

(e) Reinforced Pile Tips - Steel pile tip reinforcement includes H-pile points, pipe pile shoes or points or any other proprietary steel pile tip reinforcement. Legibly mark or tag each cast steel point or shoe delivered to the Project Site with the heat or lot number. Submit certified mill test reports showing the physical and chemical properties of each heat or lot number. If the heat or lot number cannot be read on the point or if the mark or tag is missing, the point or shoe will be rejected.

Furnish reinforced tips for steel H-piles from the QPL. In addition, furnish all cast steel points or shoes meeting the following:

ASTM A27, Grade 65 - 35
ASTM A27, Grade 70 - 36
ASTM A27, Grade 70 - 40
ASTM A148, all grades

For steel H-piles provide no less than a 5/16-inch fillet weld full width of each flange.

(f) Sampling and Field Testing Pile Tips - The Engineer may randomly sample from each heat or lot number, at least one pile tip or up to 10 percent of the tips for larger projects, of the pile tips delivered for incorporation into the Project.

Test the selected tips as follows:

- Grind five smooth spots on each randomly selected tip. The Engineer will test each smooth spot on each tip with a portable hardness tester or in a laboratory. If three or more of the five spots tested have a reading below 74 on the "B" scale, the tested tip and the entire lot is rejected.
- For steel H-piles, determine the weight of the tips. Furnish cast steel H-pile point having a weight not less than 30 percent of the weight of a 1-foot section of the H-pile where it is attached. If any of the tested tips fail to pass the minimum weight criteria the entire lot is rejected.

Pile tips that are supplied unattached to the pile may be selected for nondestructive testing as described above. Pile tips passing the field test may be incorporated into the Project. Pile tips selected for testing that are supplied already attached to the pile are destructively tested as determined by the Engineer. Provide replacement tips for the tips that are destructively tested at no cost to the Agency. Replace rejected tips with new tips and rejected lots with new lots at no additional cost to the Agency. No time extension or other compensation is granted for Materials or Work required in testing pile tips, replacing rejected pile tips or for replacing tips that are destructively tested. New tips and new lots may also be tested.

02520.30 Acceptance - Material for piles is accepted according to 00165.35 and this Section.

SECTION 02530 – STRUCTURAL STEEL

Comply with Section 02530 of the Standard Specifications modified as follows:

02530.10 Structural Steel for Bridges - Replace the paragraph that begins “Structural steel for Bridges...” with the following:

Furnish structural steel for Bridges meeting the following, as shown or specified:

02530.20 Structural Steel for Non-Bridge Structures - Replace the paragraph that begins “Structural steel for metal...” with the following:

Structural steel for metal sign Structures and other non-Bridge Structures meeting the following, or as shown or specified:

Replace the paragraph that begins “Notch toughness...” with the following:

Ensure notch toughness of all structural steel members and plates greater than 1/2 inch thick in load carrying members of sign Bridges and cantilever sign supports meets Zone 2 requirements of AASHTO M 270.

02530.50 Universal Mill Plate - Replace the paragraph that begins “Universal mill plate...” with the following:

Universal mill plate is not allowed.

02530.70 Galvanizing - Replace this subsection, except for the subsection number and title, with the following:

Hot-dip galvanize according to the following, as applicable:

- AASHTO M 111 (ASTM A123)
- AASHTO M 232 (ASTM A153)

Furnish steel that is finished by hot-dip galvanizing for use as sign bridges, illumination poles, traffic signal poles, sign supports, bridge rail and items designated on the Plans as “Galvanize - Control Silicon” having controlled silicon content of either 0 - 0.06 percent or 0.13 percent - 0.25 percent. Before galvanizing, submit mill test certificates verifying silicon content to the Engineer and the galvanizer.

02530.80 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of structural steel is according to 00165.35 and this Section.

SECTION 02560 - FASTENERS

Comply with Section 02560 of the Standard Specifications modified as follows:

02560.05 Geometry - Replace this subsection, except for the subsection number and title, with the following:

Use a bolt or rod length such that the end of the bolt or rod extends beyond or is at least flush with the outer face of the nut when properly installed.

02560.10(a) Bolts - Replace this subsection, except for the subsection number and title, with the following:

Furnish carbon steel bolts meeting the requirements of ASTM A307, Grade A or B.

02560.10(b) Nuts - Replace the paragraph that begins “Nuts for carbon steel bolts...” with the following:

Furnish nuts for carbon steel bolts meeting the requirements of the following, or equivalent:

02560.20(a) Bolts - Replace the paragraph that begins “High-strength bolts used in...” with the following:

Use Type 3 high-strength bolts in noncoated weathering steel connections. Furnish high-strength bolts meeting the requirements of the following:

02560.20(b) Nuts - Replace the paragraph that begins “Nuts for high-strength bolts...” with the following:

Furnish nuts for high-strength bolts meeting the following requirements, or equivalent:

02560.20(c) Washers - Replace this subsection, except for the subsection number and title, with the following:

Furnish washers for high-strength bolts meeting the requirements of ASTM F436. Use Type 3 washers with Type 3 bolts.

02560.20(d) Direct Tension Indicators - Replace this subsection, except for the subsection number and title, with the following:

Furnish direct tension indicators that are the compressible-washer type, mechanically galvanized, according to ASTM F959. Adjust bolt lengths to accommodate both direct tension indicators and hardened washers.

02560.20(e) Markings - Replace this subsection, except for the subsection number and title, with the following:

Mark all bolts, nuts, washers and direct tension indicators according to the appropriate AASHTO/ASTM specifications and with a symbol identifying the manufacturer.

US101: Butte Creek Culvert Project

02560.30(a) Steel Tie Rods, Anchor Bolts, and Anchor Rods - Replace this subsection, except for the subsection number and title, with the following:

Furnish steel tie rods, anchor bolts, and anchor rods meeting the requirements of AASHTO M 314, Grade 36 or 55; ASTM F1554, Grade 36 or 55.

02560.30(b) High-Strength Tie Rods, Anchor Bolts, and Anchor Rods - Replace this subsection, except for the subsection number and title, with the following:

Furnish high-strength tie rods, anchor bolts, and anchor rods meeting the requirements of AASHTO M 314, Grade 105; ASTM F1554, Grade 105; or ASTM A449, Type 1.

End stamp all ASTM F1554, Grade 105 according to ASTM F1554 Supplementary Requirements S2 and S3. If the end of the bolt is to be embedded in concrete, mark the projecting end from the concrete.

02560.30(c) Nuts - Replace the paragraph that begins “Nuts for tie rods...” with the following:

Furnish nuts for tie rods, anchor bolts, and anchor rods meeting the following requirements, or equivalent:

02560.30(d) Washers - Replace this subsection, except for the subsection number and title, with the following:

Furnish washers for anchor bolts meeting the requirements of ASTM F436, Type 1.

02560.60(a) Rotational Capacity Test - Replace the paragraph that begins “Test each combination of bolt...” with the following:

Test each combination of bolt production lot, nut lot and washer lot as an assembly. Assign a rotational capacity lot number to each combination of lots tested. The minimum frequency of testing is two assemblies per rotational capacity lot. Test according to one of the following requirements:

02560.60(a)(1) Method 1 - Replace the paragraph that begins “the above measured torque...” with the following:

Do not allow the above measured torque to exceed the torque value calculated by the following equation:

Replace the paragraph that begins “Continue to tighten the nut until...” with the following:

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).

02560.60(a)(2) Method 2 - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Test bolts that are too short to be tested in a direct bolt tension indicating device in a steel joint.

Place the lubricated fastener including a washer in one or more flat structural steel plates. The total thickness including the washer is such that three to five full threads of the bolt are located between the bearing surfaces of the bolt head and the nut. Provide the hole in the joint at the same nominal diameter as the hole in the washer. Using a calibrated torque wrench, tighten the nut to a snug-tight condition to produce an initial torque in the bolt equal to approximately 10 percent of the torque calculated using the equation given in Method 1 above where P is the minimum tension in the bolt according to Table 00560-1 of Section 00560. Mark the nut's position relative to the fixed bolt for this snug tight position.

Using the calibrated torque wrench, further tighten the nut until the nut has turned the rotation shown in Table 00560-3 of Section 00560 from its snug-tight position mark. Prevent the bolt head from turning during the tightening process. Record the measured torque with the nut in motion. The measured torque is not to exceed 1.15 times the torque value calculated in the preceding step of Method 2. Reject assemblies with torque values exceeding the calculated value.

Tighten the nut further until the nut has turned twice the rotation shown in Table 00560-3 from its snug-tight position mark. Reject assemblies that fail this rotation either by stripping or fracture.

Loosen and remove the nut. Examine the threads on the nut and bolt. Reject assemblies showing evidence of thread shear failure, stripping or torsional failure of the bolt.

02560.60(b) Other Test Requirements - Replace the paragraph that begins "Provide three high-strength bolt ..." with the following:

Furnish three high-strength bolt assemblies per size per lot for check testing.

Replace the paragraph that begins "Provide one high-strength tie rod..." with the following:

Furnish one high-strength tie rod, one high-strength anchor bolt, and one high-strength anchor rod assembly per size per lot for check testing.

02560.70 Lubricating Fasteners - Replace the paragraph that begins "Furnish all galvanized and coated..." with the following:

Furnish all galvanized and coated fasteners with a factory applied commercial water-soluble wax that contains a visible dye of a color that contrasts with the color of galvanizing or coating. Furnish black fasteners that are "oily" to the touch when installed.

02560.80 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of fasteners are according to 00165.35 and this Section.

SECTION 02570 – COMPOSITE BEARINGS

US101: Butte Creek Culvert Project

Comply with Section 02570 of the Standard Specifications modified as follows:

02570.10 Elastomeric Compound - Replace the paragraph that begins "Provide Materials meeting..." with the following paragraph:

Furnish Materials meeting the following requirements:

Replace the paragraph that begins "**Elastomer** - Elastomer for elastomeric ..." with the following paragraph:

Elastomer - Furnish elastomer for elastomeric discs of pot bearings that are 100 percent virgin natural polyisoprene (natural rubber) or 100 percent virgin chloroprene (neoprene) meeting the following requirements:

Replace the paragraph that begins "When test specimens are cut..." with the following paragraph:

When test specimens are cut from the finished product a 10 percent variation in physical properties is allowed.

Replace the paragraph that begins "**Polyether Urethane** - The properties of polyether..." with the following paragraph:

Polyether Urethane - Ensure the properties of polyether urethane for polyether urethane discs of disc bearings meet the values of the following tests:

Replace the paragraph and bullets that begins "**Fabric Pads**..." with the following paragraph and bullets:

Fabric Pads - Make preformed fabric pads for fabric pad bearings of multiple layers of duck, impregnated and bound with high quality oil resistant synthetic rubber compressed into resilient pads of uniform thickness according to the following:

- Cotton duck reinforcement is either a two-ply cotton yarn or a single-ply 50-50 blend cotton polyester with a minimum of 8 ounces per square yard.
- The fabric has a minimum tensile strength of 150 pounds per inch width when tested by the grab method.
- The filling count of the duck is 40 ± 2 threads per inch.
- The warp count of the duck is 50 ± 1 threads per inch.
- The number of plies produce the specified thickness after compression and vulcanizing.
- Furnish the finished pads that withstand compression loads perpendicular to the plane of the laminations of not less than 10,000 psi without any sign of distress after the load is removed. The tested pad is required to have a shape factor greater than 2.5. Furnish preformed fabric pads with a Shore A hardness of 90 ± 5 .

02570.20(a) Clearance Test - Replace this subsection, except for the subsection number and title, with the following:

US101: Butte Creek Culvert Project

Move the components of the bearing through their design displacements or rotations to verify that the required clearances exist. If the test is conducted on a rotational component that is not under simultaneous full vertical load, make allowance for the displacements that would be caused by that load.

02570.20(b) Long-Term Deterioration Test - Replace this subsection, except for the subsection number and title, with the following:

Conduct test on one full scale bearing per lot. Load the bearing in compression to a stress corresponding to 100 percent of the maximum dead plus live service load while subjected to plus and minus the design rotational displacement amplitude for 5,000 cycles. Test flat sliding systems by displacement through at least 1,000 cycles with an amplitude of at least ± 1.0 inch (2.0-inch peak to peak). The sliding may take place at up to 10.0 inch per minute, except when readings of the coefficient of friction are taken, when the sliding speed is 2.5 inches per minute.

Bearings are rejected when:

- There are visible cracks, splits, or excessive wear on disassembly of the bearing.
- The coefficient of friction exceeds two-thirds the value used in design.

02570.20(c) Friction Test - Replace this subsection, except for the subsection number and title, with the following:

Conduct test on one full scale bearing per lot. Ensure the coefficient of friction between the sliding surfaces is not greater than 0.06 when the maximum working stress for the polytetrafluoroethylene (PTFE) surface is 2,000 psi and is not greater than 0.045 when the maximum working stress for the PTFE surface is above 3,000 psi. Determine the coefficient of friction at 68 °F according to the requirements of section 18.3.4.3.2 of the *AASHTO LRFD Bridge Construction Specifications*.

02570.30(d)(1) Vertical Proof Load Test - Replace this subsection, except for the subsection number and title, with the following:

Apply a vertical load equal to 150 percent of the vertical design capacity of the tested bearing for 5 minutes, unload, then reapply for an additional 5 minutes. Place the bearing in a rotated position during the test. Ensure rotation is 0.015 radians or the design rotation, whichever is greater. An acceptable test bearing does not show indication of failure or other defects such as weld cracking, plate distortion, extrusion of the elastomer or bearing material, or displacement of the elastomer seal while under load or subsequently upon disassembly and inspection.

The successful test of a bearing with a vertical design capacity of 50 Tons or less is accepted as qualification for all bearings of a similar design with a lesser design capacity.

02570.30(d)(2) Horizontal Proof Load Test - Replace the paragraph that begins "A horizontal proof load test..." with the following paragraph:

US101: Butte Creek Culvert Project

A horizontal proof load test is required when the design horizontal capacity exceeds 10 percent of the design vertical capacity and no engineer's calculations are submitted. Apply a horizontal load equal to 100 percent of the horizontal design capacity while also applying a vertical load equal to 100 percent of the dead load for a period of 2 minutes. The bearing does not need to be in the rotated position. An acceptable bearing does not show indication of failure or other defects such as weld cracking, plate distortion, extrusion of the elastomer or bearing material, or displacement of the elastomer seal while under load or subsequently upon disassembly and inspection.

SECTION 02571 – ELASTOMERIC BEARING PADS

Comply with Section 02571 of the Standard Specifications modified as follows:

02571.10 Elastomeric Compound - Replace the paragraph that begins "The elastomer portion of the elastomeric..." with the following paragraph:

Ensure the elastomer portion of the elastomeric compound is 100 percent virgin polychloroprene (Neoprene) or natural rubber (polyisoprene) meeting the requirements of section 18 of the AASHTO *LRFD Bridge Construction Specifications* including the properties from the following table:

02571.15 Metal Reinforcement - Replace this subsection, except for the subsection number and title, with the following:

Furnish metal reinforcement that is rolled, mild steel sheets 14 gauge thick and according to ASTM A1011, Grade 36 Type 1, or ASTM A1008, Grade 40.

02571.20(a) Pads - Replace this subsection, except for the subsection number and title, with the following:

Furnish pads 1/2 inch thick that are all elastomer. Furnish pads over 1/2-inch-thick consisting of alternate laminations of elastomer and metal.

In metal reinforced pads, the top and bottom layers are elastomer 1/4 inch thick, and interior elastomer layers are 1/2 inch thick. The nominal thickness of the bearing shown reflects the thickness of the elastomer only. It does not include the steel laminates.

02571.20(b) Laminations - Replace this subsection, except for the subsection number and title, with the following:

Furnish laminations of elastomer in uniform thickness and in no case allow the thickness of an individual lamination to exceed 5/8 inch. Do not allow variations in thickness of an individual elastomer lamination to exceed 1/8 inch and the variation in thickness of all elastomer laminations within a pad such that each metal lamination does not vary by more than 1/8 inch from a plane parallel to the top or bottom surface of the pad.

02571.20(c) Laminated Pads - Replace the paragraph that begins "Laminated pads shall be..." with the following paragraph:

US101: Butte Creek Culvert Project

Furnish laminated pads that are molded individually to the sizes required. No shearing to size or drilling of holes is allowed. Cover all edges of metal laminations with a minimum of 1/8 inch, and a maximum of 1/4 inch, of elastomer except at laminate restraining devices and around holes that are entirely closed when the pad is in place on the Structure.

Replace the paragraph that begins "Pads 1/2 inch in thickness may ..." with the following paragraph:

Pads 1/2 inch in thickness may be sheared. Ensure the shearing does not heat the material and produces a smooth finish to 250 microinches with no tears or jagged areas.

02571.30(a) General - Replace the paragraph that begins "Independently test all completed bearings..." with the following paragraph:

Independently test all completed bearings by compressive visual inspection according to 02571.30(b). Failure of individual bearings to pass the compressive visual inspection is cause for rejection of those individual bearings.

Replace the paragraph that begins "Independently test five standard test..." with the following paragraph:

Independently test five standard test specimens of laminated pads according to 02571.30(c). Failure of any individual specimen to meet the peel strength test requirements is cause for rejection of the entire bearing production lot. A lot is defined as 50 or less bearings that are manufactured in a reasonably continuous manner from the same batch of elastomer, cured under the same conditions, and are all the same size and type.

02571.30(b) Short-Duration Compression Test - Replace this subsection, except for the subsection number and title, with the following:

Bring all bearings to a temperature of $73^{\circ}\text{F} \pm 10^{\circ}\text{F}$ and proof load for a compressive loaded to 1.5 times the maximum design load. Hold the load for 5 minutes, remove, then reapply for a second period of 5 minutes. Maintain the load constant while the bearing is inspected for visual faults. The following is cause for rejection:

- A bulging pattern or patterns implying lack of bond between the elastomer and the laminate or bulging patterns that imply improper laminate placement.
- Three separate surface cracks that are greater than 5/64 inch wide and 5/64 inch deep, or a single crack 3/16 inch deep or wider than 1/4 inch.

02571.30(c) Peel Strength Test - Replace this subsection, except for the subsection number and title, with the following:

Perform a peel strength test according to ASTM D429 Method B, with the exception that the specimens are taken randomly and cut from a production bearing submitted for the Project. Ensure the bond between the elastomer and steel laminate in each specimen is not less than 40 pounds per inch.

SECTION 02610 – SPECIAL FILTER MATERIAL

Comply with Section 02610 of the Standard Specifications modified as follows:

02610.10(a) Grading - Replace the paragraph that begins "Sieve analysis shall be determined ..." with the following paragraph:

Perform sieve analysis according to AASHTO T 27. Furnish special filter material meeting the following gradation requirements:

02610.10(b) Fracture of Rounded Rock - Replace the paragraph that begins "Special filter material..." with the following paragraph:

Test special filter material according to AASHTO T 176 and ensure a Sand equivalent of not less than 25.

SECTION 02630 – BASE AGGREGATE

Comply with Section 02630 of the Standard Specifications modified as follows:

02630.10(a) Grading - Replace the paragraph that begins "Dense-graded base Aggregate..." with the following paragraph:

Furnish dense-graded base Aggregate consisting of crushed Rock, including Sand. Uniformly grade the Aggregates from coarse to fine. Perform sieve analysis according to AASHTO T 27. Furnish Aggregates according to one of the grading requirements of Table 02630-1 as identified in the Special Provisions or indicated by the Pay Items in the Contract Schedule of Items.

Replace the paragraph that begins "² Of the fraction passing the..." with the following paragraph:

² Of the fraction passing the 1/4-inch sieve, 40 percent to 60 percent is required to pass the No. 10 sieve

02630.10(b) Fracture of Rounded Rock - Replace the paragraph that begins "Fracture of rounded Rock..." with the following paragraph:

Determine fracture of rounded Rock according to AASHTO T 335. Provide at least one fractured face based on the following percentage of particles retained on the 1/4-inch sieve for the designated size:

US101: Butte Creek Culvert Project

02630.10(c) Durability - Replace the paragraph that begins "Dense-graded Aggregate ..." with the following paragraph:

Furnish dense-graded Aggregate meeting the following durability requirements:

02630.10(d) Sand Equivalent - Replace the paragraph that begins "Dense-graded Aggregate ..." with the following paragraph:

Test dense-graded Aggregate according to AASHTO T 176 and ensure a Sand equivalent of not less than 30.

02630.11(a) Grading – Replace this subsection, except for the subsection number and title, with the following:

Furnish 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 02690 – PCC AGGREGATES

Comply with Section 02690 of the Standard Specifications modified as follows:

02690.10 Materials - Replace this subsection, except for the subsection number and title, with the following:

Furnish PCC Aggregates consisting of natural or crushed Rock that is hard, strong, durable and free from adherent Coatings or other Detrimental Materials.

US101: Butte Creek Culvert Project

Produce, handle and store the Aggregates in a way that will maintain passing material properties and avoid introducing deleterious materials or segregation prior to its use in portland cement concrete.

02690.11 Alternate Grading - Replace this subsection, except for the subsection number and title, with the following:

The Contractor may request approval to produce Coarse and Fine Aggregates in sizes other than those stated in 02690.20 and 02690.30. Submit the request in writing and state the proposed target value and specified tolerances for each of the individual sieve sizes of the materials the Contractor proposes to produce.

02690.12 Acceptance of Aggregate - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of Aggregate is according to Section 00165 and based on the Contractor's quality control testing, if verified, according to Section 00165.

(a) 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.

(b) Non-specification Aggregate Gradation - Stockpiled Aggregates that contain non specification Aggregate gradation is 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.

Reprocessing of non-conforming material and the testing required for acceptance is at no additional cost to the Agency. Acceptance of reprocessed material is based on passing test results or accepted visually by the Engineer.

02690.20 Coarse Aggregate - Replace this subsection, except for the subsection number and title, with the following:

(a) Harmful Substances - Do not exceed the following harmful substances limits:

Test	Test Method		Percent (by Weight)
	ODOT	AASHTO	
Lightweight Pieces	—	T 113	1.0
Material passing No. 200 sieve	—	T 27 / T 11	1.0
Wood Particles	TM 225	—	0.05

(b) Soundness - Test Coarse Aggregates for concrete for soundness using sodium sulfate salt, according to AASHTO T 104. Do not exceed the weighted percentage loss of 12 percent by weight.

US101: Butte Creek Culvert Project

(c) Durability - Furnish Coarse Aggregates meeting the following durability requirements:

Test	Test Method		Requirements
	ODOT	AASHTO	
Abrasion	—	T 96	30.0% Max.
Oregon Air Aggregate Degradation:			
Passing No. 20 sieve	TM 208	—	30.0% Max.
Sediment Height	TM 208	—	3.0" Max.

(d) PCC Paving Aggregate - In addition to requirements above, comply with the following:

(1) Fracture - Furnish Aggregate with at least two fractured faces on at least 50 percent of the particles retained on the 3/8-inch, 1/2-inch, 3/4-inch, 1-inch, and 1 1/2-inch sieves, as determined by AASHTO T 335.

(2) Elongated Pieces - Furnish Aggregate with elongated pieces not exceeding 10 percent by weight of the material retained on the No. 4 sieve when tested according to ODOT TM 229 with the proportional caliper device set at a ratio of 5:1.

(e) Grading and Separation by Sizes - Sample according to AASHTO R 90. Perform sieve analysis according to AASHTO T 27 and AASHTO T 11. Furnish Aggregates meeting the gradation requirements of Table 02690-1 for structural concrete. Provide a CAgT to perform sampling and testing when required.

SECTION 02810 – BRIDGE RAIL

Replace Section 02810 of the Standard Specifications except for the Section number and title with the following:

Description

02810.00 Scope - This Section includes the requirements for the steel in railings for Bridges.

Materials

02810.10 Shapes, Plates, and Bars - Furnish shapes, plates and bars meeting the following, or as shown or specified:

- ASTM A36
- ASTM A572 Grade 50
- ASTM F1554 Grade 105

Provide the silicon content of all exposed shapes, plates and bars that are called out on drawings as "Galvanize - Control Silicon", according to 02530.70.

02810.15 Anchor Adhesive - Use one of the following epoxy adhesives from the QPL:

- Hilti HIT-HY200-A
- Hilti HIT-RE 500v3, Red Head C6+
- Ultrabond HS-1CC

02810.20 Structural Steel Tubing - Furnish structural steel rail members complying with ASTM A500, Grade B, or ASTM A501. Steel meeting the requirements of ASTM A513 or ASTM A618 may be substituted for ASTM A500 tubing subject to the following limitations:

- Provide chemical and tensile properties test results.
- Provide silicon content according to 02530.70.
- Strength and elongation requirements of ASTM A513 tubing meets the requirements of ASTM A500 tubing.

02810.30 Steel Pipe - Furnish metal parapet rail members that are standard steel pipe complying with ASTM A53, Grade B or ASTM A500, Grade B.

02810.40 Cast Steel Posts - Furnish cast steel posts that are carbon steel castings complying with AASHTO M 103 (ASTM A27), Grade 65-35.

02810.50 Metal Thrie Beam Rail - Galvanize steel thrie beam rail according to AASHTO M 180, Class A rail, Type II coating after fabrication and subject to the single spot test. Backup plates are accepted with ungalvanized edges and bolt holes, provided these

US101: Butte Creek Culvert Project

areas are field-coated with an approved galvanizing substitute according to 02530.71. Provide metal posts and hardware meeting the requirements of 02820.20 and 02820.30.

02810.60 Incidentals - Furnish plates, caps and miscellaneous pieces necessary to complete the rail as shown or specified.

02810.70 Acceptance - Bridge rail Materials are accepted according to 00165.35 and this Section.

SECTION 02820 – METAL GUARDRAIL

Replace this Section except for the Section number and title with the following:

Description

02820.00 Scope - This Section includes the requirements for forming galvanized steel sheets into metal beam rail, and the manufacture of guardrail hardware.

Materials

02820.10 Metal Beam Rail - Form metal beam rail from galvanized steel. Furnish galvanized steel beam rail meeting the requirements of AASHTO M 180, Class A. Furnish zinc coating meeting the requirements of AASHTO M 180, Type II, applied after fabrication and subject to the single spot test. Backup plates are accepted with ungalvanized edges and bolt holes, provided these areas are field coated with an approved galvanizing substitute.

02820.20 Metal Guardrail and Median Barrier Posts - Furnish metal posts that are structural steel meeting the requirements of ASTM A36 and galvanized according to AASHTO M 111 (ASTM A123).

02820.30 Guardrail Hardware - Furnish all bolts, nuts, washers and other fittings for beam type guardrail that are galvanized steel meeting the requirements of AASHTO M 180.

Furnish all bolts, nuts, and washers as detailed, with nuts tapped oversize not to exceed 1/32 inch.

02820.40 Guardrail Anchor Hardware - Furnish cable and fittings for guardrail anchors according to the requirements of AASHTO M 30, Class A, for Type II cable. Galvanize all fittings according to AASHTO M 111 (ASTM A123).

For steel anchors, furnish steel tubing meeting the requirements of ASTM A500, Grade B, ASTM A501 or ASTM A618. Furnish a Soil plate meeting the requirements of ASTM A36. After fabrication galvanize tubing and plate according to AASHTO M 111 (ASTM A123).

02820.50 Acceptance of Materials - Acceptance of metal guardrail Materials is according to Section 00165.35.

SECTION 02910 - SIGN MATERIALS

Comply with Section 02910 of the Standard Specifications modified as follows:

02910.10 Aluminum - Replace the paragraph that begins "The aluminum Materials shall..." with the following paragraph:

Furnish new aluminum Materials meeting the following requirements:

Replace the paragraph that begins "Aluminum to be color coated shall..." with the following paragraph:

Furnish aluminum to be color coated consisting of an alloy that is compatible with the coating and the application process. Furnish color-coated aluminum having a temper that, after coating and aging, provides an ultimate strength of 30,000 psi and a yield strength of 25,000 psi.

Replace the paragraph that begins "Fabricate sheet aluminum signs ..." with the following paragraph:

Fabricate sheet aluminum signs from aluminum alloy 6061-T6, 5052-H38, 5154-H38, or approved equal. Give a chromate treatment according to ASTM B449, Class 2 or a titanium-based coating according to ASTM B921. Provide certified test reports for all heats of aluminum products furnished to the Agency. Furnish signs with a thickness shown in Table 02910-1 unless otherwise indicated.

02910.11 Plywood - Replace this subsection, except for the subsection number and title, with the following:

(a) **General** - Construct all plywood signs for permanent signing from 3/4-inch high-density overlay plywood. Construct plywood signs for temporary signs from either 3/4-inch high-density overlay plywood or 3/4-inch medium-density overlay plywood. Furnish Douglas fir plywood, Grade B-B exterior or better, according to *Product Standard PS-1 for Douglas Fir Plywood* published by the U. S. Department of Commerce.

(b) **Overlay** - Furnish black or buff high-density and medium-density overlay unless otherwise shown or specified. Furnish high-density and medium-density overlays that meet the *Product Standard PS-1 for Douglas Fir Plywood*.

(c) **Plywood Sealer** - Fill all voids in top or sides of panel with caulking compound after cutting plywood to size. Apply an approved plywood edge sealer tinted to match the color of the panel overlay material. Use a medium oil alkyd primer sealer.

02910.20 Retroreflective Sheeting - Replace this subsection, except for the subsection number and title, with the following:

(a) **General** - Use retroreflective sheeting from the QPL and the following:

US101: Butte Creek Culvert Project

(1) Perforation - If required for application, the sheeting may be pre-perforated with holes not greater than 0.02 inch in diameter. Perforate the holes approximately 0.4 inch apart in rows approximately 1.5 inches apart.

(2) Surface - Furnish sheeting and adhesive compatible with non-reflective permanent cut-out legend.

(b) Acceptance - Provide a quality compliance certification according to 00165.35, certifying that the reflective sheeting furnished meets the above requirements.

02910.21 Nonreflective Sheeting for Sign Background: Replace this subsection, except for the subsection number and title, with the following:

(a) General - Furnish nonreflective sheeting that is durable, weather resistant, gloss plastic film, and has a protected, precoated adhesive backing.

(b) Color - Use color for the nonreflective sheeting according to 00940.10. Submit for testing a 4-inch by 4-inch sample of the background color for each color of nonreflective sheeting shown.

(c) Adhesive - Adhere the nonreflective sheeting by a mildew and vandal resistant precoated adhesive that has no staining effect on the sheeting.

(d) Film:

(1) General - Furnish nonreflective sheeting that is flexible and easily cut to shape. The minimum tensile strength of the sheeting is 5 pounds per inch width.

(2) Surface - Clean according to the manufacturer's recommendations. Furnish a smooth and flat sheeting surface that:

- Facilitates cleaning and wet performance.
- Is readily processed.
- Is compatible with recommended transparent and opaque process inks.
- Permits cutting and color processing at minimum temperatures of 60 °F.
- Is heat resistant and permits force curing of applied sheeting at temperatures up to 150 °F.
- Is solvent resistant.

(e) Durability - For non-reflective sheeting for a sign background, process and apply according to the manufacturer's recommendations. Furnish weather resistant Material that shows no discoloration, cracking, crazing, blistering or dimensional change following cleaning.

Furnish a sheeting surface capable of being readily refurbished when cleaned and clear over-coated according to the manufacturer's recommendations.

(f) Acceptance - Provide a quality compliance certificate according to 00165.35, certifying that the nonreflective sheeting furnished meets all the above requirements.

US101: Butte Creek Culvert Project

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.

02910.32 Retroreflective Removable Legend - Replace this subsection, except for the subsection number and title, with the following:

(a) General - Furnish letters and numerals for all removable legend according to the design of the FHWA *Standard Rounded Capital Letter Alphabets*. Furnish letters and numerals for removable legend for all freeway and expressway signs according to the design of Series "E" modified from the FHWA *Standard Rounded Capital Letter Alphabets*.

Provide mounting holes within the frames to permit the use of the mounting hardware specified in the Specifications. Provide a sufficient number of mounting holes to ensure a firm attachment of the frames to the sign and meet the requirements of 00940.45(b). This requires a minimum of four mounting holes at each joint in the border.

(b) Retroreflective Sheeting Legend - Fabricate removable legend with sheeting according to 02910.20 that is permanently adhered to a flat aluminum frame.

Furnish letters, numerals, symbols and borders a minimum of 0.032-inch-thick aluminum according to ASTM B209, alloy 3003-H14. Degrease and etch the aluminum, or treat with a light, tight amorphous chromate type coating.

US101: Butte Creek Culvert Project

Apply the reflective sheeting to the prepared aluminum according to the sheeting manufacturer's recommendations.

Furnish letters, numerals, symbols and borders that are clean-cut and sharp, and have a nearly plane surface.

(c) Acceptance - Acceptance of retroreflective removable legend is based on a mill test certificate from the aluminum manufacturer attesting to the correct alloy, temper, and material thickness of the metal supplied. The Engineer may reject damaged or non-specification materials regardless of the test certification provided.

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 according to the recommendations of the manufacturer of the reflective sheeting.

(c) Retroreflective Cut-out Legend - Use Material for retroreflective cut-out legend according 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 according to 02910.21.

(f) Digitally Printed Sign - Use processes and Materials for digitally printed signs according to the requirements of 02910.23.

02910.40 Hardware - Replace this subsection, except for the subsection number and title, with the following:

Furnish aluminum alloy, stainless steel, or hot-dip galvanized steel bolts, nuts, and washers to fabricate and erect signs. Furnish aluminum for bolts and nuts according to ASTM B211, alloys 2024-T4 or 6061-T6 as the Contractor elects. Furnish aluminum washers according to ASTM B209, alloy Alclad 2024-T4. Furnish stainless steel for bolts, nuts, and washers that are Type 304 or Type 316. Furnish galvanized steel bolts, nuts, and washers that are medium carbon steel. Galvanize steel hardware according to AASHTO M 232 (ASTM A153).

Use nylon washers supplied by the sheeting manufacturer as shown or directed.

Furnish mounting hardware of the design and type shown, or if not shown of such sizes and kinds as approved by the Engineer.

US101: Butte Creek Culvert Project

Furnish 1/8-inch diameter, 1/4-inch head diameter, domed head, aluminum alloy according to ASTM B316. Aluminum alloys 5052 and 5056 are acceptable alloys. Furnish anodized blind rivets that are the same color as the sign background that are used to attach sign panels to closure strips or wind beams.

02910.60(a) General - Replace this subsection, except for the subsection number and title, with the following:

Furnish electronically cuttable films consisting of durable, transparent, colored films coated with a transparent pressure sensitive adhesive protected by a removable liner. Furnish films designed to be cut on knife-over-roll (sprocket fed or friction fed) and flat bed electronic cutting machines. Furnish films available in standard traffic colors, be dimensionally stable, and be designed to optimally cut, weed, lift and transfer. Use electronically cuttable films from the QPL.

02910.75 Manufacturer Warranty - Replace the paragraph that begins "Furnish a manufacturer warranty ..." with the following paragraph:

Provide a manufacturer warranty that unconditionally warrants to the Agency the retroreflective sheeting products, sheeting with applied electronic cuttable film products, and installation under this Section against failure, according to this Subsection and 00170.85(c)(1). Use Agency-supplied warranty forms, available from the Engineer.

SECTION 03020 - EROSION MATERIALS

Comply with Section 03020 of the Standard Specifications modified as follows:

03020.90 Acceptance - Replace the paragraph that begins "Acceptance of commercially manufactured..." with the following paragraph:

Acceptance of commercially manufactured compost Material is the following:

BID SCHEDULE

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**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **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	470.00 SQFT		
0040	0222-0164000E PORTABLE CHANGEABLE MESSAGE SIGNS	2.00 EACH		
0050	0223-0168000T FLAGGERS	500.00 HOUR		
0060	0223-0168100E FLAGGER STATION LIGHTING	2.00 EACH		
0070	0223-0169000E TRAFFIC CONTROL SUPERVISOR	45.00 EACH		
0080	0223-0200000E AUTOMATED FLAGGER ASSISTANCE DEVICE	2.00 EACH		
0090	0224-0105000E TEMPORARY BARRICADES, TYPE III	12.00 EACH		
0100	0224-0145000E TEMPORARY PLASTIC DRUMS	100.00 EACH		
0110	0225-0150000F TEMPORARY REMOVABLE TAPE	4,000.00 FOOT		
0120	0225-0153000F TEMPORARY STRIPING	15,863.00 FOOT		
0130	0225-0153200J TEMPORARY PAVEMENT BARS	24.00 SQFT		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0140	0225-0154000F STRIPE REMOVAL	5,863.00 FOOT		
0150	0225-0156000J BAR REMOVAL	24.00 SQFT		
0160	0226-0126100F TEMPORARY BARRIER	2,512.50 FOOT		
0170	0226-0134000E TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM	4.00 EACH		
0180	0226-0137000E MOVING TEMPORARY IMPACT ATTENUATORS, NARROW SITE SYSTEM	2.00 EACH		
0190	0226-0138000E TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED	1.00 EACH		
0200	0226-0141100E REFLECTIVE BARRIER PANELS	410.00 EACH		
0210	0226-0141300E REPAIR TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM	3.00 EACH		
0220	0226-0141400E REPAIR TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED	2.00 EACH		
0230	0230-0200000A CONSTRUCT AND REMOVE TEMPORARY ROADBED AND SURFACING	ALL LUMP SUM		
0240	0231-0100000A CONSTRUCT AND REMOVE TEMPORARY ACCESS ROAD	ALL LUMP SUM		
0250	0240-0100000A TEMPORARY DRAINAGE FACILITIES	ALL LUMP SUM		
0260	0245-0100000A TEMPORARY WATER MANAGEMENT FACILITY AT STATION "L" 45+80	ALL LUMP SUM		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0270	0280-0100000A EROSION CONTROL	ALL LUMP SUM		
0280	0280-0101000J PLASTIC SHEETING	100.00 SQYD		
0290	0280-0105010J MATTING, TYPE A	13,200.00 SQYD		
0300	0280-0105050J MATTING, TYPE E	8,450.00 SQYD		
0310	0280-0105100J COMPOST EROSION BLANKET	10,400.00 SQYD		
0320	0280-0110000A EROSION AND SEDIMENT CONTROL MANAGER	ALL LUMP SUM		
0330	0280-0110010E CONSTRUCTION ENTRANCE, TYPE 1	5.00 EACH		
0340	0280-0112500E CONCRETE WASHOUT FACILITY	2.00 EACH		
0350	0280-0113000F SEDIMENT FENCE	2,800.00 FOOT		
0360	0280-0115030F SEDIMENT BARRIER, TYPE 3	300.00 FOOT		
0370	0280-0115040E SEDIMENT BARRIER, TYPE 4	50.00 EACH		
0380	0280-0115080E SEDIMENT BARRIER, TYPE 8	6,750.00 EACH		
0390	0280-0119000E STRAW BALE	5.00 EACH		
0400	0290-0100000A POLLUTION CONTROL PLAN	ALL LUMP SUM		
0410	0290-0102000A WORK CONTAINMENT PLAN	ALL LUMP SUM		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0420	0290-0200000A TURBIDITY MONITORING	ALL LUMP SUM		
0430	0294-0200010M CONTAMINATED SOIL AND ACM DISPOSAL	132.00 TON		
0440	0294-0500000A LEAD COMPLIANCE PLAN	ALL LUMP SUM		
0450	0295-0200000F REMOVE ASBESTOS MATERIAL, NON-FRIABLE	180.00 FOOT		
0460	0298-0200000A ABANDON MONITORING WELLS	ALL LUMP SUM		

SECTION: 0002 ROADWORK

0470	0305-0100000A CONSTRUCTION SURVEY WORK	ALL LUMP SUM		
0480	0310-0100000F REMOVAL OF PIPES	180.00 FOOT		
0490	0310-0106000A REMOVAL OF STRUCTURES AND OBSTRUCTIONS	ALL LUMP SUM		
0500	0310-0119110F ASPHALT PAVEMENT SAWCUTTING, LESS THAN 6 INCHES DEEP	450.00 FOOT		
0510	0320-0100000A CLEARING AND GRUBBING	ALL LUMP SUM		
0520	0330-0103000K TOE TRENCH EXCAVATION	3,035.00 CUYD		
0530	0330-0105000K GENERAL EXCAVATION	11,832.00 CUYD		
0540	0330-0126000K STONE EMBANKMENT	2,740.00 CUYD		

**OREGON DEPARTMENT OF TRANSPORTATION
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CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
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ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0550	0331-0112000J 24 INCH SUBGRADE STABILIZATION	290.00 SQYD		
0560	0350-0100000J DRAINAGE GEOTEXTILE, TYPE 1	115.00 SQYD		
0570	0350-0104000J RIPRAP GEOTEXTILE, TYPE 2	44.00 SQYD		
0580	0350-0105000J SUBGRADE GEOTEXTILE	2,710.00 SQYD		
0590	0390-0105000K LOOSE RIPRAP, CLASS 50	15.00 CUYD		
0600	0390-0135000K KEYED RIPRAP, CLASS 700	690.00 CUYD		

SECTION: 0003 DRAINAGE AND SEWERS

0610	0415-0100000F MAINLINE VIDEO INSPECTION	38.00 FOOT		
0620	0430-0100060F 6 INCH DRAIN PIPE	215.00 FOOT		
0630	0445-010012AF 12 INCH CULVERT PIPE, 5 FT DEPTH	38.00 FOOT		
0640	0445-0700120E SLOPED END SECTIONS, 12 INCH	2.00 EACH		
0650	0460-0100000J PAVED CULVERT END SLOPES	46.00 SQFT		
0660	0480-0100000F DRAINAGE CURBS	50.00 FOOT		

SECTION: 0004 BRIDGES

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0670	0510-0100000A SHORING, CRIBBING, AND COFFERDAMS	ALL LUMP SUM		
0680	0510-0101000A STRUCTURE EXCAVATION	ALL LUMP SUM		
0690	0510-0108000A GRANULAR STRUCTURE BACKFILL	ALL LUMP SUM		
0700	0520-0100010A PROVIDE PILE DRIVING EQUIPMENT	ALL LUMP SUM		
0710	0520-0131000F FURNISH PP 18 X 0.5 STEEL PILES	910.00 FOOT		
0720	0520-0316000E DRIVE PP 18 X 0.5 STEEL PILES	14.00 EACH		
0730	0520-0329000E PILE LOAD TEST (DYNAMIC)	2.00 EACH		
0740	0520-0330000E REINFORCED PILE TIPS	14.00 EACH		
0750	0520-0427000E PP 18 X 0.5 STEEL PILE SPLICES	2.00 EACH		
0760	0530-0104400A REINFORCEMENT, ASTM A1035 CM GRADE 100	ALL LUMP SUM		
0770	0540-0203100A DECK CONCRETE, CLASS HPC4500	ALL LUMP SUM		
0780	0540-0301000A GENERAL STRUCTURAL CONCRETE, CLASS 3300	ALL LUMP SUM		
0790	0540-0302000A GENERAL STRUCTURAL CONCRETE, CLASS 4000	ALL LUMP SUM		
0800	0540-0401000J SURFACE TEXTURING	480.00 SQYD		
0810	0545-0100100J REINFORCED CONCRETE BRIDGE APPROACH SLABS	215.00 SQYD		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0820	0550-0108200F BT 60 PRECAST PRESTRESSED GIRDERS	633.00 FOOT		
0830	0587-0105000A 3 TUBE CURB MOUNT RAIL	ALL LUMP SUM		
0840	1999-9Z90000A #5 GFRP REINFORCEMENT	ALL LUMP SUM		
0850	1999-9Z90000A #6 GFRP REINFORCEMENT	ALL LUMP SUM		

SECTION: 0005 BASES

0860	0620-0120000J COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP	5,730.00 SQYD		
0870	0641-0102000M AGGREGATE BASE	1,790.00 TON		
0880	0641-0130000M AGGREGATE SHOULDERS	1,100.00 TON		

SECTION: 0006 WEARING SURFACES

0890	0744-0302000M LEVEL 3, 1/2 INCH ACP MIXTURE	2,250.00 TON		
0900	0744-0341000M LEVEL 3, 1/2 INCH ACP MIXTURE IN TEMPORARY	24.00 TON		
0910	0749-0100000E EXTRA FOR ASPHALT APPROACHES	4.00 EACH		

SECTION: 0007 PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
0920	0810-0120000E GUARDRAIL ANCHORS, TYPE 1 MODIFIED	2.00 EACH		
0930	0810-0122000E GUARDRAIL END PIECES, TYPE B	1.00 EACH		
0940	0810-0126000E GUARDRAIL TRANSITION	4.00 EACH		
0950	0810-0129000E GUARDRAIL TERMINALS, NON- FLARED	3.00 EACH		
0960	0810-0146100F MIDWEST GUARDRAIL SYSTEM, TYPE 2A	668.25 FOOT		
0970	0810-0146100F MIDWEST GUARDRAIL SYSTEM, TYPE 3	50.00 FOOT		
0980	0840-0101000E DELINEATORS, TYPE 1U	8.00 EACH		
0990	0840-0104200E DELINEATORS, TYPE 4 ALTERNATE 2	8.00 EACH		
1000	0842-0101001E FACILITY FIELD MARKERS, TYPE S1 GREEN	1.00 EACH		
1010	0842-0102001E FACILITY FIELD MARKERS, TYPE S1 RED	1.00 EACH		
1020	0842-0103001E FACILITY FIELD MARKERS, TYPE S2	2.00 EACH		
1030	0842-0401000E BRIDGE IDENTIFICATION MARKERS	2.00 EACH		
1040	0855-0103100E BI-DIRECTIONAL YELLOW TYPE IAR MARKERS	4.00 EACH		
1050	0855-0107100E BI-DIRECTIONAL YELLOW TYPE IAR MARKERS, RECESSED	42.00 EACH		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1060	0865-0119600F THERMOPLASTIC, SPRAYED, SURFACE, NON-PROFILED	4,010.00 FOOT		
1070	0867-0145100J PAVEMENT BAR, TYPE B-HS	24.00 SQFT		

SECTION: 0008 PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS

1080	0905-0100000A REMOVE EXISTING SIGNS	ALL LUMP SUM		
1090	0905-0101000A REMOVE AND REINSTALL EXISTING SIGNS	ALL LUMP SUM		
1100	0910-0100000K WOOD SIGN POSTS	126.00 FBM		
1110	0920-0100000A SIGN SUPPORT FOOTINGS	ALL LUMP SUM		
1120	0930-0114000A PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS	ALL LUMP SUM		
1130	0930-0117000A PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	ALL LUMP SUM		
1140	0940-0202000J SIGNS, STANDARD SHEETING, SHEET ALUMINUM	90.00 SQFT		

SECTION: 0009 RIGHT-OF-WAY DEVELOPMENT AND CONTROL

1150	1014-0100000A WATER QUALITY FILTER STRIP, DFI# D01511	ALL LUMP SUM		
1160	1030-0101000R WEED CONTROL	4.00 ACRE		
1170	1030-0102000E SEEDING MOBILIZATION	2.00 EACH		

**OREGON DEPARTMENT OF TRANSPORTATION
BID SCHEDULE**

CONTRACT NO.: 15662 **PROJECT:** US101: BUTTE CREEK CULVERT
PROJECT KEY: 22419 **ADDENDUM NO.:** 0

ITEM NO	ITEM DESCRIPTION	QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			(IN FIGURES)	(IN FIGURES)
1180	1030-0103000R TEMPORARY SEEDING	1.00 ACRE		
1190	1030-0108000R PERMANENT SEEDING	3.42 ACRE		
1200	1040-0109000E CONIFER TREES, SEEDLINGS	12.00 EACH		
1210	1040-0121000E SEEDLING TREES, DECIDUOUS	56.00 EACH		
1220	1040-0152000E SHRUBS, BARE ROOT	153.00 EACH		
1230	1040-0180000E PLANT CUTTINGS, GREATER THAN 1 INCH	759.00 EACH		
1240	1040-0183000E WETLAND PLANTS, PLUGS	960.00 EACH		
1250	1091-0100000A STREAMBED ENHANCEMENT	ALL LUMP SUM		
1260	1999-9Z90000E FASCINES	130.00 EACH		

TOTAL BID: _____

