

**BID BOOKLET
FOR HIGHWAY CONSTRUCTION**



**LINN COUNTY ROAD DEPARTMENT
ALBANY, OREGON**

BRIDGE AND ROADWAY

ONE HORSE SLOUGH (BREWSTER ROAD) BRIDGE

BREWSTER ROAD

LINN COUNTY

APRIL 7, 2020

CLASS OF PROJECT FEDERAL AID NUMBER C043(052)

CLASS OF WORK BRIDGES AND STRUCTURES

BID OF _____

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

DESCRIPTION OF WORK

Bridge and Roadway
One Horse Slough (Brewster Road) Bridge
Brewster Road
Linn County

TIMES AND PLACES OF RECEIVING BIDS (BID CLOSING)

Bid Closing for the work described above will be 9:00:00 a.m. on the 7th day of April, 2020.

Before 9:00:00 a.m. on the day of Bid Closing, Bids shall be submitted to:

Ralph Wyatt, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W.,
Room 201, Albany, Oregon 97321

Bids, Bid modifications, and Bid withdrawals will not be accepted on 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 opened and read at the Linn County Courthouse, Board of Commissioners, 300 Fourth Avenue S.W., Room 201, Albany, Oregon, beginning at approximately 9:35 a.m. on the day of Bid Closing.

COMPLETION TIME LIMIT

See Special Provisions Subsection 00180.50(h).

CLASS OF PROJECT

This is a Federal-Aid Project. Brewster Road is classified as a Rural Major Collector.

CLASS OF WORK

The Class of Work for this Project is: Bridges and Structures.

APPLICABLE SPECIAL PROVISIONS

The Special Provisions booklet applicable to the above-described work, for which Bids will be opened at the place, time, and date stated above, is that which contains the exact information as shown above on this page.

Bidders are cautioned against basing their Bids on a booklet bearing any different description, date(s), class of project, or class of work.

INSTRUCTIONS FOR MODIFYING BID

General - Bid modifications must be received in writing by hand delivery, mail, parcel delivery service, or by electronic facsimile (FAX) transmission prior to the time designated for Bid Closing. Bid modifications received after Bid Closing will not be considered. **Incomplete or late transmittals will not be accepted, regardless of reason.**

One Horse Slough (Brewster Road) Bridge Bridge and Roadway

Bids will be modified at the Bid Opening according to the information received.

Instructions and Format - Make modifications to Bids according to the "Letter Format for Modifying Bid" document located in this Bid Booklet and the following:

- Prepare the modifications on the Bidder's letterhead stationery.
- Include the Project title and the Bidder's company name.
- Make changes (increase/decrease statement) for each affected Bid Item. (*Lumping the changes into one Bid Item may result in the Bid Item being unbalanced, causing the Bid to be considered irregular and constituting grounds for Bid rejection.*)
- List all decreased-in-Bid items in numerical order first, then list all increased-in-Bid items.
- Show the total difference in the Bid last. (*Do not refer to your original Bid total. Do not show a new Bid total. Do not include a new Bid Schedule.*)
- Print name and sign the letter by an individual authorized to execute Bids.

Hand Delivery, Mail, or Parcel Delivery Service - If delivering by hand, mail or parcel delivery service deliver to:

Ralph Wyatt, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W.,
Room 201, Albany, Oregon 97321

FAX Transmittals - If using FAX as transmission, send them according to the following:

- Send the FAX to the FAX telephone number 541-926-8228. FAX transmittals will be accepted only at this number. (*Contractors will be responsible for the payment for the transmission of Bid modifications.*)
- The time of receipt of FAX transmittals by the County will be determined by the time which is electronically imprinted upon the Bid change by the County facsimile machine.
- The Agency is not responsible for any failed or partial FAX transmissions of Bid changes, caused by whatever reason, mechanical failure or otherwise.
- **Complete Bids will not be accepted by FAX.**

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

LETTER FORMAT FOR MODIFYING BID

(NOTE: Text shown as "italic-underline" are instructions for preparing the letter for modifying Bids.)

(Prepare on Bidders Letterhead Stationery)

(Bid Opening Date)

Attn: Ralph Wyatt, County Administrative Officer

Hand Delivery, Mail, or Parcel Delivery Service Address:

Linn County Courthouse
300 Fourth Avenue S.W., Room 201
Albany, Oregon 97321

SUBJECT: Modifications to Bid

(Project Title)

(Bidders Company Name)

(For a decrease in a Bid amount: Copy and paste the following line for each Bid Item reduction.)

Reduce Bid Item No. _____ by \$_____ per _____ (Indicate unit of measurement, e.g.,
ton, cu. yd., sq. ft., etc.)

(For an increase in a Bid amount: Copy and paste the following line for each Bid Item increase.)

Increase Bid Item No. _____ by \$_____ per _____ (Indicate unit of measurement, e.g.,
ton, cu. yd., sq. ft., etc.)

This will (increase/decrease) our total Bid by \$_____. (Only show the total increase
or decrease of your Bid. Do not show
a new Bid total.)

(Printed name of individual signing below.)

(Signed by an individual authorized to sign
Bids and execute documents.)

**SPECIAL PROVISIONS
FOR HIGHWAY CONSTRUCTION**



**LINN COUNTY ROAD DEPARTMENT
ALBANY, OREGON**

**BRIDGE AND ROADWAY
ONE HORSE SLOUGH (BREWSTER ROAD) BRIDGE**

BREWSTER ROAD

LINN COUNTY

APRIL 7, 2020

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

DESCRIPTION OF WORK

Bridge and Roadway
One Horse Slough (Brewster Road) Bridge
Brewster Road
Linn County

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START DATE

No work included in this contract shall begin prior to the Preconstruction Meeting. Other Job Site Restrictions may apply as shown in Section 130.80 of these Specifications.

COMPLETION TIME LIMIT

See Subsection 00180.50(h).

CLASS OF PROJECT

This is a Federal-Aid Project. Brewster Road is classified as a Rural Major Collector.

CLASS OF WORK

The Class of Work for this Project is: Bridges and Structures.

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

PROJECT INFORMATION

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

Daineal Malone, P.E., Project Manager, Linn County Road Department,
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202;
email: daineal.malone@co.linn.or.us

Andrew Potts, P.E., Project Engineer, Linn County Road Department,
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202;
email: andrew.potts@co.linn.or.us

Chuck Knoll, P.E., Linn County Engineer, Linn County Road Department,
3010 Ferry Street, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202;
email: cknoll@co.linn.or.us

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

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Bridge and Roadway**

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- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
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- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

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 (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).

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.

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). 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 bid proposal or request for proposal 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).

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.

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.

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, 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 who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

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.

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, national origin, age or disability. The following procedures shall be followed:

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

b. The contractor 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of 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 contracting agency deems appropriate.

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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall 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.(1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.

(3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. 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, 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.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;

(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 of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. 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. 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 journeymen 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.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.

9. Disputes concerning labor standards. 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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 watchmen 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.

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. 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 watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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" 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:

(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.

2. 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. 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.

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

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 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.

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 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).

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 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 1, 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

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

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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.

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.

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.

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.

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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

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. 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

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

2. 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)

a. By signing and submitting this proposal, the prospective lower tier 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.

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 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall 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 20).

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.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

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:

<http://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 PR-1391. This report shall be sent directly to ODOT Office of 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 nonsegregated 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.

EQUAL EMPLOYMENT OPPORTUNITY-ASPIRATIONAL TARGET PROVISIONS

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

Aspirational Diversity Targets

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

Covered Areas

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

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

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

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

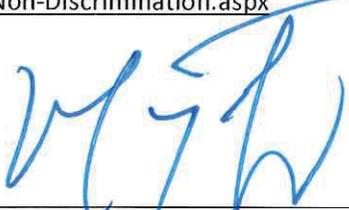
It is ODOT's policy never to exclude any person from participation in, deny any person the benefits of, or otherwise discriminate on the basis of race, color, sex, national origin, or disability in the award and administration of USDOT-assisted contracts. It is ODOT's policy to ensure DBEs, as defined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

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

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

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

ODOT Office of Civil Rights
3930 Fairview Industrial Drive, MS-23
Salem, OR 97302
<http://www.oregon.gov/ODOT/Business/OCR/Pages/Non-Discrimination.aspx>



Matthew Garrett, Director
Oregon Department of Transportation

For questions or further information, please contact:

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6-29-17

Date

DBE INFORMATION

GENERAL INFORMATION

It is the policy of the Oregon Department of Transportation (ODOT) that disadvantaged business enterprises (DBE) as defined in 49 CFR 26 shall have the opportunity to participate in the performance of contracts financed in whole or in part with USDOT funds under this agreement.

A full explanation of DBE Participation Goals and Requirements is in Sections 03.00 and 04.00 of the DBE Supplemental Required Contract Provisions.

Firms certified by the Certification Office of Business Inclusion and Diversity (COBID) as DBE in the state of Oregon shall be used to meet the assigned DBE contract goals for DBE participation on contracts funded in whole or in part with U.S. Department of Transportation (USDOT) funds.

Responsiveness is based on the DBE firm's certification status at time of Bid Opening. Contractors should not rely upon past experiences and verbal assurances of firms listed or non-listed.

Services and Commodity Codes reflect information provided by the certified DBE Firms and is not used as a pre-qualification factor by ODOT.

All Bidders, including DBE prime Bidders, are required to submit a Subcontractor Solicitation and Utilization Report form to ODOT Office of Civil Rights, DBE Program, within 10 Calendar Days after the Bid Opening date.

WEBSITES

DBE Directory - A Certification Directory of DBEs is available from COBID at:

<https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp>

Subcontractor Solicitation And Utilization Report - The Subcontractor Solicitation and Utilization Report form is available from the Office of Civil Rights at:

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

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

01.00 DBE Policy and Authorities:

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

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

(2) DBE Required Assurance - The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of USDOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the ODOT deems appropriate. Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

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

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

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

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

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

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

Oregon Revised Statutes, Chapters 200 and 279.

Oregon Administrative Rules, Chapter 123, Division 200, Certification Procedures.

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

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

(a) Abbreviations:

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

DBE - Disadvantaged Business Enterprise

FAA - Federal Aviation Administration

FHWA - Federal Highway Administration

FTA - Federal Transit Administration

ODOT - Oregon Department of Transportation

USDOT - United States Department of Transportation

(b) Definitions:

Assigned DBE Contract Goal - An assigned numerical percentage value of the total dollar amount of a Contract Award that is allocated solely for DBE participation.

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

Certification Directory of DBEs - A publication (available in paper or Internet) listing all DBEs which are currently certified by the COBID. The Directory is provided to the

Contractor for use in identifying DBE firms whose participation on a contract may be counted toward achievement of the assigned DBE contract goal.

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

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

Commercially Useful Function (CUF) - Commercially useful function and related DBE crediting rules are set out fully in 49 CFR 26.55. In part, 49 CFR 26.55(c) defines commercially useful function as follows:

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

Committed DBE - A Committed DBE firm is one that was identified by the Contractor to meet an assigned DBE contract goal as a condition of Contract Award, and includes any substitute DBE that has subsequently been committed work to meet the assigned DBE contract goal. A non-Committed DBE is one that was hired on a race- and gender-neutral basis and has not been identified as a substitute Committed DBE.

Commodity Codes - Codes assigned by the COBID to indicate the standard types of work the DBE provides.

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

DBE Eligibility - A firm is eligible to participate as a DBE if it meets the criteria as established by the federal DBE regulations in 49 CFR part 26 and enforced by the certifying agency, COBID. A firm will no longer be able to participate as a DBE on current or future contracts when it receives notification of decertification, denial of recertification, or notice of graduation by the certifying agency.

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

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

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

Joint Venture DBE - An ODOT certified enterprise consisting of two or more businesses formed to jointly carry out a single highway construction project, one or more of which is a certified DBE (see Section 8.00).

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

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

Operational Control - Consistent with normal industry practice, the DBE shall supervise the daily operations of the work contracted. There are only two acceptable ways for the DBE to supervise the daily operations. The DBE owner may act as superintendent and directly supervise the work or a skilled and knowledgeable superintendent employed by and paid wages by the DBE shall directly supervise the work. If the latter is used, the DBE owner shall be actively involved in making the operational and managerial decisions of the firm.

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

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

- Compensation for performance of work is on a unit price or lump sum basis.

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

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

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

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

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

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

According to 49 CFR 26.71(n), DBE firms are certified only for specific types of work. If a DBE firm has not been certified prior to Bid Opening, for the type of work it is intending to perform on a given contract, then the firm's participation on that contract cannot count toward assigned DBE contract or overall goals.

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

04.00 Subcontracting Limitations:

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

(b) Second Tier DBE Subcontracts - Second tier DBE subcontracts may be counted toward the Contractor's assigned DBE contract goal provided the subcontract was listed in the original DBE commitment prior to bid award.

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

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

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

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

The Contractor shall make good faith efforts to replace with another DBE, a DBE who is unable or unwilling to perform, unable to perform a commercially useful function, or has changed its ownership and/or control. Section 10.00 discusses the procedures that shall be followed to terminate a Committed DBE and replace the firm with a substitute.

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

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

<http://www.oregon.gov/ODOT/CS/CIVILRIGHTS/Pages/forms.aspx>

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

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

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

(a) Type of Work - List the types of work the DBE will perform.

(b) Personnel Required - List the names and/or craft classifications for personnel who will perform. Indicate whether the individual is regularly employed by the DBE, or the source from which the individual was or is to be recruited.

(c) Equipment Required - List the items of equipment that will be used on the project. Indicate whether the equipment is owned, rented or leased. If rented or leased, consent to the rental or lease shall be obtained from the Agency prior to beginning of the work.

(d) Supplies and Materials Required - List the supplies and materials that will be used on the project. Indicate the source, by name, address, and phone number, from which supplies and materials will be obtained. For a DBE supplier committed to meet an assigned DBE contract goal, attach documentation showing how the DBE meets manufacturer, regular dealer, or broker requirements, as applicable to the credit being claimed and provide any additional explanation needed regarding ordering, scheduling, and delivery according to subsection (f) below.

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

(f) Additional Information - Provide comments or explanation of any of the information provided above. Include information related to joint check arrangements or any plans

the DBE has to subcontract work to a lower tier or perform work through a specialty contractor.

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

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

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

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

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

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

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

(a) The DBE (Not Some Other Business Entity) Shall Actually Perform the Subcontract - The DBE's utilization of labor, supervisory personnel, equipment and material in the performance of the subcontract shall be consistent with industry standards and shall demonstrate that the DBE and not some other business entity is actually performing the subcontract. For example, if a DBE associates itself too closely with another business entity or entities, in acquiring a labor force, supervisors, equipment or materials to an extent inconsistent with industry standards, the DBE can no longer be said to be actually performing the subcontract because a partnership or joint venture, of which the DBE is a member, is the actual performer of the subcontract.

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

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

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

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

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

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

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

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

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

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

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

10.00 Termination and Substitution of DBEs - The Contractor shall notify the Engineer in writing of the termination or substitution of any DBE participating on the project. For Committed DBEs, the Contractor shall obtain written consent from the Engineer before terminating and, if required to meet the assigned DBE contract goal, replacing a Committed DBE with a substitute. Written consent for terminating the performance of any Committed DBE will be granted only where the Contractor can demonstrate good cause that the DBE is unable, unwilling or ineligible to perform. Such written consent to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE. Termination or replacement of a Committed DBE will not be consented to based solely on a Contractor's ability to negotiate a more advantageous contract with another subcontractor.

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

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

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

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

(d) Proposed Substitution of Another Certified DBE - When a Committed DBE substitution shall occur, the Contractor may submit another eligible DBE firm to replace the original committed firm in writing. The Contractor shall submit the name of the DBE firm, the proposed work to be performed, and the dollar amount of the work. The Contractor shall give pertinent information including bid item, item description, bid quantity and unit, unit price, and total price. In addition, the Contractor shall submit a written DBE Work Plan for the requested substitute DBE according to Section 07.00. The dollar value of work to be performed by the substitute DBE shall be in an amount

equal to the dollar value of the amount committed to the terminated DBE, minus the value of work performed to date by the DBE, prior to the request for substitution. Should the Contractor be unable to commit the required dollar value to the substitute DBE, the Contractor shall provide written evidence of good faith efforts made to obtain the substitute value requirement. The Agency will review the quality and intensity of those efforts. Efforts that are merely superficial are not good faith efforts to meet the assigned DBE contract goal. The Contractor shall document the steps taken to obtain participation which demonstrate the good faith efforts outlined below:

- Evidence that the Contractor attended any pre-solicitation or prebid meetings that were scheduled by ODOT to inform DBE firms of contracting and subcontracting or material supply opportunities available on the project;
- Evidence that the Contractor identified and selected specific economically feasible units of the project to be performed by DBE firms in order to increase the likelihood of participation by DBE firms;
- Evidence that the Contractor advertised in general circulation, trade association, minority and trade oriented, women-focus publications, concerning the subcontracting or supply opportunities;
- Evidence that the Contractor provided written notice to a reasonable number of specific DBE firms, identified from the DBE Directory of Certified Firms for the selected subcontracting or material supply work, in sufficient time to allow the enterprises to participate effectively;
- Evidence that the Contractor followed up initial solicitations of interest by contacting the enterprises to determine with certainty whether the enterprises were interested. The Contractor should provide the following information as evidence:
 - The names, addresses, and telephone numbers of DBE firms who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacting the DBE firms to determine with certainty whether the DBE firms were interested;
 - A description of the information provided to the DBE firms regarding the plans and specifications and estimated quantities for portions of the work to be performed;
 - Documentation of each DBE contacted, but rejected and the reasons for the rejection.
- Evidence that the Contractor provided interested DBE firms with adequate information about the plans, specifications and requirements for the selected subcontracting or material supply work;
- Evidence that the Contractor negotiated in good faith with the enterprises, and did not without justifiable reason reject as unsatisfactory bids prepared by any DBE;
- Evidence that the Contractor advised and made efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance required by ODOT or Contractor;
- Evidence that the Contractor's efforts to obtain DBE participation were reasonably expected to produce a level of participation sufficient to meet the assigned DBE contract goal or requirements of ODOT;
- Evidence that the Contractor used the services of minority community organizations, minority organizations identified by the Advocate for Minority and

Women Business that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises; and

- Evidence that the Contractor used the services of ODOT's Supportive Services Contractor(s).

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

12.00 Contractor Payments to Subcontractors and Suppliers:

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

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

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

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

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

each non-Committed DBE supplier or service provider with estimated total payments for the Project over \$10,000.

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

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

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

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

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

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

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

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

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

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

For further information concerning Disadvantaged Business Enterprise participation, including confirmation of certification for type of work, contact, in writing, the DBE Program Manager not later than one week prior to the project Bid Opening at ocrinforequest@odot.state.or.us.

Other requests may be directed to:

Oregon Department of Transportation
Office of Civil Rights MS 23
3930 Fairview Industrial Dr., S.E.
Salem, OR 97302
Phone: 503-986-4350
Fax: 503-986-6382
ocrinforequest@odot.state.or.us

DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENT REQUIREMENTS

1. DBE Policies, Obligations, Applicabilities, and Authorities

According to 49 CFR Part 26, all ODOT, all Bidders, and all Contractors shall agree to abide by and take all necessary and reasonable steps to comply with the DBE policies, obligations, applicabilities and authorities listed in the Disadvantaged Business Enterprise (DBE) Supplemental Required Contract Provisions.

The "assigned DBE contract goal" for this project is referred to in the project Special Provisions.

2. Eligibility Requirements for DBE Participation on Projects

Participation shall be accomplished by including certified DBEs in any part of the Contract work that is necessary to complete the Contract obligation. A certified DBE may participate as a prime Contractor, subcontractor, joint venture, material supplier, material manufacturer, or professional service provider.

Only those firms certified by the Certification Office of Business Inclusion and Diversity (COBID) as a DBE in the types of work selected shall be eligible to fulfill required DBE participation Contract obligations.

3. Crediting of DBE Participation Toward Meeting the Assigned DBE Contract Goal

(a) Crediting of DBE Participation in Bid Submission

Credit toward meeting the assigned DBE contract goal shall be granted only when a listed firm is currently certified by COBID as a DBE. Bidders should not assume that a minority-owned or a woman-owned firm is currently certified by COBID as a DBE firm or that a firm is certified to perform any particular type of work. Bidders are encouraged to verify each DBE firm's certification by:

- 1) requesting a copy of the DBE certification letter from the committed DBE firm and contacting COBID at 503-986-0075 to confirm the firm's current certification status; or
- 2) accessing the updated Certification Directory of DBEs by going to the COBID website at <https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp>

For joint ventures, the percentage of DBE participation to be credited toward the assigned DBE contract goal will be determined and approved by ODOT prior to Bid Opening on the basis of information submitted in the joint venture application according to Item No. 6 DBE Participation through Joint Venture.

(b) Crediting of DBE Participation Subsequent to Contract Award

The total dollar value of and the scope of work for the DBE commitment as shown on the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM shall be credited toward meeting the assigned DBE contract goal, provided the DBE performs a Commercially Useful Function according to 49 CFR 26.55(c)(1).

(c) Crediting of DBE Participation through the Use of DBE Manufacturers

The Bidder may count 100% of its expenditure to a DBE manufacturer. According to 49 CFR 26.55(e)(1)(i), a DBE manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.

The Bidder may count 100% of its expenditures for a DBE firm that furnishes and places these materials **only if** the DBE firm is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The DBE shall negotiate the cost, arrange delivery of, and pay for the materials and supplies required for the work of its contract. Invoices for materials must be invoiced to the DBE firm and not to the Contractor.

(d) Crediting of DBE Participation Through Use of DBE Regular Dealers

The Bidder may count only 60% of the committed amount for the cost of supplies and materials from regular dealers toward meeting the assigned DBE contract goal. According to 49 CFR 26.55(e)(2)(i) a DBE regular dealer owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the Contract are bought, kept in stock, and regularly sold to the public in the usual course of business.

No credit will be granted if the Contractor makes a direct payment to a material supplier. However, it will be permissible for a material supplier to invoice the Contractor and the DBE jointly and be paid by the Contractor making remittance to the DBE firm and material supplier jointly, provided such joint payment arrangements received prior written approval from ODOT.

No credit will be granted if the Contractor deducts from the amounts owed to DBE firms for work performed the costs for: (1) materials and service ordered by the DBE firm and used by the DBE in performing its work, (2) purchase price of supplies or materials acquired from the Contractor by the DBE firm and used by the DBE in performing its work, and (3) cost of equipment leased or rented from the Contractor by the DBE firm and used by the DBE in performing its work. Credit shall be withheld where such costs have been deducted from dollar amounts paid to DBE firms for work performed.

(e) Crediting of DBE Participation through Use of DBE Service Providers

Credit toward meeting the assigned DBE contract goal through use of DBE service providers shall be granted for:

(1) The fees or commissions charged for providing a BONA FIDE service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the Contract, provided that the fee or commission is determined by ODOT to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(2) The fees charged for delivery of materials and supplies required on a job site (but not the cost of materials and supplies themselves) when the hauler, trucker, or delivery service is not also the manufacturer of or a regular dealer in the materials or supplies. The fee must be reasonable and not excessive as compared with fees customarily allowed for similar services.

(3) The fees or commissions charged for providing any bonds or insurance specifically required for the performance of the Contract, provided that the fee or commission is determined by ODOT to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(4) The total dollar value of payments to the DBE for which a Commercially Useful Function was performed in delivering a professional, technical and/or expert service.

(f) Crediting of DBE Participation Through Use of DBE Owner/Operator Trucking

A DBE owner/operator must own and operate at least one truck and be certified by COBID.

In order for the Contractor or subcontractor to be credited and receive payment for DBE owner/operator trucking participation, a valid agreement that includes or has attached the following information must be submitted to the Engineer:

- (1) Driver's name;
- (2) Copy of driver's license;
- (3) Vehicle identification number;
- (4) Copy of vehicle registration;
- (5) Motor vehicle license plate number;
- (6) Motor Carrier Plate Number;
- (7) Copy of ODOT Motor Carrier 1A Permit;
- (8) Name of owner/operator from the side of the truck; and
- (9) Method of payment (hour, ton or load)

(g) Crediting of DBE Participation Through Use of DBE Trucking Firms

In order for the Contractor to receive credit and payment for the use of a DBE trucking firm, the trucking firm must be covered by a subcontract or written agreement, and the Engineer must have granted consent to that subcontract or agreement prior to the beginning of the work.

4. Documentation of Bidders' Proposed DBE Participation

(a) DBE Commitment Certification and Utilization Form

DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM shall become a part of the resulting Contract. This certification and utilization form shall be used to determine the Bidder's responsiveness to the DBE requirements.

If the assigned DBE contract goal is greater than zero, the Bidder must complete and sign the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM. The form must be completed and signed by the Bidder's authorized representative. In Part I of the form, the Bidder shall fill in each committed DBE firm and its corresponding type of work, its capacity, and the subcontract amount, expenditure, fee, or commission. Should the Bidder fail to completely fill out, sign, and submit the form with the bid when the assigned DBE contract goal is greater than zero, the Bidder will be considered non-responsive. The Agency will calculate each DBE amount, total the amount to be applied to the assigned DBE contract goal and calculate the DBE commitment as a percentage of the total bid.

(b) DBEs Bidding as Prime Contractors

The requirements of section 4(a) will apply to DBE Bidders for a Contract. In determining whether a DBE Bidder for a Contract has met an assigned DBE contract goal, only the work the DBE has committed with its own forces as well as the work that it has committed to be performed by DBE subcontractors, suppliers, or service providers will be counted.

DBEs bidding as prime Contractors shall complete the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM indicating the percentage of work to be performed by its own forces as well as the work to be performed by other committed DBEs to meet the assigned DBE contract goal.

(c) DBE Commitment Certification Form Part II - Good Faith Efforts

It is the intent of ODOT that all Bidders meet the assigned DBE contract goal for DBE participation. It is recognized that in rare exceptions it may not be possible for all Bidders to meet the assigned DBE contract goal. To determine whether the contract should be awarded to a Bidder that has failed to meet the assigned DBE contract goal, ODOT must decide whether the efforts made to obtain DBE participation constituted good faith efforts. ODOT will review the quality and intensity of those efforts. Efforts that are merely superficial are not good faith efforts to meet the assigned DBE contract goal.

In the event a Bidder is unable to meet the assigned DBE contract goal, the Bidder shall provide additional information regarding good faith efforts per the requirements Part II of the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM. The Bidder must document the steps taken to obtain DBE participation, which demonstrate good faith efforts, such as those outlined below:

- (1) Evidence that the Bidders attended any pre-solicitation or prebid meetings that were scheduled by ODOT to inform DBEs of contracting and subcontracting or material supply opportunities available on the project;
- (2) Evidence that the Bidder identified and selected specific economically feasible units of the project to be performed by DBEs in order to increase the likelihood of participation by DBEs;
- (3) Evidence that the Bidder advertised in general circulation, trade association, minority and trade oriented, women-focus publication, concerning the subcontracting or supply opportunities;
- (4) Evidence that the Bidder provided written notice to a reasonable number of specific DBEs, identified from the Certification Directory of DBEs for the selected subcontracting of material supply work, in sufficient time to allow the enterprises to participate effectively;
- (5) Evidence that the Bidder followed up initial solicitations of interest by contacting the enterprises to determine with certainty whether the enterprises were interested. This may include the information outlined below:
 - (a) The names, addresses, and telephone numbers of DBEs who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacting the DBEs to determine with certainty whether the DBEs were interested;
 - (b) A description of the information provided to the DBEs regarding the plans and specifications and estimated quantities for portions of the work to be performed;
 - (c) Documentation of each DBE contacted but rejected and the reasons for the rejection.
- (6) Evidence that the Bidder provided interested DBEs with adequate information about the plans, specifications and requirements for the selected subcontracting or material supply work;
- (7) Evidence that the Bidder negotiated in good faith with the enterprises, and did not without justifiable reason reject as unsatisfactory bids prepared by any DBE;

(8) Evidence that the Bidder advised and made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance required by ODOT or contractor;

(9) Evidence that the Bidder's efforts to obtain DBE participation were reasonably expected to produce a level of participation sufficient to meet the assigned DBE contract goal or requirements of ODOT;

(10) Evidence that the Bidder used the services of minority community organizations, minority contractor groups, local, state and federal minority business assistance offices and other organizations identified by the Advocate for Minority, Women, and Emerging Small Business that provide assistance in the recruitment and placement of disadvantaged, minority, or women business enterprises; and

(11) Evidence that the Bidder used the services of ODOT's Supportive Services contractor(s).

(d) Failure to Comply

All Bidders, including certified DBE prime Bidders, shall submit a completed and signed DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM with its bid when the assigned DBE contract goal is greater than zero.

If the Bidder fails to properly and completely fill out the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM and/or to provide sufficient evidence of compliance with good faith effort requirements, the bid shall be considered non-responsive and the bid shall be rejected when the assigned DBE contract goal is greater than zero.

5. Contract Award Selection Procedure

In addition to the provisions of Sections 00120 and 00130 of the bid documents, the following items will be considered in determining Contract Award:

(a) The Award of the Contract will be in the best interest of the State of Oregon and will assure that ODOT meets its commitment to its overall DBE goal.

(b) If the low Bidder offering a reasonable bid meets or exceeds the assigned DBE contract goal, that Bidder will be considered responsive to the DBE requirement.

(c) If a DBE's type of work listed on the DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM does not match the type of work for which the DBE is certified by COBID, then the firm's participation on that Contract cannot count toward the assigned DBE contract goal or overall DBE goals. The Bidder will be determined non-responsive unless the Bidder meets or exceeds the assigned DBE contract goal by committing sufficient other work to one or more certified DBE firms with matching types of work, or the Bidder has established sufficient good faith efforts.

(d) If the low Bidder has not met the assigned DBE contract goal, ODOT will review the documentation regarding its good faith effort activities to determine if the steps taken are satisfactory. If the steps taken are found satisfactory during the review process, that Bidder will be considered responsive to the DBE requirement. If the steps taken are not found satisfactory, the bid will be considered non-responsive to the DBE requirement.

(e) If the low Bidder is determined to be non-responsive, ODOT, before awarding the Contract, will notify the Bidder in writing within 15 Calendar Days of the Bid Opening. The notification will include the reason for the determination and provide the Bidder an opportunity for administrative reconsideration.

Administrative Reconsideration includes:

- (1) The Bidder will have the opportunity to provide written documentation or argument to the Review Committee, consisting of personnel knowledgeable with DBE Program requirements, concerning the issue of whether it met the assigned DBE contract goal or made adequate good faith efforts to do so, within four Calendar Days of the receipt of notification.
- (2) Upon request, the Bidder will have the opportunity to meet in person with the Review Committee, to discuss the issue of whether it met the assigned DBE contract goal or made adequate good faith efforts to do so.
- (3) The Review Committee will make a decision on reconsideration within four Calendar Days after reviewing evidence of Good Faith Efforts.
- (4) The Bidder will be notified in writing by the Review Committee regarding the decision of reconsideration within five Calendar Days of the decision. This notice will explain the basis for finding that the Bidder did or did not meet the assigned DBE contract goal or make adequate good faith efforts to do so.
- (5) The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

6. DBE Participation Through Joint Venture

Bidders who plan to bid as a joint venture with a DBE partner must be pre-qualified with the Oregon Transportation Commission under the provisions of ORS 279C.430 and Oregon Administrative Rule 734-010-0200 through 734-010-0380. The requirements of 49 CFR 26.55(b) also apply to Bidders bidding as joint ventures. In addition to the standard pre-qualification process, there is a specific DBE Joint Venture Application Form. This form must be completed in order for ODOT to determine DBE participation in the joint venture. Certification of DBE joint ventures shall be completed for and granted for each individual project. The DBE Joint Venture Application form will be provided by ODOT Procurement Office - Construction Contracts Unit, at the address specified on the "Description of Work" page in the Bid Booklet; phone (503) 986-6916. The application must be received by Construction Contracts Unit at least 10 days prior to the date of Bid Opening for each individual Contract, and approval given prior to Bid Opening.

7. DBE Contract Compliance After Award and Before Contract Execution

ODOT will send the successful Bidder written notice of acceptance and Award, including a request for further breakdown of the DBE information. Within ten Calendar Days after Award and prior to Contract execution, the successful Bidder shall provide ODOT with a completed Committed DBE Breakdown and Certification Form describing the work to be performed by each DBE firm.

The successful Bidder shall submit the following breakdown information: bid item, type of work, bid quantity and unit, unit price, and total price. Furthermore, the successful Bidder shall indicate partial work on a bid item and explain the partial item work. If trucking is a DBE committed work

item, the successful Bidder shall indicate if the DBE firm is an owner/operator trucking firm. The Contractor and the Committed DBE Contractor shall sign the form.

FAILURE TO PROVIDE DETAILED DBE INFORMATION TO ODOT WITHIN TEN CALENDAR DAYS AFTER AWARD SHALL BE CAUSE FOR CANCELLATION OF THE AWARD AND WITHDRAWAL OF THE CONTRACT AND MAY BE CAUSE FOR FORFEITURE OF THE BID GUARANTY.

8. Information Relating to Contractors Soliciting Project Participation (Bidders List)

Within ten Calendar Days after Bid Opening, all Bidders shall provide information requested in the Subcontractor Solicitation and Utilization Report, (see appendix), listing bona fide bids or quotes received on this project. The information provided will be used to construct a Bidders List required by 49 CFR 26.11(c).

9. Information Relating to the DBE Requirements on this Project

For further information concerning Disadvantaged Business Enterprise participation, including confirmation of certification for type of work, contact in writing, the DBE Program Manager no later than one week prior to the project Bid Opening at ocrinforequest@odot.state.or.us.

Other requests may be directed to:

Oregon Department of Transportation
Office of Civil Rights MS 23
3930 Fairview Industrial Dr., S.E.
Salem, OR 97302
Phone: 503-986-4350
Fax: 503-986-6382
ocrinforequest@odot.state.or.us

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**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

ASSIGNED DBE CONTRACT GOAL

The minimum Assigned DBE Contract Goal for this Project is **0%**.

(Overall DBE program goal for ODOT is set at 15.37% for FHWA funded Contracts for federal fiscal years 2020, 2021 and 2022.)

A Certification Directory of DBEs is available from the Certification Office of Business Inclusion and Diversity (COBID) website at:

<https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp>

or by telephone at 503-986-0075.

PROJECT WAGE RATES

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

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

(1) U.S. Department of Labor, "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 in Oregon".

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

Wage Rates are Internet-Accessible - The applicable Davis-Bacon wage rates can be found on the US Department of Labor website at:

<https://www.wdol.gov/dba.aspx>

The BOLI wage rates can be found on the Oregon Bureau of Labor and Industries website at:

<http://www.oregon.gov/boli/WHD/PWR/Pages/index.aspx>

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

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

WEB SITE ADDRESSES

General Conditions for Construction for the Linn County Road Department:

<http://www.co.linn.or.us/Roads/ContractConst.asp> - Project Title

Plan Holder Registration (00120.05):

<http://www.co.linn.or.us/Roads/Register.asp>

Addenda Letters (00120.30):

<http://www.co.linn.or.us/Roads/ContractConst.asp> - Project Title

Notice of Intent to Award (00130.10):

<http://www.co.linn.or.us/Roads/ContractConst.asp> - Project Title

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM INSTRUCTIONS

Instructions for Submitting Form

Submit the First-Tier Subcontractor Disclosure form not later than two working hours after the time set for Bid Closing (For example, before 11:00 a.m. after a 9:00 a.m. Bid Closing.) by any of the following methods:

- By filling out the Subcontractor Disclosure Form included in the Bid Booklet and submitting it together with the Bid at the time designated for receipt of Bids.
- Hand delivering it to: The Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, OR 97321, or
- FAX it to 541-924-0202

The Department is not responsible for partial, failed, illegible, or partially legible FAX transmissions or electronic submissions.

Instructions for First-Tier Subcontractor Disclosure

Without regard to the amount of a Bidder's Bid, if the Agency's cost range for a public improvement Project in the "Notice to Contractors", or in other advertisement or solicitation documents is greater than \$100,000 Bidders are required to disclose information about first-tier Subcontractors that will furnish labor or labor and materials (See ORS 279C.370). Specifically, when the contract amount of a first-tier Subcontractor is greater than or equal to: (1) 5% of the total project Bid, but at least \$15,000, or (2) \$350,000 regardless of the percentage of the total project Bid, you must disclose the following information about that Subcontractor not later than two working hours after the time set for opening Bids:

- The name of the Subcontractor
- The category of work that the Subcontractor will be performing
- The dollar amount of the subcontract

Total all work for each Subcontractor in making this determination.

If the Agency's cost range is greater than \$100,000 and you will not be using any first-tier Subcontractors, you are still required to submit the form, with the appropriate box checked or enter "NONE" on the first line.

If the Agency's cost range is greater than \$100,000 and you are not subject to the above disclosure requirements, you are still required to submit the form, with the appropriate box checked or enter "NONE" on the first line.

THE AGENCY MUST REJECT BIDS if the Bidder fails to submit the disclosure form with this information by the stated deadline.

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

LINN COUNTY ROAD DEPARTMENT

SPECIAL PROVISIONS

FOR

Bridge and Roadway
One Horse Slough (Brewster Road) Bridge
Brewster Road
Linn County

PROFESSIONAL OF RECORD CERTIFICATION(s):

<p>Seal w/signature</p>  <p>Expires: 06/30/2021</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for environmental and stormwater. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00100, 00110, 00120, 00130, 00140, 00150, 00160, 00165, 00170, 00180, 00190, 00195, 00196, 00197, 00199, 00280, 00290, 00294, 01013, 01030, 01040, 03020</p> <p>C. R. Knoll</p>
<p>Date Signed: 02/10/2020</p>	

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

LINN COUNTY ROAD DEPARTMENT

SPECIAL PROVISIONS

FOR

Bridge and Roadway
One Horse Slough (Brewster Road) Bridge
Brewster Road
Linn County

PROFESSIONAL OF RECORD CERTIFICATION(s):

<p>Seal w/signature</p>  <p>Expires: 12/31/20</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project bridge and roadway. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00210, 00220, 00225, 00253, 00305, 00310, 00320, 00330, 00350, 00501, 00510, 00520, 00530, 00540, 00545, 00550, 00582, 00587, 00591, 00620, 00640, 00730, 00744, 00810, 00850, 00860, 00930, 00940, 02001, 02040, 02050, 02080, 02110, 02440, 02510, 02520, 02530, 02560, 02690, 02820, 02910</p> <p>A.T. Potts</p>
<p>Date Signed: <u>1/31/20</u></p>	

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

SPECIAL PROVISIONS

WORK TO BE DONE

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

1. Furnish, install, maintain, and remove traffic control and erosion control devices
2. Construct roadway approach widening
3. Perform grading, excavation/embankment
4. Asphalt pavement saw cutting
5. Remove existing structure
6. Construct new driven piles, grade/cap beams, wingwalls
7. Construct bridge superstructure and other components to new bridge
8. Install bioslopes
9. Install asphalt concrete pavement
10. Install pavement markings
11. Install signage
12. Install guardrail
13. 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 are the November 15, 2019 edition of the "General Conditions for Construction for the Linn County Road Department and the 2018 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. Brewster Road is classified as a Rural Major Collector.

SECTION 00100 - GENERAL CONDITIONS

Comply with Section 00100 of the General Conditions for Construction for the Linn County Road Department modified as follows:

SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

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

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

- American Traffic Safety Services Association (ATSSA)
www.atssa.com
- ODOT Construction Section
www.oregon.gov/odot/construction/pages/index.aspx

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- ODOT Construction Section - Qualified Products List (QPL)
www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx
- ODOT Estimating
www.oregon.gov/ODOT/Business/Pages/Steel.aspx
- Oregon Legislative Counsel
www.oregonlegislature.gov/lc
- ODOT Procurement Office - Construction Contracts Unit prequalification forms
www.oregon.gov/odot/business/procurement/pages/bid_award.aspx
- Oregon Secretary of State: State Archives
sos.oregon.gov/archives/Pages/default.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

SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES

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

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

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

“Bridges and Roadway
One Horse Slough (Brewster Road) Bridge
Linn County Bridge No. BR0024-0462
ODOT Bridge No. 23904
April 2020”

00120.10 Bid Booklet - In the paragraph that begins "The Bid Section includes all pages after...", add the following bullet to the bullet list:

- Certificate of nondiscrimination regarding ORS 279A.110 and certificate regarding policy and practice against sexual harassment, sexual assault and discrimination against employees who are members of a protected class as required by ORS 279A.112 (House Bill 3060, 2017)

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

- The Bidder has liquidated and delinquent debt owed to the State or any department or agency of the State.
- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the Standard Specifications.

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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:

00150.30 Delivery of Notices - Add the following to the end of this subsection:

For purposes of this subsection, the time zone is Pacific Standard Time (PST) to determine time of receipt of notices and other documents. For purposes of this subsection, non-business days are Saturdays, Sundays and legal holidays as defined by ORS 187.010 and 187.020.

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.

Claims must be submitted on paper documents according to Section 00199.

00150.50(e) Notification - Add the following to the end of this subsection:

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 below. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Utility	Contact Person's Name, Address, Email, and Phone Number
Consumers Power Inc.	Adrian Smith, adrians@cpi.coop, 541-929-8623
Pacific Power	Kevin Schiedler, kevin.schiedler@pacificcorp.com

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.

(Consumers Power Inc. and Pacific Power) - Power Suppliers - The Contractor shall maintain at least 10 feet of safety clearance from energized power lines. Exceptions require written approval from Power Supplier(s) and will require an On-Site safety watcher at no cost to the Contractor. The Contractor shall provide the Engineer with a copy of the written approval of exception before beginning Work.

Add the following subsection:

00150.50(g) Utility Information (Anticipated Relocations) - The following organizations 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:

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
00150.50(g)(1)	NW Natural	Dave Bellinger, d6b@nwnatural.com, 541-926-4253 x8238	

The Contractor shall contact the Engineer to view the approved Utility Relocation Plans.

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

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

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

- Northwest Natural Gas 1-800-882-3377

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.

00150.90(b) All Contract Work – Replace the bullet that reads “The Contractor has removed...” with the following bullet:

- The Contractor has removed all Equipment, other than that incorporated into the Work; and

00150.97 Responsibility for Materials and Workmanship - Add the following to the end of this subsection:

(c) Full or partial termination of the Contract under 00180.90 shall not relieve the Contractor of responsibility for completed or performed Work, or relieve the Contractor's Surety of the obligation for any just claims arising from the completed or performed Work.

SECTION 00160 - SOURCE OF MATERIALS

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

00160.20 Preferences for Materials - Add the following paragraph to the beginning of this subsection:

Section 1518 of Moving Ahead for Progress in the 21st Century Act provides that Buy America applies to all Contracts eligible for federal assistance under Title 23, United States Code, included within the scope of an applicable National Environmental Policy Act (NEPA) finding, determination or decision, regardless of the funding source of such Contracts, where at least one Contract is funded with Title 23 funds. This Contract includes Title 23 funds under such a NEPA finding, determination or decision and Buy America applies to this Contract.

00160.20(b) Buy Oregon – Replace the sentence that begins “This provision does not apply to...” with the following sentence:

This provision does not apply to contracts financed wholly or in part by federal funds.

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>

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SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications.

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

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

Add the following subsection:

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

00170.70(a) Insurance Coverages - Add the following to the end of this subsection:

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

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	\$1,000,000	\$2,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)
Pollution Liability	\$1,000,000	(aggregate limit not required)

00170.72 Indemnity/Hold Harmless - In the sentence that begins "To the fullest extent..." replace the word "Contractor" with the following words:

"Contractor(s) and subcontractor(s) that are not units of local government as defined in ORS 190.003, if any,".

Add the following paragraph to the end of this section:

Any such indemnification shall also provide that neither Agency's contractor and subcontractor nor any attorney engaged by Agency's contractor and subcontractor shall defend any claim in the name of the State of Oregon or any agency of the State of Oregon, nor purport to act as legal representative of the State of Oregon or any of its agencies, without the prior written consent of the Oregon Attorney General. The State of Oregon may, at any time at its election assume its own defense and settlement in the event that it determines that Agency's contractor is prohibited from defending the State of Oregon, or that Agency's contractor is not adequately defending the State of Oregon's interests, or that an important governmental principle is at issue or that it is in the best interests of the State of Oregon to do so. The State of Oregon reserves all rights to pursue claims it may have against Agency's contractor if the State of Oregon elects to assume its own defense.

SECTION 00180 - PROSECUTION AND PROGRESS

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

00180.20(c)(3) Submittals – Replace the reference to "00180" to the reference "00180.20(a)".

00180.40(b) On-Site Work - Add the following paragraph to the end of the subsection:
The Contractor shall not begin On-Site Work before a preconstruction conference has been held, unless approved by the Engineer.

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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
On-Site Work	00180.40(b)
Contract Time	00180.50(h)
Closed Lanes	00220.40(e)(1)
Regulated Work Areas	00290.34(a)
Noise Control	00290.32

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

00180.50(c) Beginning of Contract Time - Replace this subsection, except for the subsection number and title, with the following:

When the Contract Time is stated in Calendar Days, counting of Contract Calendar Days will begin on the day the Contractor begins On-Site Work as defined in 00110.20.

Add the following subsection:

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

The Contractor shall complete all Work to be done under the Contract required to remove and replace Bridge No. 0024-0462, including reinstalled end panels, final ACP wearing course, and permanent bridge rails; and reopen Brewster Road to two traffic lanes before the elapse of 130 Calendar Days, or not later than October 23, 2020 whichever occurs first.

00180.70(b) Contractor’s Responsibility during and after Suspension - Replace the reference to “00150.40(b)” to the reference “00150.40”.

00180.85(b) Liquidated Damages – Add the following:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$1,540 per Calendar Day *.

*Calendar Day amounts are applicable when the Contract time is expressed on the Calendar Day or fixed date basis.

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). In addition to the liquidated damages, all added cost for traffic control measures, including flagging,

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required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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 15 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 15-minute limit listed in 00220.02. 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, for stopping or holding traffic longer than 15 minutes. In addition to the liquidated damages, any added cost for traffic control measures, including flagging, required to stop or hold traffic beyond the 15-minute time limit, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

Assessment of liquidated damages will stop when the Engineer determines that traffic is no longer stopped or held beyond the 15-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.

SECTION 00195 - PAYMENT

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

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

No Pay Items under this Contract qualify for the steel escalation/de-escalation program for this Project.

00195.50(b) Retainage – Replace this Subsection, except for the Subsection number and title, with the following:

The Agency reserves the right in its sole discretion to not withhold retainage from progress payments or to begin withholding retainage at any time. If the Agency withholds retainage from progress payments, the amount to be retained from progress payments will be 2.5% of the value of Work accomplished, and will be retained in one of the forms specified in Subsection (c) below. If the Agency determines that satisfactory progress is not being made on the Work, the Agency may withhold up to 5% of the value of Work accomplished from subsequent progress payments. No retainage will be withheld from Work performed as Force Account Work, escalation/de-escalation, bonuses, or other items decided by the Agency.

As provided in 00170.65(b)(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.

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00195.50(c) Forms of Retainage - Replace the paragraph that begins "Forms of acceptable retainage are specified below ..." with the following paragraph:

If the Agency withholds retainage, forms of acceptable retainage are specified below in Subsections (1) through (3). Unless the Contractor requests and the Agency accepts a form of retainage under Subsections (2) or (3), the Agency will use the "Cash, Alternate A" in this Subsection. If the Agency incurs additional costs as a result of the Contractor's election to use a form of retainage other than Cash, Alternate A, the Agency may recover such costs from the Contractor by a reduction of the final payment.

00195.50(c)(1) Cash, Alternate A - Replace the paragraph that begins "The Agency will deposit the cash retainage ..." with the following two paragraphs:

Except as otherwise provided, the Agency will deposit the cash retainage withheld in an interest-bearing escrow account as required by ORS 279C.570(2). The Contractor shall execute such documentation and instructions respecting the interest-bearing escrow account as the Agency may require to protect its interests, including but not limited to a provision that no funds may be paid from the account to anyone without the Agency's advance written authorization. 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.

For a contract over \$500,000, if the Contractor requests that the Agency deposit the retainage in an interest-bearing account under ORS 279C.560(5), the Agency will use the "Cash, Alternate A" in this Subsection. For a contract \$500,000 or less, if the Contractor requests that the Agency deposit the retainage in an interest-bearing account under ORS 279C.560(5), the Agency will use an interest-bearing account (in a bank, savings bank, trust company, or savings association) as provided under ORS 279C.560(5).

00195.50(c)(2) Cash, Alternate B (Retainage Surety Bond) - Replace the paragraph that begins "Upon receipt of an approved retainage surety ..." with the following paragraph:

Upon receipt of an approved retainage surety bond, the Agency will limit the amount of cash retainage withheld to \$10,000, which will be deposited in an interest-bearing escrow account as described in (1) above. The surety bond must be in the bond form provided by the Agency. The bond must be provided by the same Surety that provides the Performance and Payment Bonds.

Replace the paragraph that begins "Amounts of retainage withheld under ..." with the following paragraph:

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

00195.50(d) Release of Retainage - Add the following paragraph to the end of this Subsection:

The Contractor shall comply with all applicable legal requirements for withholding and releasing retainage and for prompt payments, including but not limited to those in ORS Chapters 279C and 701, and 49 CFR 26.29.

00195.50(f) Prompt Payment Policy - Replace the paragraph that begins "Payments shall be made promptly ..." with the following paragraph:

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

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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.

SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the Standard Specifications.

SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

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

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

One or more Traffic Lanes may be closed on Brewster Road when allowed, shown, directed or as indicated in 00220.40(f).

Add the following subsection:

00220.40(f) Limited Duration Road Closure - The Contractor will be permitted to close all Traffic Lanes on Brewster Road for a period not to exceed 80 Calendar Days during construction activities.

Add the following subsection:

00220.41 Bridge Work – If the Work is done while Brewster Road is still open to traffic, before starting any grading or pavement removal at bridge ends or removal of pavement from bridge decks, arrange so that all equipment, labor, and materials required to complete the pavement replacement work and bridge deck waterproofing work are on hand or are guaranteed to be delivered. Once grading and pavement removal begins, vigorously prosecute and complete this work. Complete paving and membrane waterproofing work in the shortest possible time.

Temporarily taper or bevel longitudinal and transverse grade changes or drop-offs resulting from grading and pavement removal and membrane waterproofing work with asphalt concrete mixture to provide a smooth and safe transition. Construct tapers according to 00620.40.

Add the following subsection:

00220.42 Bridge Site Road Closure - Close the road to traffic at the bridge site during reconstruction of the bridge. Do not close the road until all materials and equipment are on hand or guaranteed to be delivered so that the work can be done in an efficient manner with a minimum period of road closure.

The road closure will not be allowed until the area and the detour route are signed according to the TCP and the requirements of Section 00225.

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Portable changeable message signs meeting the requirements of section 00225.16(b) shall be installed for a minimum period of 14 Calendar Days prior to the road closure.

Add the following subsection:

00220.45 Load Restrictions on Bridges - Limit the combined weight of construction vehicles, equipment, and daily material usage to 65,000 pounds for every 1,000 square feet of surface area plus the weight of long term storage of materials to 25,000 pounds for every 100 square feet of surface area of the bridge or a total of 200,000 pounds for each span of the bridge, whichever is less.

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

SECTION 00225 - WORK ZONE TRAFFIC CONTROL

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

00225.01(b) Definitions – Add the following to the end of the subsection:

Temporary Walk – Temporary Surfacing for a sidewalk or Multi-Use Path designated to be used by pedestrians, bicyclists, or other non-motorized users.

00225.02(a) Temporary Signs - Add the following to the end of the bullet list:

- Install two sign flag boards, as shown on the Standard Drawings, above the following detour and road closed advance warning signs, where applicable:
 - "DETOUR AHEAD", "DETOUR XXXX FT", "DETOUR X/X MILE" (W20-2) signs.
 - "ROAD CLOSED AHEAD", "ROAD CLOSED XXXX FT", "ROAD CLOSED X/X MILE" (W20-3) signs.

00225.12(g) Water Filled Barrier – Furnish water filled jersey barriers from the QPL, as shown on the plans, or approved by the Engineer.

00225.32(b) Traffic Control Inspection Without TCS - Add the following bullet(s) to the end of the bullet list:

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

00225.98 Flaggers and Traffic Control Supervisors - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for flaggers.

SECTION 00253 - TEMPORARY WORK ACCESS AND CONTAINMENT

Comply with Section 00253 of the Standard Specifications modified as follows:

00253.01 General - Add the following paragraph to the end of this subsection:

Work platforms and containment are only allowed on the bridge above ordinary high water level or existing active channel, whichever is greater.

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Add the following subsection:

00253.02 Definitions:

Dead Load - Self-weight of a structure, such as a work platform, scaffolding, and containment.

Factor of Safety - Component ultimate failure load divided by the maximum working load combination applied to the component.

Live Load - The weight of personnel, equipment, materials, debris, and vehicles.

Point Load - A force applied to a structure at a single point.

Span - A section of bridge superstructure between piers.

00253.03 Submittals - Add the following paragraph and bullets to the end of this subsection:

Submit the following:

- Stamped Working Drawings clearly defining dimensional limits and loading limits that satisfy the conditions listed in 00253.09 for exemption from design calculations for the bridge structural members. Identify the work platform, scaffolding, and containment system dead load (in pounds per square foot) in the loading note, and identify the maximum allowable accumulations of collected debris or water (inches depth) allowed in conjunction with the number of workers allowed and the concentrated loads (in pounds) of equipment and materials to be used within the structure. Identify the maximum wind speed at which containment wall materials remains on the structure.
- Stamped calculations showing that equipment, vehicles, and supplies placed in a closed lane do not exceed the equivalent of 80,000 GVW or HS-20 loading

Add the following subsection:

00253.09 Work Platform, Scaffolding and Containment Structural Design Requirements -

For containment structures positioned symmetrically on any span, design calculations for the bridge structural members are not required if all of the following conditions are satisfied:

- Total combined live load and dead load of all work platforms and containment structures supported by the span, including all personnel, equipment, materials, and collected debris or water, does not exceed 20 pounds per square foot.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

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

00280.00 Scope - Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA Permit is not applicable to the Project. Before beginning Work on the Project, obtain an NPDES 1200-CA Permit from the applicable local jurisdiction or an NPDES 1200-C Permit that is applicable to the Project.

00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands - Add the following three paragraphs:

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The erosion control plans as shown in the plans, have been developed for anticipated site conditions. The Contractor shall submit a revised ESCP plan for approval which represents actual staging conditions for this project. Submit an initial ESCP for review and approval ten Calendar Days before the pre-construction conference, as stipulated in section 00280.02. The plan may be developed and submitted in stages for each type of work shown in the Contractor’s schedule. When submitted in stages, each type of work will not begin until the Engineer approves the ESCP.

At the preconstruction conference, the Engineer will present an evaluation of the submitted Erosion and Sediment Control Plan (ESCP) or submitted ESCP modifications, and their implementation schedules. Update plan as revisions are implemented or changes are made in the original plan. During the life of the contract, submit proposed changes to the approved ESCP or schedule to the Engineer for approval before implementing the changes.

Other erosion control measures may be required depending on the Contractor’s methods of operations and scheduling.

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.

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

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

Item	Quantity
Plastic Sheeting.....	35 Square Yard
Sediment Barrier, Type 8	40 feet

SECTION 00290 - ENVIRONMENTAL PROTECTION

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

00290.00 Scope - Add the following paragraphs:

Inspect and clean all equipment prior to operating it within 150 feet of the Regulated work Area. check all equipment for fluid leaks.

Maintain hazardous material containment kits and spill containment kits on-site to facilitate the cleanup of hazardous material spills for both dry-land spill and spills that could reach nearby waterways. Install hazardous material containment kits in instances where there is a potential for release of petroleum or other toxicants.

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

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 Section 00237 or approved, in writing, by the Engineer.

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Do not stage Equipment, park Equipment or store Materials in any City, County, State, or Federal park, wayside or recreational facility.

Restore the site by:

- Removing all imported fabric, rock, and other construction debris.
- Smoothing the ground.
- Reseeding all disturbed earth.

00290.20(c)(1) General - Replace the paragraph that begins "Segregate all demolition debris according to..." with the following paragraph:

Segregate all demolition and construction debris according to its intended end use (reuse, recycle, or dispose). If required, store in designated areas in a manner that prevents contamination to Soil and water and prevents fugitive dust emissions. Remove all waste materials recovered from the site unless otherwise approved, in writing. Retain disposal and recycling facility receipts for wastes generated on site for at least 1 year after completion of the Project. Provide copies of the receipts to the Engineer within 7 Calendar Days of the disposal or recycling.

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) Reuse, Recycle and Dispose of Materials - Replace the title of this subsection with "**Reuse, Recycle, Compost and Dispose of Materials**".

(3) Reuse, Recycle, Compost and Dispose of Materials – Replace the three bullets with the following bullets:

- Reuse demolition and construction debris.
- Recycle demolition and construction debris.
- Compost or mulch yard waste material from lawn and landscape maintenance.
- If it is not feasible to reuse, recycle, or compost, ("feasible" is defined as a facility that is capable of handling the material, will take the material and the cost of transportation plus the cost to reuse or recycle the material is equal to or less than the costs of disposal) dispose of waste material according to the following:

00290.30(a) Pollution Control Measures - Add the following subsections and bullets:

(7) Water Quality:

- Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, or water contained within a work area isolation, directly into any waters of the State or U.S. until it has been satisfactorily treated (using a best management practice such as a filter, settlement pond, bio-bag, dirt-bag, or pumping to a vegetated upland location).
- Do not use permanent stormwater quality treatment facilities to treat construction runoff unless prescribed by an ESCP approved under Section 00280
- Construction discharge water is not allowed to be released into an outfall, diffuser port, or into the active channel.
- Do not use explosives under water.
- Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cure water,

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silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the State or U.S.

- Implement containment measures adequate to prevent flowing stream water from coming into contact with concrete or grout within the first 24 hours after placement.
- Do not end-dump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.
- Cease project operations under high flow conditions that may result in inundation of the project area, except for efforts to avoid or minimize resource damage.
- The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.
- If Work activities violate permit conditions or any requirement of this subsection, stop all in-water work activities and notify the Engineer.
- Do not cause a visible sediment plume in waters of the State or U.S.

00290.30(b) Pollution Control Plan - Replace the paragraph that begins “Develop and submit a PCP...” with the following:

Develop a PCP using ODOT Form 734-2445 and submit it for approval 10 Calendar Days before the preconstruction conference. Maintain a copy of the PCP on-site at all times during construction activities, readily available to employees and Inspectors. Ensure that all employees comply with the provisions of the PCP.

Delete the paragraph that begins “A Pollution Control Plan...”.

00290.32 Noise Control - Replace the first bullet with the following:

- Do not perform construction operations, including staging, within 1000 feet of any occupied dwelling unit on Sundays, legal holidays and between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and between the hours of 8:00 p.m. and 8:00 a.m. on Saturdays, unless otherwise approved by the Engineer.

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.

For this Project, the regulated work area is the area at or below 301.0 feet elevation and between approximate stations 3+40 and 3+70.

There shall be no work within the regulated work area at any time. All work shall be performed in a manner that no equipment or personnel shall enter the regulated work area.

The total volume of material filled or discharged into waters of the state and waters of the U.S. shall not exceed 0 cubic yards.

The total volume of material excavated from the waters of the state and waters of the U.S. shall not exceed 0 cubic yards.

00290.34(b) Prohibited Operations - Replace this subsection, except for the subsection number and title, with the following:

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Except where allowed by the Contract or by permit, do not:

- Blast underwater.
- Use water jetting.
- Release petroleum products or chemicals in the water.
- Disturb spawning beds.
- Obstruct stream channels.
- Cause silting or sedimentation of waters of the State or waters of the U.S.
- Use treated timbers within the regulated work area.
- Impede adult and juvenile fish passage, including intermittent streams.
- Allow entry within the Regulated Work Area.
- Allow equipment to enter or work in or on the water.

Add the following subsection:

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

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

- Store treated wood shipped to the Project out of contact with standing water and wet soil, and protected from precipitation.
- Visually inspect each load and piece of treated wood. Reject for use in or above aquatic environments if visible residues, bleeding of preservative, preservative-saturated sawdust, contaminated soil, or other matter is present.
- Use pre-fabrication to the extent feasible. When field fabrication is necessary, all cutting and drilling of treated wood, and field preservative treatment of wood exposed by cutting and drilling, shall occur above the OHW. Use tarps, plastic tubs, or similar devices to contain the bulk of any fabrication debris, and wipe off any excess field preservative.
- All treated wood structures, including pilings, shall have design features to avoid or minimize impacts and abrasion by livestock, pedestrians, vehicles, vessels, and floats.
- Treated wood may be used to construct a bridge, over-water structure or an in-water structure, with the exception of the work containment system, provided that all surfaces exposed to leaching by precipitation, overtopping waves, or submersion are coated with a water-proof seal or barrier are maintained. Apply and contain coatings and paint-on field treatment to prevent contamination. Surfaces that are not exposed to precipitation or wave attack, such as parts of a timber bridge completely covered by the bridge deck, are exempt from this requirement.
- During demolition of treated wood, ensure that no treated wood debris falls into the water. If treated wood debris does fall into the water, remove it immediately.
- Store removed treated wood debris in appropriate dry storage areas, at least 150 feet away from the regulated work area.

(a) Disposal of Treated Wood - Dispose of temporary or permanent treated timber at a DEQ approved landfill. Payment for disposal of treated timbers is incidental to section 00501.

00290.36(a) Migratory Birds - Add the following paragraphs to the end of this subsection:

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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, including existing work platforms, as needed to prevent migratory bird nesting. Nesting prevention may include daily bird harassment and the installation and maintenance of devices that exclude birds.

Notify the Engineer, in writing, a minimum of 10 calendar days prior to starting activities that could harm nesting birds. Avoid disturbing migratory bird nesting habitat (shrubs, trees, and structures) from March 1 to September 1 of each year. If avoidance is not possible, obtain approval from the Engineer before falling trees or clearing vegetation that could disturb migratory bird nesting habitat between March 1 and September 1.

00290.41 Protection of Wetlands – Replace the title of this subsection with “Protection of Waters of the U.S. or State”

Delete the paragraph that begins with “For the purposes of this Section...”.

00290.41(a) Identifying Wetlands – Replace the title of this subsection with “Identifying Waters of the U.S. or State, Including Wetlands”

Add the following subsection:

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

Develop and submit a WCP for approval at least 21 Calendar Days prior to mobilization for bridge removal activity. Maintain a copy of the WCP on the Project Site at all times during construction, readily available to employees and inspectors. Ensure that all employees comply with the provisions of the WCP. Design the WCP to avoid or minimize disturbance to protected features (sensitive cultural or natural resources, Regulated Work Areas, aquatic life or habitat in Regulated Work Areas) related to Contractor operations.

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

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

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

The WCP shall identify how the Contractor's construction operations will protect regulated features during mobilization, construction, maintenance, and demolition. Include a narrative describing compliance with Section 00290 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.

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

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

Partial Payments will be made as follows:

- When the initial WCP and WCS is approved.....20%
- When WCS has been installed.....40%
- When WCS has been removed and all Equipment and Materials have been removed from the site.....40%

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

SECTION 00294 - CONTAMINATED MEDIA

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

Description

00294.00 Scope - In addition to the requirements of Section 00290 and these specifications, this work consists of the following:

- Excavate, segregate, stockpile, transport, and dispose of contaminated Soils from the following locations:

Contaminated Soil Location Table

Location/Station	Depth below grade (feet)	Approximate Quantity (tons)	Known Contaminants
Top 1.5 feet of shoulder material from STA: 0+00 to STA: 6+00	0 to 1.50	46	Arsenic and Lead
Approximate Total Quantity			46 cy
Quantity to be reused on Project			0 cy
Quantity to be disposed at landfill			70 tons

- In areas where excavation is not required, leave contaminated material and clearing and grubbing material in place.
- Prepare a Health and Safety Plan (HASP) for work within the contaminated areas of the Project.

The September 2019 Linn County report titled *Modified Hazardous Materials Corridor Study, Brewster Road, One Horse Slough, Bridge* 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 will be considered and treated as contaminated Soil for the purposes of this Section.

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Shoulder Soil - Soil outside of the existing Roadway Pavement and within Right-of-Way generated during Roadway maintenance or construction activities. This definition applies to excess Soil generated to a maximum depth of 1.5 feet below ground surface.

00294.02 Testing of Contaminated Soil and Groundwater - When additional testing of contaminated Soil or groundwater is required to characterize the material for reuse, recycle, or disposal, conduct the tests according to 00290.20(c).

Use analytical methods meeting DEQ's Clean Fill Guidance Screening Levels for each analyte. Contaminated Soil and groundwater sampling must be conducted by an Oregon Registered Geologist or Professional Engineer who has experience characterizing contaminated media.

00294.03 Submittals - Submit the following documents:

- A Project-specific written lead compliance plan, 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 seven Calendar Days of the request.
- A site-specific HASP at least 10 Calendar Days before the pre-construction conference.
- Modifications to the HASP that are requested by the Engineer within seven Calendar Days of the request.

00294.05 Health and Safety Plan - Prepare a site specific HASP that meets or exceeds the requirements of 29 CFR 1910.120 and include a personnel and equipment decontamination plan that details how decontamination media will be contained and disposed.

Maintain a copy of the HASP on site at all times and readily available to employees and inspectors during construction activities. If additional information becomes available regarding the site-specific conditions, revise the HASP and submit the revised version to the Engineer. Review or acknowledgment of the HASP by the Engineer is not an indication or representation that the HASP is fully compliant with State or federal requirements. Compliance is the responsibility of the Contractor. Review by the Engineer will not impose liability upon the Agency or relieve the Contractor of any responsibilities under the Contract.

Do not begin work in contaminated areas until the Engineer provides written acknowledgement of the HASP.

All personnel entering contaminated areas shall follow the requirements of the HASP.

Labor

00294.30 Personnel Qualifications - Provide employees meeting the following requirements:

- For removal of contaminated Soil, provide employees trained in:
Lead awareness according to 29 CFR 1926.62(l).

Construction

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

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- 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 directly into trucks and transport directly to the recycling or disposal facility or, when approved by the Engineer, temporarily store contaminated Soil on-site 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 rainwater to enter the excavated contaminated Soil. Label all stored material with the type of material, the contaminants, and the dates of accumulation.
- Remove contaminated media from the exterior of all vehicles before they leave the Project Site
- Cover trucks transporting contaminated materials to prevent spillage during transit to the disposal facility according to OAR 340-093-0220.
- Where over excavation is required, backfill the excavation according to 00330.42.

00294.41 Contaminated Soil Management - Reuse, recycle, or dispose of contaminated Soil according to any of the following:

(a) Landfill Disposal:

- Obtain the Engineer's approval of the disposal facility before disposing of the contaminated Soil.
- Transport the contaminated Soil to a DEQ permitted municipal solid waste landfill or a permitted construction and demolition landfill for disposal. Dispose of temporarily stored contaminated Soils within 30 days of beginning excavation work or before Second Notification, whichever occurs first.
- Complete and sign all manifests and bill-of-lading forms for handling, loading, transporting, and disposing of the contaminated Soil.
- Pay all filing and permit fees.

Measurement

00294.80 Measurement - Work performed under this Section will be measured according to the following:

No measurement of quantities will be made for the following:

- HASP
- Written Lead Compliance Plan

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

Clearing and grubbing will be measured according to 00320.80.

Payment

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

Pay Item

Unit of Measurement

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- (a) Health and Safety Plan Lump Sum
- (b) Written Lead Compliance Plan Lump Sum
- (c) Contaminated Soil Disposal..... Ton

For items (a) and (b), partial Payments will be made as follows:

- When the initial HASP and Lead Compliance Plans are approved.....20%
- When 30 percent of the Contract is complete, excluding advances on materials...20%
- When 60 percent of the Contract is complete, excluding advances on materials...20%
- When 90 percent of the Contract is complete, excluding advances on materials...20%
- At completion of the Contract and all waste is removed from the Project site
and all reports, receipts, and documents have been submitted.....20%

Item (c) includes all costs involved with the disposal of contaminated Soil at a recycling or disposal facility and providing all manifests and bill-of-ladings.

No separate or additional payment will be made for excavation of contaminated soil. Payment will be included in payment made for the appropriate items under which excavation of contaminated soils is required.

Clearing and grubbing will be paid for according to 00320.90.

Payment will be payment in full for removing and disposing of all Materials, and for furnishing all Equipment, labor, plans, test results, and Incidentals necessary to complete the Work as specified.

SECTION 00305 - CONSTRUCTION SURVEY WORK

Section 00305, which is not a Standard Specification, is included for this Project by Special Provision.

Description

00305.00 Scope - This work consists of all surveying activities necessary to control the many phases of work required to construct the Project to the lines and grades as shown, specified, or established.

Make all supporting computations and field notes required for control of the work and as necessary to establish the exact position, orientation, and elevation of the work from control stations, including furnishing and setting construction stakes and marks, reference marks, and additional control stations.

Plans, specifications and other data necessary to lay out the work will be available for inspection at the Project Manager’s office. The Contractor will be furnished a copy of these documents.

00305.01 Definitions:

Confidence Points - Random points measured in the field within the boundary of a digital terrain model (DTM), the purposes of which are to verify the accuracy of the DTM and to provide evidence just prior to construction that the DTM is a reasonable representation of the original ground for computation of volumes and pay quantities. Similarly, confidence points are used to verify that a constructed grade has been built according to the design DTM. Additional information is available from the Engineer.

Confidence point locations follow these guidelines:

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- Randomly selected without regard for the location of DTM points or triangles
- Evenly distributed over the entire DTM area to be validated
- Proportionately distributed between confidence point classifications as applicable
- At a density sufficient to validate the surface, generally ten per instrument location as used in collecting DTM data or if not applicable, as in data collected photogrammetrically, 2% of DTM points

Control Network - An array of control stations either established by the Contractor or provided by the Agency.

Control Station - Any item identified in the Project records as having a position and/or elevation on the Project datum and intended to be used to control the many phases of the construction work.

Digital Terrain Model (DTM) - An electronic computer model of the shape of the ground.

Reference Stakes - Stakes set away from but with information relating back to the intended location and/or grade.

Slope Catch - The location where a design slope intersects the existing ground and where excavation or embankment work should begin to provide the intended earthwork.

Slope Staking - The process of using measurements and calculations in the field to determine the slope catch. Slope staking shall normally include setting stakes to mark the slope catch and setting a reference stake for every catch stake.

Stakes - Stakes, nails, marks, string lines, or other devices or mechanisms set or established for the purpose of indicating or controlling the location, orientation, or grade of any feature intended for construction, or for the purpose of limiting or influencing the construction work.

Staking - The act of placing stakes.

Subgrade Area – The area of Subgrade from Subgrade shoulder to Subgrade shoulder.

Survey Marker - Any survey monument, control station, or stake.

Survey Monument - Any natural or man-made item specified or identified in a property deed, boundary survey, government document, or other instrument of public record, when the purpose of said item is to mark or reference a property boundary, geographical location, elevation, or other position.

Surveyor - The individual designated by the Contractor and licensed in the state of Oregon as a Professional Land Surveyor and placed in "responsible charge" of the survey work as defined in ORS 672.002(6)(b).

Temporary Bench Mark (TBM) - A control station established for the purpose of providing vertical control for the Project. A TBM may or may not have an established horizontal position.

00305.02 Pre-Survey Conference -The prime Contractor, subcontractors, surveyor, survey crew leader, and all surveying personnel who are to be involved in the survey work shall be present at the preconstruction meeting or shall schedule to meet with the Project Manager two weeks prior to beginning survey work. The purpose of this meeting will be to discuss methods and practices of accomplishing required survey work.

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00305.03 Review by the Engineer -The Engineer may periodically review the notes, calculations and layout work, including field locations, for compliance with these specifications. Survey work that does not meet the tolerances in 00305.40 may be rejected, and the work redone at the Contractors expense to meet the tolerances.

Review by the Engineer does not constitute approval or acceptance of the work, nor does it relieve the Contractor of responsibility for performing work in conformance with the plans and specifications.

00305.04 Agency Responsibilities - The Agency Shall perform or provide the following items of work:

- Perform and provide a Pre-Construction Survey.
- Provide copies of plans and specifications.
- Establish initial horizontal and vertical control stations in the proximity of the Project.
- Provide horizontal and vertical alignment data.
- Provide cross section grade elevations to establish lines, grades, slopes, cross sections, and curve superelevation for each phase of roadwork.
- Evaluate grade for acceptance at each course of material.
- Perform measurements and calculations for pay quantities.
- Review Contractor's work and records periodically.

00305.05 Contractor Responsibilities - The Contactor shall perform or provide the following items of work:

- Make calculations, field notes and survey drawings for the layout and control of the work as are necessary to construct the Project as specified
- Provide original or copies of notes, calculations and drawings as requested.
- Preserve survey monuments and control stations according to 00305.71 and as governed by applicable law.
- Give the Engineer such facilities and assistance in establishing lines, grades and points as the Engineer may require.
- In the case of alterations, which involve any changes in stakes, the Contractor shall cooperate with the Engineer and facilitate the prompt re-establishment of field control for the altered or adjusted work.
- Replace and augment control stations as necessary to control the Project.
- Establish additional control stations as necessary to control the Project.
- Perform slope staking necessary for construction of earthwork including intersections and matchlines.
- Set stakes defining limits for clearing. Set stakes defining approximate right-of-way and easements.
- Set stakes to define construction centerline, centerline offsets, detour lines, or other lines necessary for control of the Project work.
- Set stakes to define the work, that may include but is not limited to the following:
 - Roadway location and grade. Set stakes and/or hubs at 50-foot intervals on tangents and 25-foot intervals on curves
 - Controls for sanitary and domestic water systems

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- Fences and gates.
 - Guardrail, barrier, barricades, and associated features.
 - Traffic delineators, reflectors, and guide devices.
 - Temporary and permanent signing *
 - Temporary and permanent pavement striping and pavement marking devices.
 - Poles and footings, cabinets, junction boxes, sensors, and other features associated with illumination and signal facilities *
 - Curbs, walks, ADA ramps, stairs, walls, mailboxes, and other miscellaneous structures.*
 - Pipes, manholes, inlets, weirs, settlement basins and other storm water, drainage and water quality structures and facilities *
- *This includes field verification of fit and functionality or as instructed by the Engineer.
- Landscaping items.
 - Earthwork features including guardrail flares and mounds, berms, and mounds
 - Buildings and other structures and facilities.
 - Environmental impact mitigation features.
 - Other incidental survey Work common to this type of construction project.
- Remove and dispose of all flagging, lath, stakes and other temporary staking material after the Project is completed.
 - Perform final "as constructed" measurements.
 - Complete a Post-Construction survey of monuments and control stations and submit as-built documentation to Linn County Surveyor's Office.
 - For bridge work, supply survey drawings depicting the location and elevations of the elements of substructure and superstructure and place stakes for features including, but not limited, to the following:

Substructure:

- Piling
- Footings
- Columns, walls, and abutments
- Pile caps and cross beams
- Bearing pads or devices

Superstructure:

- Horizontal alignment and deck edges
- Soffit grades
- Seismic restraints
- Wing walls and retaining walls
- Bridge end panels
- Deck elevations
- Railings
- Deck drains and other bridge drainage facilities

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- Set reference stakes and elevations in the vicinity of the structure work, as are necessary for the Engineer to check the layout. This may include establishment of a control network.

00305.06 Survey Methods - Survey procedures shall be appropriate for the equipment being used and be according to current Agency practices.

New survey procedures that are not according to current Agency practices shall be submitted to the Engineer for review 21 days prior to conducting the work. The surveyor may be required to demonstrate the capabilities, accuracy, and reliability of the intended procedure. The Engineer will evaluate the procedure and intended application and provide approval or rejection within 21 days. Work may proceed immediately upon approval of procedures by the Engineer.

Survey equipment must be properly calibrated and kept in good repair.

00305.07 Survey Work Records - Contractor's survey personnel shall maintain a Project daily record of work performed by the survey crew. The daily record shall contain the date, crew names, type and location of work, and work accomplished. Upon request, furnish a copy of diary entries to the Engineer. Furnish a final copy of the diary when the Project is complete.

Contractor's survey personnel shall make all field notes and calculations in a manner consistent with current Agency practices and on forms provided or approved by the Engineer. Computations, survey notes and other records necessary to accomplish the work shall be neat, legible and complete. Furnish copies of computations, notes and other records when requested by the Engineer.

When a Project affects any permanent change to vertical clearances within the traveled way, complete and submit a Standard Vertical Clearance form (Form 734-2614) within 30 days of the change to the vertical clearance.

When a Project temporarily restricts any vertical clearances submit a Standard Vertical Clearance form (Form 734-2614) 28 days before the restriction takes effect.

For bridges, furnish all computations, layout notes, and drawings of the structure to the Engineer for review 7 Calendar Days before beginning construction.

Upon completion of construction staking and prior to final acceptance of the Contract, furnish to the Engineer, computations, survey notes, Project records and other data used to accomplish the work. Include an itemized list of the data.

All data and original documentation associated with the Project will become the property of the Agency.

00305.08 Communication with the Surveyor - The Engineer has the right to communicate directly with the surveyor.

00305.09 Electronic Data - The Engineer will not be responsible for any data translations. Compressed data provided by the Engineer or the Contractor will be in a "self-expanding executable" format. The method of exchange of electronic data will be mutually agreed upon at the pre-survey conference.

00305.10 File Formats for Digital Data Exchange - Below are the preferred formats for data exchanged between the Agency and the Contractor. Other formats may be used, but must be pre-approved by the Engineer.

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- **CAD (graphics) Files** - AutoCAD Civil 3D 2012 (.DWG) format.
- **Alignments (Horizontal and Vertical)** - AutoCAD Civil 3D 2012 (.DWG) format.
- **Elevations** - ASCII Elevation File format.
- **DTM Data** - AutoCAD Civil 3D DTM or AutoCAD Civil 3D (.DWG) format.
- **Coordinates of Miscellaneous Survey Points Set** - ASCII Coordinate File format.

00305.12 Other Documents - Adobe Acrobat Portable Document Format (pdf) is the preferred format for exchanging documents such as reports, drawings and maps.

Materials

00305.20 Materials - Furnish all materials including supplies, clothing, and incidentals required to accomplish the work. Use materials of good quality and suitable for the purpose intended. Stakes, hubs, and guinnies are to be of sufficient length to provide a solid set in the ground. Mark the stakes in such a way as to remain legible for the intended duration. Provide and use safety equipment required by State and federal regulations.

Equipment

00305.30 Survey Equipment - Furnish survey equipment required to accomplish the work that meets the following requirements:

- Components designed to work together.
- Suitable for the purpose intended.
- Capable of achieving specified tolerances.
- In good operating condition.
- Maintained to meet manufacturers specifications.
- Kept in proper adjustment throughout the duration of the Project.

Submit documentation on survey equipment that is new to the industry, to the Engineer for review 21 days prior to its use. The Engineer will evaluate the equipment and intended application and provide approval or rejection within 21 days. Equipment may be used immediately upon approval by the Engineer.

Labor

00305.40 Personnel - Provide technically qualified personnel capable of performing required tasks in a timely and accurate manner. Perform work under the direction and review of the Surveyor.

The Surveyor is responsible for:

- Maintaining registration as a Professional Land Surveyor in the State of Oregon.
- Performing or validating requirements for procedures and testing of equipment.
- Maintaining familiarity with the site conditions and progress of the Project.
- Becoming familiar with the plans and specifications.
- Determining notes and documentation required for types of survey work.
- Determining the accuracy required for each survey stake.
- Using appropriate equipment and methods.

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- Keeping close communication with the Project inspector(s), Project Manager, and Agency survey crews working on the Project.
- Being familiar with the varying construction survey requirements of each aspect of the Project, including the various bridge construction techniques when applicable.
- Notifying the Project inspector of conflicts and changes necessary due to utilities, match point variations, design revisions, or other variables.

The survey crew leader is responsible for:

- Becoming familiar with the plans and specifications.
- Keeping close communication with the Project inspector(s), Project Manager working on the Project.
- Notifying the Project inspector of conflicts and changes necessary due to utilities, match point variations, design revisions, or other variables.

Construction

00305.50 Construction Staking Tolerances - Set stakes or other devices at an adequate frequency and within the following tolerances:

Item	Horizontal	Vertical
Box Culverts	± 0.10 ft	± 0.05 ft
Bridge Substructures	± 0.03 ft	± 0.03 ft
Bridge Superstructures	± 0.02 ft	± 0.02 ft
Clearing and Grubbing Stakes	± 1.00 ft	n/a
Construction Centerline Control Points	± 0.05 ft	n/a
Construction Centerline Station Points	± 0.10 ft	n/a
Curbs, Walks, and Bikepaths	± 0.03 ft	± 0.02 ft
Grade Stakes - Roadway Subgrade	± 0.20 ft	± 0.05 ft
Grade Stakes - Top of Rock	± 0.20 ft	± 0.03 ft
Grade Stakes - Roadway Finish	± 0.10 ft	± 0.02 ft
Manholes, Inlets, and Culverts	± 0.10 ft	± 0.03 ft
PCC Pavement	± 0.10 ft	± 0.02 ft
Slope Stakes and References	± 0.30 ft	± 0.10 ft
Traffic Markings	± 0.20 ft	n/a
Walls - Retaining, MSE, Sound, etc.	± 0.10 ft	± 0.05 ft
Wetland Mitigation Control Stakes	± 0.20 ft	± 0.20 ft
Luminaire and Signal Poles (incl. footings)	± 0.20 ft	± 0.03 ft

Stakes for miscellaneous items not listed above will have a horizontal and vertical tolerance of 0.20 foot, unless otherwise directed. Features that are to be constructed flush to another surface should take on the same tolerance as that surface.

Staking tolerances for special circumstances will be discussed at the pre-construction meeting. These staking tolerances are not cumulative to the construction tolerances identified for the appropriate items in which construction tolerances are required.

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In constructing the work, the contractor shall meet the appropriate construction tolerances for the material as specified in the special provisions or standard specifications, regardless of the construction staking tolerances, specific to the work item.

00305.51 Slope Stakes and References - Set slope stakes and references at even design stationing on both sides of centerline at 50-foot stations on tangents, at 25-foot stations on curves, and at terrain breaks and changes in the typical section. Establish slope stakes in the field as the actual point of intersection of the design roadway slope with the existing ground line. Direct staking of the theoretical (computer generated) slope stake catch point requires prior approval of the Engineer.

Set slope stake references farther out from centerline than the actual catch point. Include all reference point and slope stake information on the reference stakes.

If an automated slope staking routine is intended to be used, the system shall be able to perform the proper superelevation, lane transitions, and benching, as well as duplicate other details in the design surface. The system shall record field modifications made to the final catch slopes. Any modifications shall be recorded and provided to the Engineer.

Record the actual as staked (three dimensional) position of the slope and reference stakes. Prepare field notes showing slope stake and reference information, and provide to the Engineer.

00305.52 Clearing Limits - Set clearing limit stakes according to Section 00320. Space clearing limit stakes at intervals not greater than 50 feet on tangents and not greater than 25 feet on curves, or as directed.

00305.53 Grade Stakes - Set grade stakes or other control for grade elevation and horizontal alignment. Set grade stakes at each grade break line. Set additional points at intervals, as necessary, not to exceed the width of the grading equipment, or as approved by the Engineer. Set these rows at 50-foot stations on tangents and at 25-foot stations on curves, or as required in special situations, as in road connections and other areas where conditions require tighter spacing of grade stakes to assure grade and alignment.

Stakes and hubs shall be checked by the inspector as a representative of the Engineer. Do not begin placement of the next material course until the Engineer has accepted the grade and approval is given to proceed.

00305.54 Walls - Set stakes or other devices to control the location and elevation of walls, including retaining walls, geotextile walls, wing walls, sound walls and other walls as specified. Provide horizontal and vertical control for elements of wall(s) including but not limited to footings, leveling pads, batter slope and direction, and top elevation. Stake drainage facilities, electrical conduits water pipes and other items shown or identified that are to be integrated into the construction of the wall(s).

00305.55 Pipes and Culverts - Stake pipes and culverts to fit field conditions. Their location may be different from the plans. Perform the following:

- Determine the roadbed slope catch points at the inlet and outlet of pipes and culverts.
- Set reference point offsets to pipes and culverts. Record information necessary to determine structure length and end treatments.
- Stake ditches or grade to make pipes and culverts functional.
- Complete and submit a Culvert Data Sheet (Form 734-3247)

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- Submit a copy of the field notes to the Engineer by the next working day following completion of the staking work.

00305.56 Manholes and Inlets - Determine the location of manholes, inlets, siphon boxes, slope protectors, and other similar structures. This may require an approved field adjustment to the planned location in order to avoid obstacles or assure placement at the low point. Determine the elevation of the center of the grate.

Set a stake referencing the center of the structure. Set a guard stake with the following information written on it:

- Type of structure
- Centerline station
- Centerline offset
- Reference distance
- Cut or fill to top of structure
- Center of structure elevation

Establish a reference line to control the alignment of the structure. Record data on the Culvert Data Sheet (Form 734-3247) containing staking information for the outlet pipe from the specific drainage structure.

00305.57 Box Culverts - Set stakes or other devices to control the location and elevation of box culverts as specified. Provide horizontal and vertical control for elements of the box culvert(s) including but not limited to footing, side walls, wing walls, weirs, fish ladders, apron and top elevation. Stake other drainage facilities, electrical conduits, water pipes, and other items shown or identified that are to be integrated into the construction of the box culvert(s). Stake ditches to make the box culverts(s) functional.

00305.60 Horizontal Control - Establish horizontal control stations using Theodolite/EDM network or static GPS techniques. Least squares adjustments shall be applied to either method. The use of traverses will be permitted only if approved by the Engineer.

Preserve all Agency provided and Contractor established horizontal control stations for the life of the Project. If the horizontal control network cannot be preserved in its original position during construction or if the Agency provided control stations are not of adequate quantity or location, establish a secondary horizontal control network using the original control as a basis. This secondary control network may then be used by the Contractor to layout all construction items and may be used by the Agency for right-of-way monumentation and for other purposes.

(a) General Specifications - Horizontal control networks shall conform to these general requirements in addition to Theodolite/EDM or GPS specifications to follow.

(1) Equipment:

- Use tripods for all occupations with theodolite, target, or GPS antenna.
- Test all components and adjust according to manufacturer specifications.

(2) Procedures:

- Include in field notes a detailed point description and vicinity sketch for each control station and survey monument established or used.

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- Perform a minimally and fully constrained Least Squares adjustment.
- Prior to using 2 points for the basis of bearing, perform an analysis to verify that the points are actually those indicated in the record.
- Control station monuments shall conform to the requirements of the Agency "Right-of-Way Monumentation Policy" available from the Engineer.
- If available, include at least three existing control stations in establishing any control network.
- Establish a point identifier for each control point within the range of 1 - 399. Alphanumeric point identifiers up to eight characters may be used. Inscribe the point identifier on the monument.

(3) Acceptance Standards - At least squares adjustment shall be accepted based on the following criteria for all specified tolerances.

- Two-thirds of all values shall be within the total tolerance.
- 100% of all values shall be within 3 times the total tolerance.
- Tolerance for confidence regions at the 95% level is 0.05 feet + 50 ppm based on the shortest distance to the nearest unadjusted control station.

(4) Data Requirements:

- Field notes containing a detailed point description and vicinity sketch for each control station and survey monument established or used.

(b) Terrestrial Networks:

(1) Equipment:

- Use Theodolites with a maximum angular standard of error no greater than ± 6 seconds.
- Use EDMs with a maximum distance standard error no greater than ± 0.02 feet ± 5 ppm.
- All components shall be of compatible accuracy and designed to be used together.

(2) Field Procedures:

- Include distance measurements with all observations unless impractical.
- Have at least one redundant observation for every point in the network.
- Triangulation, trilateration, and resection methods are acceptable.

(3) Acceptance Tolerances:

- Tolerance for angle residuals is ± 3 seconds.
- Tolerance for distance residuals is ± 0.02 feet ± 2 ppm.

(4) Data Requirements - Provide the following to the Engineer for each network or circuit established:

- **Raw Data Files** - These are electronic data files containing original measurements produced by the Theodolite (total station). The file shall contain:
 - Observation data for each measurement, including:

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- point identifier
- direction, plate reading, or horizontal angle
- vertical or zenith angle
- slope distance
- Supplemental measurement data, including:
 - distance units recorded
 - angular units recorded
 - curvature and refraction correction applied
 - atmospheric correction applied
 - prism correction applied
- Codes or instructions to the processing software on how to process the data.
- Atmospheric conditions at the time of the survey.
- Angular and distance units recorded, and whether the distance has been corrected for curvature and refraction and/or atmospheric conditions.
- **Set Reduction Report** - This report summarizes the reduction of the angle sets and mean distances.
- **Least Squares Adjustment Report** – These reports contain details of the least squares adjustment, including a list of all angular and distance residuals, confidence region values at a 95% confidence level, and final adjusted coordinates.

(c) GNSS Networks:

(1) Equipment:

- GNSS receivers shall be dual frequency geodetic receivers with a manufacturer-specified accuracy of ± 0.02 feet ± 1 ppm or better.
- All components shall be of compatible accuracy and designed to be used together.

(2) Field Procedures:

- Ensure that satellite geometry during the field observation phase is sufficient to produce accurate results. The geometric dilution of precision (GDOP) shall not be greater than 8.
- The number of healthy satellites being observed at any time shall be four or more.
- The elevation mask shall be not less than 15 degrees.
- Horizontal survey measurements, once completed, shall form a closed figure, and shall be connected to at least two existing horizontal control stations.
- Network shall be comprised entirely of independent baselines.
- Adjacent stations shall have direct connections.
- Every station shall be connected to two or more stations.
- Receiver documentation shall be followed for observation times and epoch intervals.

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- Each control station shall be occupied no less than twice, of which two occupations shall be separated from each other by time. Separation shall be measured start-time to start-time. Separation shall be 90 minutes or more from initial occupation and 90 minutes or more from any 12-hour multiple thereafter for 30 days. Additional occupations beyond two are not subject to time restrictions.
- Back-to-back occupations of 90 minutes or more shall be separated by off leveling and re-setting the tripod and rotation of the tribrach or leveling equipment by 120 degrees or more.
- Stations closer together than 1,500 feet shall be connected with terrestrial observations.
- Inter-visible stations closer together than 3,000 feet shall be connected with terrestrial observations.

(3) Acceptance Tolerances:

- Tolerance for linear residuals in latitude, longitude, and elevation is ± 0.05 feet.

(4) Data Requirements - Provide the following to the Engineer for each network established:

- **Receiver Independent Exchange (RINEX) Data Files** - These are industry-standard non-proprietary electronic data files containing original data collected by the receiver. The provided files shall contain all data supported by both the RINEX file format and the equipment and software employed in the survey. Files provided shall include as a minimum:
 - GNSS observation data file
 - GNSS navigation message file
- **Observation Log Sheet** - This log includes, for each observation, start and stop times, and antenna height including measurement procedure.
- **Least Squares Adjustment Report** – These reports contain details of the least squares adjustment, including a list of all angular and distance residuals, confidence region values at a 95% confidence level, and final adjusted coordinates.

(d) Traverses:

(1) Equipment:

- Identical to requirements for Theodolite/EDM networks.

(2) Field Procedures:

- Include distance measurements with all observations unless impractical.
- Close both traverse for angle and distance.

(3) Acceptance Standards - Closure shall be a minimum of 1:20,000 after angular adjustment and prior to coordinate adjustment.

(4) Data Requirements - Provide the following to the Engineer for each traverse established:

- **Adjustment Report** - This report contains details of the traverse adjustment, including adjusted coordinates.

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- **Other Reports** - All data required for Theodolite/EDM networks except least squares adjustment report.

00305.61 Vertical Control - Establish vertical control stations using differential leveling and third order or better equipment and techniques. The development of vertical control by techniques other than differential leveling must be approved by the Engineer. A least squares adjustment shall be applied to each network of acceptable level circuits.

The Agency provided and Contractor established vertical control stations shall be preserved for the life of the Project. If the vertical control network cannot be preserved in its original position during construction or if the Agency provided control stations are not of adequate quantity or location, establish a secondary vertical control network using the original control as a basis. This secondary control network would then be used to layout all construction items and may be used by the Agency for other purposes.

(a) Field Procedures:

- Use a compensated (or "automatic") optical level or compensated digital level.
- Use precise non-adjustable rod(s) unless otherwise directed. Do not use "Lenker" or self-computing rods.
- Use a rod level with each rod.
- Include a minimum of two published bench marks in each circuit unless otherwise directed.
- If the circuit between benches does not close within the tolerance stated below, close circuit back to the starting point.
- If the use of one benchmark is approved, close circuit back to the starting point.
- Select turning points that are firm, solid objects with a defined high point. Set a nail, spike, or stake if no existing items are acceptable. Turning plates with a weight of not less than 4.5 pounds may be used.
- Balance backsight and foresight distances to within 30 feet on each setup and to within 30 feet on the entire circuit.
- Make a record of the rod reading(s) and the observation distance on each sighting
- Set TBMs near significant construction items (bridges, intersections, and other locations where elevations will be needed) and not more than 1,000 feet apart throughout the Project.
- Select TBM monuments that are firm, solid objects with a defined high point, not likely to be moved by human or natural influences, readily identifiable, and out of the path of construction. Do not use fire hydrants, guardrails, highway signs, or nails or spikes in utility poles or fence posts.
- Include detailed point descriptions and vicinity sketch in field notes.
- Take field notes when recording measurements electronically. Include data and information not electronically measured and recorded.
- Apply a vertical least squares adjustment to allowable errors. The use of proportional distribution of error may be used if approved by the Engineer.

(b) Acceptance Standards - Each leveling circuit shall be accepted based on the "point-to point" or "closed-loop" limits described below. A single least squares adjustment shall be applied to the observation in the leveling circuits meeting the acceptance standards.

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- Accept point to point circuit based on the following. Error of closure shall be no greater than:

$$\text{Allowable Error} = 0.05 \text{ ft. } \sqrt{D}$$

D = Shortest level line distance in miles

- If a closed loop, the error of closure shall be no greater than:

$$\text{Allowable Error} = 0.035 \text{ ft. } \sqrt{E}$$

E = Perimeter of level loop in miles

(c) Data Requirements - Provide the following to the Engineer for each network or circuit established:

- **Raw Data** - These are hand written field notes or hand-written field notes accompanied by electronic data files containing original measurements produced by the level. The file shall contain:
 - Data for each measurement, including a:
 - point identifier (within a range of 400 - 499 and also inscribed on the monument)
 - rod reading
 - observation distance
 - Supplemental measurement data, including:
 - distance units recorded
 - curvature and refraction correction applied
- **ASCII Point Elevation Data File**

00305.62 Bridges - Set stakes, nails, or other devices to control the location and elevation of the various parts of bridges and progressive phases of construction. Provide horizontal and vertical control for all elements of bridge construction. Stake drainage facilities, electrical conduits, water and sewer pipes, pedestrian and bicycle facilities, traffic signal and sign supports, illumination devices, and other items shown or identified that are to be integrated into the construction of the bridge.

Identify marks or provide field notes or reports to the Engineer. Such provision of information shall be adequate for the Engineer to review the location and elevation of the mark for the intended purpose prior to incorporating material that is based on the mark.

(a) Bridge Survey Control Stations - Use the smallest number of original Project control stations as is practical for establishing positions and reference points for bridge construction on one bridge. Use of multiple control station will increase the probability of incorporating error into the construction. Use control stations that are as closely related mathematically as practical. The Contractor may establish additional control stations as necessary to complete the survey work. Additional control stations shall be established in such a manner as to provide the accuracy needed to meet the tolerances in Section 00305.

Original Project stations shall be used only after the following evaluation is completed for each bridge:

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- Supply a list of original Project horizontal and vertical control stations intended by the Contractor to be used in establishing positions on a given bridge.
- Measure relative positions of original Project horizontal control stations intended to be used.
- Measure elevation differences between original Project vertical control stations intended to be used.
- Supply horizontal and vertical measurement data to the Engineer
- Compare measured values with those computed from original horizontal network coordinates and vertical network elevations.
- Any discrepancy of concern to either the Contractor or the Engineer will be resolved before that combination of control stations is used.

(b) Layout Marks and Reference Points:

(1) Substructure - Stake, reference, or otherwise identify locations, orientations, and elevations necessary for placement of substructure components, including but not limited to cofferdams, piling (including batter), drilled shafts, footings, columns, abutments, caps, cross beams, bearing devices, temporary supports or falsework, and excavations and embankments associated with any of the above.

Verify and document the locations, elevations and spatial relationships with adjacent substructure components. On bridges where prefabricated beams will be used, measure and document span lengths between bearing devices at each beam location as soon as practical. Supply a copy of such documentation to the Engineer for review before the next stage of construction.

Compute the final elevations after studying the plans, specifications, and shop drawings. Adjust the grades as needed to compensate for camber or prefabricated beams, chording of beams across the low side of superelevations, width of flat beams on superelevated surfaces, and any other factor resulting from design or construction methods.

(2) Superstructure - Stake, reference, or otherwise identify locations, orientations, and elevations necessary for placement of superstructure components, including but not limited to beams, girders, diaphragms, earthquake restraints, deck, rails, structure mounted traffic control and illumination devices, and concrete forms, temporary supports or falsework, and excavations and embankments associated with any of the above.

Stake alignment of structure as needed at each stage of construction. Stake alignment of poured-in-place items at 10-foot stations or as established by the Engineer. Stake alignment for the following items as needed to maintain the horizontal tolerance defined in section 00305.50:

- Outside edge of girder(s)
- Face(s) or centerline(s) of internal girders or stem walls
- Edge of deck
- Alignment of grade breaks
- Pedestrian and bicycle facilities
- Rails and railings

Stake grades at each stage of construction. Stake grade of poured-in-place items 10-foot stations, or as established by the Engineer. Apply corrections to design grades based on the

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dynamics of the evolving structure. Corrections that may be required depend upon the design of the bridge and the constriction methods employed. Provide correction values to the Engineer at least 15 working days prior to incorporating into the structure. The following list is examples of possible corrections:

- Design camber (upward adjustment to compensate for anticipated deflection)
- Structural deflection (deflection of the bridge under its own increasing weight)
- Structural shifting (dynamics of the bridge under eccentric loading)
- Falsework deflection (deflection of falsework beams under increasing weight)
- Falsework crush (compression of falsework supports under increasing weight)
- Form crush (compression of forms under increasing weight)
- Equipment deflection (deflection of deck finishing machine or deck rails)
- Other adjustments to staked value to achieve the design grade.

(c) Bridge Deck Grades - Set stakes or other devices to control the deck grade elevations. The exact process will depend upon the type of deck and the equipment being used.

(1) Portland Cement Concrete Deck - The surveyor and survey crew leader shall attend the first of the two deck pre-placement conferences, described in the Oregon Standard Specifications for Construction, subsection 00540.02(a), required for each deck placement.

Control of a PCC deck may involve significant work with the deck placement crew to establish control for a deck finishing machine. Rails for supporting the deck finishing machine are generally set up on either side of the deck. Each rail is held up by adjustable supports every 5 feet. Adjust the rail at each support to the desired grade while the rail is supporting the weight of the finishing machine. Corrections may need to be applied as listed in subsection 00305.52(c-2)

(2) Asphalt Concrete Deck - Control of an AC deck will not generally involve as many variables as PCC. An AC deck serves as a wearing surface, but not a structural component. Asphaltic concrete will frequently be used as filler to create the desired superelevations when flat beams form the superstructure. Stake control of the finish grade like any asphalt finish grade. Under some circumstances, design camber and structural deflection may need to be considered.

00305.63 Pavements - Set stakes or other control devices to control the location and elevation of asphalt and PCC pavement as shown. Provide surveying or survey-related activity necessary to control grade, thickness, and smoothness as required.

00305.64 Signs, Signals, Illumination and Fabricated Items - Determine the exact location and their relative location to roadway and bridge features as appropriate such as edge of pavement, curbs, islands, sidewalks, sidewalk ramps, lane lines, bridge columns, bridge decks, and other existing features for the following items:

- Posts and poles including foundations
- Cabinets
- Junction boxes
- Detectors
- Other similar sign, signal, and illumination appurtenances

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- New fabricated items

Provide the following documentation to the Engineer before submitting working drawings:

- Field verified length of poles, posts, mast arms, and tenon locations
- Field verified orientation of triangular bases for poles
- Field verified measurements of all existing features including orientation and relationship to all other new appurtenances and new fabricated items.
- Plan, elevation, and side views
- Identification of all obstacles

Field adjustment to the planned location may be required in order to avoid obstacle and to ensure its placement in a functional location. Do not submit working drawings until the Engineer returns the field verified documents. The Engineer will return field verified documents within 21 Calendar Days after receipt of the documents.

Set a stake referencing the center of the item. Set a guard stake with the following information written on it:

- Description of item (by plan number if applicable)
- Centerline station
- Centerline offset
- Cut or fill from reference point (and what point the cut or fill is to)
- Intended elevation

If the orientation of the item is significant and is not clear, establish a reference line for the skew of the item.

Have bridge layout and roadway layout features staked, including referencing, no more than seven calendar days before submitting field verification documents.

00305.70 Temporary Protection and Direction of Traffic - Provide work zone signing conforming to "Oregon Temporary Traffic Control Handbook for Operations of 3 Days or Less."

Provide temporary roll-up signs and sign supports meeting the requirements of the Oregon Standard Specifications for Construction, subsection 00225.11. Provide flaggers and flagger equipment meeting the requirements of the Oregon Standard Specifications for Construction, Section 00225.

00305.71 Preservation of Survey Markers:

(a) Project Control Points Established by the Engineer - Maintain, relocate or replace existing survey monuments, control points, and stakes, as determined by the Engineer. Perform the work to produce the same level of accuracy as the original monument(s) in a timely manner, and at no additional cost to the Agency.

(b) Monuments of Record - Preserve survey monuments according to subsection 00170.82(c), ORS 209.140 and ORS 209.150. If such monuments are to be disturbed or destroyed, comply with requirements of these ORS at no additional cost to the Agency.

(c) Post Construction Survey - At the completion of the project, file a post construction survey with the Linn County Surveyor's Office. Provide the Engineer with a copy of the approved survey.

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If no monuments were disturbed or destroyed during construction activities submit stamped, written verification to the Engineer.

00305.72 Project Monumentation - The Contractor will not be responsible for performing right-of-way monumentation.

00305.73 Pre-Construction Survey - The Contractor will not be responsible for performing a pre-construction Survey.

Measurement

00305.80 Measurement - No measurement of quantities will be made for work performed under this section.

Payment

00305.90 Payment - The accepted quantities of construction survey work will be paid for at the Contract lump sum amount for the item "Construction Survey Work".

Payment will be payment in full for furnishing all material, equipment, labor, and incidentals necessary to complete the work as specified.

No separate or additional payment will be made for temporary protection and direction of traffic measures including flaggers and signing necessary for the performance of the construction survey work.

No separate or additional payment will be made for preparing surveying documents including but not limited to office time, preparing and checking survey notes, and all other related preparation work.

The amount to be allowed for "Construction Survey Work" in the progress payments will not be in excess of the reasonable value of the surveying work performed under this specification as said reasonable value is estimated by the Engineer.

Costs incurred as a result of survey errors will be borne by the Contractor. Such costs include price adjustments for failure to meet requirements of the construction specifications, repair or removal and replacement of deficient product, and over-run of material.

In cases where changes, not due to the Contractor's operations, necessitate redesign of the work, increased Contractor survey costs due to these changes will be paid for as Extra Work.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

SECTION 00320 - CLEARING AND GRUBBING

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

00320.01 Areas of Work - Replace this subsection, except for the subsection number and title, with the following:

Clearing and grubbing will be required to the extents needed to complete the work unless otherwise shown on the plans or directed by the Engineer.

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SECTION 00330 - EARTHWORK

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

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

Perform all earthwork under this Section on the excavation basis.

00330.41(a)(4) Excess Materials - Replace this subsection, except for the subsection number and title, with the following:

If the quantities of excavated materials are greater than required to construct embankments and to do all filling and backfilling, the Contractor may use the remaining materials to uniformly widen embankments or to flatten slopes in a manner satisfactory to the Engineer.

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

Unless otherwise specifically allowed and subject to the requirements of 00280.03, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on wetlands, either public or private, or within 300 feet of rivers or streams.

00330.92 Kinds of Incidental Earthwork - Add the following bullet to the end of the bullet list:

- Earthwork required for driveways and road approaches. Earthwork for driveways and road approaches will be that which is outside the neat line limits shown on the typical sections.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications.

SECTION 00501 - BRIDGE REMOVAL

Comply with Section 00501 of the Standard Specifications modified as follows:

00501.00 Scope - Add the following paragraph(s) to the end of this subsection:

Remove the existing bridge over One Horse Slough.
Add the following subsection:

00501.02 Plans – Incomplete Plans of the existing structure are available for viewing at the office of the Engineer. Prints of these plans are available upon request.

Add the following subsection:

00501.03 Submittals - Provide unstamped bridge removal plans according to 00150.35, 14 calendar days before beginning removal work.

Include the following information in the submittal:

- Removal sequence, including contractor staging and traffic staging.
- Detailed schedule of bridge removal work.
- Type of equipment that will be used, including size and capacity.

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- Equipment location during removal operations.

Do not begin bridge removal work until the bridge removal plans have been approved.

SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL

Comply with Section 00510 of the Standard Specifications modified as follows:

00510.13 Granular Structure Backfill - Replace this subsection, except for the subsection number and title, with the following:

Furnish granular structure backfill meeting the requirements of 02630.10 and the following:

(1) Material Passing No. 200 Sieve - The amount of Materials passing the No. 200 sieve shall not exceed 15 percent by weight. Test according to AASHTO T 11.

(2) Plasticity Index - The plasticity index of the Material passing the No. 40 sieve shall not exceed 6. Test according to AASHTO T 90.

00510.41 Structure Excavation - Replace the paragraph that begins “If the Plans show...” with the following paragraph

Where the Plans show concrete in footings placed against undisturbed material, make excavation for footings as nearly as possible to the limits shown. Fill the space between the footing and remaining undisturbed material to the top of the footing with footing concrete or granular structure backfill material, as directed. Compact the granular structure backfill to 97 percent of maximum density, according to 00330.43.

00510.48(a) General - In the paragraph that begins “Place backfill and riprap...” replace the last sentence with the following sentence:

Prevent large lateral or wedging compaction forces from occurring directly against the concrete; for sloped excavations, step the slope or use other approved means to prevent the wedge action.

00510.48(b) Bridge Abutments and Retaining Walls - Replace this subsection with the following subsection:

00510.48(b) Bridge Abutments, Wing Walls, Retaining Walls, and End Panels - Backfill, at a minimum, to the pay limits shown. Backfill abutments, wing walls, retaining walls, and end panels with specified backfill to the pay limits shown, and as follows:

(1) Placement at Abutments - Do not place backfill at Bridge abutments until Superstructure elements are set, pinned and tensioned. Place backfill required at the front face of retaining walls and wing walls before backfilling behind the wall unless shown otherwise. For single span Bridges with abutments, keep the backfill heights within 2 feet of each other.

(2) Placement at Weep Holes - Place granular wall backfill at all weep holes.

(3) Compaction Within 3 Feet Behind Abutments and Walls – Within 3 feet behind abutments, wing walls, and retaining walls, provide walk behind vibratory roller compactor with a single smooth drum, vibratory plate compactor, or rammer/tamper plate compactor; each with a gross static weight of not more than 1,000 pounds and a total compaction static plus dynamic force of not more than 5,000 pounds. Compact backfill to 95 percent of maximum density using the required number

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of passes determined according to the test pad method, and not less than three compaction Equipment passes.

a. Test Pad Method - 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 will be 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.

(4) Compaction More Than 3 Feet Behind Abutments and Walls - Greater than 3 feet behind abutments, wing walls, and retaining walls, provide vibratory roller compactor with a single smooth drum, vibratory plate compactor, or rammer/tamper plate compactor. Compact backfill to 95 percent of maximum density. Unless otherwise specified, test in-place field density according to AASHTO T 310. Test at the frequency required in the ODOT Manual of Field Test Procedures.

(5) End Panels - Place and compact foundation for end panels as shown and according to 00510.46(a).

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)
Bents and Wingwalls	152

00510.80(b)(2) Volume - In the paragraph that begins “Quantities will be...” replace the sentence that begins “Quantities will be...” with the following sentence:

Quantities will be limited to the limits shown, or if not shown, will be limited to the following:

00510.80(d) Granular Wall/Structure Backfill - Replace this subsection, except for the subsection number and title, with the following:

No measurement of quantities will be made granular structure backfill. The estimated quantity of granular structure backfill is:

Location	Granular Structure Backfill (Cubic Yard)
Bents and Wingwalls	35

00510.90(d) Granular Wall/Structure Backfill - Replace this subsection, except for the subsection number and title, with the following:

Granular structure backfill will be paid for at the Contract unit price, per unit of measurement, for the following item:

Pay Item	Unit of Measurement
(a) Granular Structure Backfill	Lump Sum

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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
Bent 1	6	70	PP16x0.5	N/A	N/A
Bent 2	6	74	PP16x0.5	N/A	N/A

¹ Protective coating system and color requirements according to 00594.10.

00520.42(d) Set Period and Redriving - Replace the sentence that begins “The “set period” shall be...” with the following sentence:

The “set period” shall be a minimum of 24 hours unless otherwise approved by the Engineer.

SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE

Comply with Section 00530 of the Standard Specifications modified as follows:

00530.45 Inspection and Repair of Epoxy Coated Rebar – Replace the sentence that begins” Before installation, patch all visual defects...” with the following sentence:

Before installation, patch all visual defects in the coating with a manufacturer recommended patching material according to ASTM A775.

00530.47(c) Installation – Replace the paragraph that begins “When using epoxy coated reinforcing bars...” with the following paragraph:

When using epoxy coated reinforcing bars, coat heads prior to installation according to ASTM A775. After the heads are attached to the rebar, coat exposed areas of bare steel and seal the rebar to head interface with a manufacturer recommended patching material according to ASTM A775.

00530.80(a) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of reinforcement is:

Structure	Uncoated Reinforcement Quantity (Pound)			
	Grade 60	Grade 80	Grade 100	Stainless Steel Grade _____
BR0024-0462	8,700			

The weight of miscellaneous metal, based on weights listed in 00530.80(b) and Project quantities, is included in the estimated quantity of uncoated reinforcement.

00530.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

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The accepted quantities of reinforcement will be paid for at the Contract unit price, per unit of measurement, for the following items:

- (a) Reinforcement, Grade 60..... Lump Sum

Item (a) includes fabricating and placing uncoated reinforcement as specified.

Payment for reinforcement will be made when the reinforcement is incorporated into the concrete.

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

No separate or additional payment will be made for clips, wire, separators, wire chairs, and other Material used in fastening the reinforcement in place.

SECTION 00540 - STRUCTURAL CONCRETE

Comply with Section 00540 of the Standard Specifications modified as follows:

00540.17(a) Aggregate - Replace this entire subsection, including 00540.17(a)(1) and 00540.17(a)(2), with the following subsection:

00540.17(a) Aggregate - Acceptance of aggregate will be according to 02690.12.

00540.17(c)(2) Actual Strength Test Value - Replace this subsection, except for the subsection number and title, with the following:

The ASTV at 28 Days is the average compressive strength of the three cylinders tested. Discard all specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing. The average strength of the remaining cylinders shall then be considered the test result.

00540.49(a)(1) Hot Weather - Replace the paragraph that begins "Maintain the concrete temperature..." with the following paragraph:

Maintain the concrete temperature during hot weather as specified. When concrete temperatures approach the maximum allowable temperature according to 02001.20(d), take appropriate action to lower the concrete temperature.

00540.51(a) General Requirements - Replace the paragraph that begins "Cure cast-in-place concrete..." with the following paragraph:

Cure cast-in-place concrete surfaces with water, wet burlap, and a layer of 4 mil polyethylene film, except polypropylene fabric may be used in place of wet burlap on horizontal surfaces. Begin curing as soon after placement as possible without damaging the freshly placed concrete. Continue curing for 7 Calendar Days (14 Calendar Days for bridge decks) after placement.

Add the following paragraph to the end of this subsection:

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, the thermometer shall remain 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.

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00540.53(b) Class 1 Surface Finish (Ground and Coated) - Replace this subsection with the following subsection:

00540.53(b) Class 1 Surface Finish (Ground, Sacked, and Coated) - 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 shall be one part bonding agent to two parts water, or as recommended by the manufacturer. Apply coating according to 00540.53(d).

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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).

	YES	NO	N/A
A. Contract Plans, Specifications, Permits, Etc.			
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?	_____	_____	_____

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- 10. Has damage from stream drift been considered in the falsework design? _____
- 11. Is the concrete placing sequence shown and is it consistent with the contract plans? _____

B. Foundation Requirements

- 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? _____

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- c. Have the soil parameters used in calculating the ultimate bearing capacity been listed and confirmed by the designer? _____
- 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

- 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? _____

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D. Allowable Stresses

- 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

- 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? _____

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F. Steel Falsework Construction

- 1. Are steel structural shapes and plates identified by ASTM number on the falsework plans and in the calculations? _____
- 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

- 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

- 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? _____

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- 9. Has the width to height ratio of wedge packs been verified to fall within the limits given in the special provisions? _____
- 10. If overhang brackets are attached to unstiffened 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? _____

Designer's Signature Date

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SECTION 00545 - REINFORCED CONCRETE BRIDGE END PANELS

Comply with Section 00545 of the Standard Specifications modified as follows:

00545.10 Materials - Replace the bullet that begins "Furnish Class HPC4000 concrete..." with the following bullet:

- Furnish Class HPC4500 concrete for end panels, unless shown otherwise.

Replace the bullet that begins "Class V reinforced concrete..." with the following bullet:

- Class V reinforced concrete pipe meeting the requirements of 02410.10(g).

00545.44 Expansion Joints - Delete the paragraph that begins with "Saw cut the AC wearing Course...".

Delete the paragraph that begins with "Flush the saw cut thoroughly with...".

00545.46 AC Paving – Replace this subsection, except for the subsection number and title, with the following:

Compact AC abutting end panels according to Section 00744 and Section 00745, as applicable.

SECTION 00550 - PRECAST PRESTRESSED CONCRETE MEMBERS

Comply with Section 00550 of the Standard Specifications modified as follows:

00550.12(c)(3) Acceptance - Replace this subsection with the following two subsections:

(3) Actual Strength Test Value - The ASTV at 28 days is the average compressive strength of the three cylinders tested.

Discard all specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing. The average strength of the remaining cylinders shall then be considered the test result.

(4) Acceptance - Hardened concrete members with an ASTV meeting or exceeding the specified design strength, f'_c , will be acceptable 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 member is suitable for the intended purpose. If suitable, the concrete represented by an ASTV less than f'_c may be accepted subject to a price adjustment according to 00150.25.

Concrete that has an ASTV less than 85 percent of f'_c will not be accepted. All costs of removal, replacement, and all related work are the Contractor's responsibility.

00550.90 Payment - In the paragraph that begins "No separate or additional payment will be...", add the following bullet to the bullet list:

- surface finish on members

SECTION 00582 - BRIDGE BEARINGS

Comply with Section 00582 of the Standard Specifications.

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SECTION 00587 - BRIDGE RAILS

Comply with Section 00587 of the Standard Specifications modified as follows:

00587.10 Materials - Add the following to the end of the list:

Coating Materials for Concrete.....02210.30

00587.42(e) Latex Paint Cure for PCC - Replace this subsection with the following subsection:

00587.42(e) Latex Emulsion Paint Cure for PCC - As an option to curing cast-in-place or slipformed bridge rails, the following procedure may be used:

- Allow free moisture to flash off, but only until the concrete surface does not glisten, and never for more than 1 hour.
- Apply latex emulsion paint from the QPL as follows:
 - Apply the first coat at an application rate of 150 square feet per gallon.
 - Allow the first coat to air-dry for 1 hour.
 - Apply the second coat at an application rate of 150 square feet per gallon, with the application direction transverse to the direction of the first coat.

00587.80 Measurement - Add the following to the end of this subsection:

The estimated quantity of bridge rail is:

Structure	Rail Type	Quantity (Foot)
Bridge No. BR0024-0462	Type "F" Concrete Bridge Rail	284

SECTION 00592 - ROLLED WATERPROOFING MEMBRANE

Section 00592, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00592.00 Scope - This Work consists of preparing bridge decks and furnishing and placing rolled bridge deck waterproofing membrane on the decks of Bridges as shown.

00592.03 Submittals - Submit the following at least 7 Calendar Days before the pre placement meeting for each membrane proposed for use:

- The manufacturer's product data sheet for the primer and rolled membrane.
- The manufacturer's test certificate required in Section 00592.10(e).
- Submit a primer application plan according to 00592.41(h)(1), which includes a manufacturer's letter indicating primer is compatible with the rolled membrane.
- A detailed work plan for the deck preparation, membrane installation sequence, and cleanup.
- Names of manufacturer approved supervisory personnel meeting the requirements of 00592.30.
- List of Equipment proposed for use in pressure rolling laps and membrane surface.

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- Proposed methods of measuring the application rate of hot asphalt cement tack coat and primer to meet the specified application rates.
- For Bridges with curbs, drains, intermediate joints, or concrete rails, submit unstamped Working Drawings, according to 00150.35, detailing membrane placement at those locations.

Do not begin any Bridge membrane Work before the work plan and submittals have been approved.

00592.04 Pre-placement Conferences:

(a) Supervisory Personnel - Hold a pre-placement conference with the Engineer and all supervisory personnel, Subcontractors, Suppliers, and all other personnel who will be involved in the membrane Work. Meet at a mutually agreed time at least 14 Calendar Days before beginning the membrane Work. Present and discuss all phases of the membrane Work, including ACP placement.

If the Contractor’s manufacturer-approved personnel change, or if the Contractor proposes a significant revision to the work plan, hold an additional meeting before any additional Work is performed.

(b) Placement Crew - Before beginning membrane Work, hold a second pre-placement conference with the Engineer and the entire membrane work crew at the Project Site, 30 minutes before membrane Work begins, to discuss placement duties and procedures.

Materials

00592.10 Rolled Waterproofing Membrane System - Furnish a rolled waterproofing membrane system that is a sheet membrane conforming to ASTM D6153 Type III and meeting the following criteria:

Test	Test Method	Limit or Value
Grab Tensile Strength (for Geotextiles and Fabrics)	ASTM D4632 (Woven or Nonwoven)	200 pounds min.
Resistance to Puncture (Geotextiles and Fabrics)	ASTM E154	200 pounds min
Permeability	ASTM E96 (water method)	5.7 NG/PaSm2 (perms.0.1) Max
Pliability	ASTM D146	No Breaks

Furnish test result certificates showing physical tests for the rolled waterproofing membrane system according to 00165.35.

Provide a membrane that can be used for the maximum profile grades and super elevations shown. Profile grade and super elevation limitations are available from the manufacturer.

00592.11 Hot Asphalt Cement Tack Coat - Furnish PG 64-22, PG 70-22, PG 64-28, or PG70-28 hot asphalt cement tack coat unless otherwise approved. Do not use an emulsified asphalt tack coat.

00592.12 Mastic - If shown or specified, furnish mastic to seal edges, splices, and laps meeting requirements of ASTM D4586.

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00592.13 Primer - Furnish a primer compatible with the rolled membrane according to the manufacturer's recommendations.

Equipment

00592.20 Equipment - Provide approved Equipment to place the membrane. Remove all Equipment that leaks oil or other contaminants from the work area until they are repaired.

Labor

00592.30 Personnel Qualifications - Provide supervisory personnel who are approved, in writing, by the rolled membrane material manufacturer as qualified and who shall oversee the placement. Provide qualifications to the Engineer. Do not begin Work on any Bridge membranes until the qualifications have been approved.

Construction

00592.40 Preparing Existing Bridge Decks - Prepare the entire deck surface, including the deck edge against the curb, to receive the membrane. Remove all grease, oil, paint, dirt, laitance, rust, and all other contaminants that would affect adhesion of the rolled membrane.

Perform surface preparation in accordance with Section 00504, modified as follows:

- After removing the existing asphalt concrete wearing surface according to Section 00503, ensure the deck is smooth and free of obstructions. Clean the bridge deck by thoroughly sweeping and blowing compressed air immediately prior to placing the hot asphalt cement tack coat.
- Class 1 Preparation according to 00504.41(b) is not required

00592.41 Placing Rolled Waterproofing Membrane:

(a) General - Do not begin membrane installation until qualified supervisory personnel and, all Materials and Equipment necessary to perform the installation and any required repairs are at the job site.

(b) Weather and Other Restrictions - Place hot asphalt cement tack coat, concrete patching, and waterproofing membrane when the deck is dry, the air temperature is between 40 °F and 90 °F, and the surface temperature of the deck is 40 °F minimum and rising. Do not place hot asphalt cement tack coat if the surface temperature exceeds 120 °F.

(c) Handling Materials - Store membrane indoors at a temperature between 60 °F and 120 °F until it is placed on the bridge deck. Do not allow the membrane to sit in direct sunlight longer than necessary.

(d) Area of Application - Apply the membrane starting at the low point working to the high point. Protect adjacent surfaces from spatter or coating.

On Bridges without curbs, apply waterproofing membrane from outside edge to outside edge of the deck, or within the limits of the AC wearing Course.

On Bridges having end panels with a saw cut and joint sealant end joints, extend the rolled membrane 5 feet beyond the bridge deck onto the end panel.

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On Bridges with curbs or concrete rail, place a 12 inch continuous membrane strip, after applying hot asphalt cement tack coat, so that 2 inches is placed vertically along the curb or rail, with 10 inches placed horizontally on the deck surface.

00592.42 Installation:

(a) **Tack Coat** - Place hot asphalt cement tack coat as follows:

(1) **Concrete Substrate** - Place hot asphalt cement tack coat on the concrete substrate, below the ACP Base Course, to cover a maximum area of 60 square feet per gallon (0.15 gallons per square yard). Extend the tack coat 2 inches up the face of the curb.

(2) **ACP Base Course** - Place hot asphalt cement tack coat on the two inch ACP Base Course to cover a maximum area of 75 square feet per gallon (0.05 gallons per square yard). Primer may be substituted for the hot asphalt cement tack coat on the ACP Base Course according to 00592.42(e).

(3) **Rolled Waterproofing Membrane** - Place hot asphalt cement tack coat on the surface of the rolled membrane to cover a maximum area of 120 square feet per gallon (0.075 gallons per square yard).

(b) **ACP Base Course** - Place a 2 inch ACP Base Course, according to 00744 or 00745 to provide a uniform surface on which to apply the rolled membrane. Construct the ACP Base Course using the same ACP specified for the ACP wearing Course, unless otherwise shown or directed.

(c) **Primer** - Primer may be substituted for hot asphalt cement tack coat only for application on the ACP Base Course below the rolled waterproofing membrane, with a primer application plan, according to the following:

- When ambient temperatures are forecasted to be above 65 °F, follow minimum manufacturer primer cure times or allow primer to cure a minimum of two hours until the primer is sufficiently cured, as approved by the Engineer, prior to rolled membrane installation.

Do not use primer when ambient temperatures are forecasted to be, or fall below 65 °F at any time during rolled membrane placement.

Apply primer to cover a maximum area of 180 square feet per gallon on the Base Course by brush, roller or as approved, to result in a completely uniform wetted surface, without puddling.

(d) **Rolled Waterproofing Membrane** - Install rolled waterproofing membrane after the ACP Base Course, according to the following:

- Maintain 6 inches minimum overlap at all sides (longitudinal) joints or seams
- Maintain 12 inches minimum overlap at all end joints
- On Bridges with curbs or concrete rail, install the first rolled section overlapped 10 inches onto the pre-placement strip
- Roll press all lap joints
- Stagger butt splices a minimum of 10 feet
- Prior to applying hot asphalt cement tack coat, roll press the entire membrane surface with approved Equipment

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- Release any bubbles or pockets of trapped air or vapor and repair with mastic or as approved
- Sewn splices are not allowed

(e) ACP Wearing Course - Construct the ACP wearing Course according to 00744 or 00745. Prior to placing the hot asphalt cement tack coat, and any ACP Course or waterproofing membrane, verify the underlying surface is free from loose rocks, or other debris. Clean the underlying surface by thoroughly sweeping and blowing compressed air immediately prior to placing the hot asphalt cement tack coat. Pave in the same direction as the membrane overlap end joints.

00592.43 Daily Report Requirements - Submit a written report to the Engineer by the end of each Day that Work is being performed under this Section. The daily written report shall include the following:

- Total gallons of hot asphalt cement tack coat applied to each Bridge
- Total gallons of primer applied to each Bridge
- Digital photographs documenting the existing bridge deck surface, application of the hot asphalt cement tack coat, installation of the membrane, the completed membrane installation, ACP paving operations
- Size and location of repair areas with digital photographs taken before and after placement of the membrane. Provide all digital photographs in a format acceptable to the Engineer.

00592.44 Protection During Construction - Traffic is not allowed on the membrane without prior written approval. Except for paving Equipment, do not allow Contractor Equipment on the membrane unless approved by the Engineer.

Immediately repair any damage to the membrane caused by the paving operation, or other Contractor operations, with mastic or as approved by the Engineer. Complete repairs before resuming paving.

Measurement

00592.80 Measurement - The quantities of waterproofing membrane will be measured on the area basis. Measurement will be the sealed surface area, excluding curb and rail faces and will be limited to the Neat Lines and dimensions shown.

Payment

00592.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per square foot, for the item "Rolled Waterproof Membrane".

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

ACP will be paid for according to 00744.90.

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL

Comply with Section 00620 of the Standard Specifications.

SECTION 00640 - AGGREGATE BASE AND SHOULDERS

Comply with Section 00640 of the Standard Specifications modified as follows:

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00640.10 Materials - Replace this subsection, except for the subsection number and title, with the following:

Aggregates shall be 1"-0 or ¾"-0 (as the Contractor elects) crushed quarry rock only. Crushed river rock will not be allowed. Base and shoulder aggregates shall meet the applicable requirements of Subsection 02630 and 02640, respectively.

00640.41 Hauling and Placing - Add the following paragraph:

Where required, rock shall be placed at driveways and field approaches in a manner that provides an adequate transition between the new surface and the existing surface, subject to approval by the Engineer.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications modified as follows:

00730.90 Payment - Replace the paragraph that begins "No separate or additional payment..." with the following paragraph:

No separate or additional payment will be made for water added to dilute the Emulsified Asphalt used for tack coat after delivery from the asphalt supplier.

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

Comply with Section 00744 of the Standard Specifications modified as follows:

00744.11(a) Asphalt Cement - Add the following to the end of this subsection:

Provide 64-22 grade asphalt cement for this Project.

00744.42 Tack Coat - Add the following paragraph to the end of this subsection:

Treat all waterproofing membranes on and against which ACP is to be placed with an asphalt tack coat meeting the requirements of 00744.11(a) or as recommended by the membrane manufacturer.

00744.45(c) Bridge Deck Overlays - Replace the sentence that begins "Fill the joint with a poured..." with the following sentence:

Fill the saw cut joint with a hot applied joint sealant from the QPL.

00744.90 Payment - In the paragraph that begins "No separate or..." add the following bullet:

- Asphalt tack coat
- Unused, remaining, or excess ACP

SECTION 00810 - METAL GUARDRAIL

Comply with Section 00810 of the Standard Specifications modified as follows:

00810.10 Materials - In the list of materials, replace the line that begins "Wood Guardrail Blocks..." with the following line:

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Guardrail Blocks02110.20

00810.13 Guardrail Anchors - Add the following paragraph to the end of this subsection:

Furnish one guardrail anchor cable assembly per project for testing according to AASHTO M 30.

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications modified as follows:

00850.45 Installation - Add the following bullet before the bullet that begins “Place material according to...”:

- Place material between May 1 and October 15.

Replace the bullet that begins “Place material according to...” with the following bullet:

- Place material according to the manufacturer’s installation instructions.

SECTION 00860 - LONGITUDINAL PAVEMENT MARKINGS - PAINT

Comply with Section 00860 of the Standard Specifications.

SECTION 00930 - METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications modified as follows:

00930.10 Materials - Replace the paragraph that begins “Furnish structural steel materials...” with the following paragraph:

Furnish perforated steel square tube slip base sign supports and perforated steel square tube anchor sign supports from the QPL. Furnish other structural steel materials meeting the applicable portions of Section 02530, with weights and sizes as shown or specified.

00930.40(e)(1) General – Add the following sentence to the end of the paragraph:

The installation will be rejected if the geometry does not satisfy the requirements of 02560.05.

00930.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Item	Estimated Quantity (Pound)
Perforated Steel Square Tube Sign Supports	55

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications.

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SECTION 01013 - STORMWATER CONTROL, WATER QUALITY BIOSLOPE

Section 01013, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01013.00 Scope - This work consists of furnishing and installing a water quality bioslope as shown.

Materials

01013.10 Materials - Furnish material meeting the following requirements:

Permanent Seeding.....	01030
Imported Topsoil	01040.15

01013.11 Ecology Mix - Furnish an ecology mix composed of the following:

- 3/8" - No. 8 mineral Aggregate gradation meeting the requirements of Section 00680.
- Horticultural grade perlite, free of toxic materials meeting the following gradation:

Sieve Size Percent Passing (by Volume)

No. 18	0 - 29
No. 30	0 - 10

- Agricultural grade calcium magnesium carbonate dolomite, free of toxic materials meeting the following gradation:

Sieve Size Percent Passing (by Weight)

No. 8	95 - 100
No. 16	0 - 5

- Non-calcined agricultural grade hydrated calcium sulfate gypsum, free of toxic materials, meeting the following gradation:

Sieve Size Percent Passing (by Weight)

No. 8	95 - 100
No. 16	0 - 5

Blend the mineral Aggregate, perlite, dolomite, and gypsum so that the mixture is composed of:

- 3 cubic yards of mineral Aggregate per 1 cubic yard of perlite
- 0.2 cubic yards of topsoil per 1 cubic yard of perlite
- 10 pounds of dolomite per 1 cubic yard of perlite
- 1.5 pounds of gypsum per 1 cubic yard of perlite

Mix the Aggregate, perlite, dolomite, topsoil and gypsum before delivery to the project. Mix the materials in the presence of the Project Manager. Provide at least 5 Calendar Days' notice to the Engineer before beginning mixing.

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Construction

01013.40 General - Construct water quality bioslope facility as shown. Perform excavation and placement work only when the facility area is dry. Do not stockpile excavated material in the facility area.

(a) Compaction - After placing the ecology mix and shoulder Aggregate, compact by saturating with water.

Maintenance

01013.70 Cleaning - Remove all accumulated sediment and debris before completing the facility.

Measurement

01013.80 Measurement - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of materials are:

Item	Quantity
Mineral Aggregate	70.3 Cu. Yd.
Perlite	23.4 Cu. Yd.
Dolomite	234 Lbs.
Gypsum	35 Lbs.
Topsoil.....	5.1 Cu. Yd.
Permanent Seeding	0.1 Acres

Payment

01013.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Bioslope".

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

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.13(f) Types of Seed Mixes - Add the following to the end of this subsection:

Provide the following seed mix formulas:

- Permanent Seeding:**

Botanical Name (Common Name)	PLS (lb/acre)	÷	(% Purity (minimum)	x	% Germination) (minimum)	=	Amount (lb/acre)
<u>Festuca rubra</u> (Creeping Red Fescue)	175		_____		_____		_____
<u>Lolium perenne</u> (Perennial Ryegrass)	20		_____		_____		_____

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Deschampsia cespitosa
(Tufted Hairgrass)

50

01030.90 Payment – Delete the sentence and bullets that begins “Partial payments for permanent seeding..”.

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

01040.80(b) Topsoil and Wetland Topsoil - Replace this subsection, except for the subsection number and title, with the following:

No measurement of quantities will be made for Topsoil or Wetland Topsoil.

01040.90(b) Topsoil and Wetland Topsoil - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for Topsoil or Wetland Topsoil.

01040.90(d) Plant Materials – Delete the three sentences that begin “Partial payments for plant Materials will...” , “Partial payments made....” and “Upon completion of the Establishment Period...” with the following paragraph:

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

SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications modified as follows:

02001.01 General - Replace the sentence that begins “Provide quality control...”, with the following sentence:

Provide quality control according to Section 00165 and this Section.

02001.02 Abbreviations and Definitions - Replace this subsection, except for the subsection number and title, with the following:

ASTV - Actual Strength Test Value - average of test cylinder compressive strengths

f'_c - Minimum Specified Compressive Strength at 28 days

f'_{cr} - Average Compressive Strength Over-design. The average strength required to assure that, with normal variations, the concrete will meet f'_c

GGBFS - Ground Granulated Blast Furnace Slag

HPC - High Performance Concrete

HRWRA - High-Range Water-Reducing Admixture (super-plasticizer)

PPCM - Precast prestressed concrete member

SCM - Supplementary Cementitious Materials

SSD - Saturated Surface-Dry

w/cm Ratio - Water-Cementitious Material Ratio

WRA - Water Reducing Admixture

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Cementitious Materials - Portland cement and supplementary cementitious materials.

High Performance Concrete - Concrete designed for enhanced durability and performance characteristics. High performance concrete is identified by the letters "HPC" in front of the concrete class designation (for example, HPC4500 - 1 1/2).

Moderate Exposure - Elevations below 1,000 feet.

Pozzolans - Fly ash, silica fume, and metakaolin.

Severe Exposure - Elevations 1,000 feet and above.

Supplementary Cementitious Materials - Fly ash, silica fume, metakaolin, and ground granulated blast furnace slag.

02001.10 Materials - Replace this subsection, except for the subsection number and title, with the following:

Furnish Materials meeting the requirements of the following:

Aggregates	02690
Cement.....	02010
Chemical Admixtures	02040
Concrete Modifiers	02035
Supplementary Cementitious Materials.....	02030
Synthetic Fiber Reinforcing	02045
Water.....	02020

02001.20 Concrete Properties, Tolerances, and Limits - Replace the paragraph that begins "Provide concrete that is a workable..." with the following paragraph:

Provide concrete that is workable, placeable, uniform in composition and consistency, and having the following properties:

02001.20(a) Strength - Replace this subsection, except for the subsection number and title, with the following:

Provide 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.

Table 02001-1

Concrete Strength and Water/Cementitious Material (w/cm) Ratio		
Type of Concrete	Strength (PSI)	Maximum w/cm Ratio
Structural	3300	0.50
	3300 (Seal)	0.45
	4000	0.48
	HPC4500	0.40
	5000 and Above	0.40 ¹
	HPC5000 and above	0.40
Drilled Shaft	4000	0.48

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Paving	4000	0.44
¹ PPCM's with cast-in-place decks and no entrained air may have w/cm as follows: 5000 psi - 0.48; 5500 psi - 0.44; 6000 psi and up - 0.42		

(1) Required Over Design Strength (f'_{cr}) - Using the ASTV from either field results or trial batch cylinder's, provide calculations demonstrating compliance with one of the following:

- $f'_{cr} = f'_c \times 1.20$ for up to but not including Class 6000; $f'_{cr} = f'_c \times 1.15$ for Class 6000 and higher
- $f'_{cr} = f'_c + 1.34 \times S^1$ for up to but not including Class 6000; $f'_{cr} = f'_c + 1.28 \times S^1$ for Class 6000 and higher

¹ For current designs, S is the standard deviation of 28-Day cylinder strengths from the available data set. For new mix designs, the second option above may be used if there are at least 15 sets of 28-Day cylinders from a similar class ($\pm 1,000$ psi) mix design produced at the same plant.

(2) Flexural Beams - Flexural beams for paving concrete mix designs shall achieve 600 psi at 28 Days.

02001.20(c) Slump - Replace this subsection, except for the subsection number and title, with the following:

Provide 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.

Table 02001-3

Concrete Slump	
Condition	Slump
Concrete without WRA	4" max.
Concrete with WRA	5" max.
Concrete with HRWRA	5 1/2" \pm 2 1/2"
Precast Prestressed Concrete with HRWRA	10" max.
Seal Concrete	8" \pm 2"
Drilled Shaft Concrete	8 1/2" \pm 1 1/2" ¹
¹ Maintain a minimum slump of 4 inches throughout drilled shaft placement, including temporary casing extraction.	

Add the following subsection:

02001.20(e) Durability - For HPC and SFC designs, except designs for precast bridge rail elements, the following additional requirements apply:

Test	Test Method	Acceptance Value
Length Change	ASTM C157	-0.045%
Permeability	AASHTO T 277	1,000 Coulombs (max.) at 90 days ¹

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¹ Only required for alternate HPC designs. See 02001.30(b)(2).

02001.30 Concrete Mix Design - Replace this subsection with the following subsection:

02001.30 Concrete Constituents:

(a) Portland Cement - Use AASHTO M 85 or ASTM C150, Type I or II cement for structural or paving concrete. Use AASHTO M 85 or ASTM C150, Type III cement for precast prestressed concrete. Provide all cement from the QPL.

(b) Supplementary Cementitious Materials - SCM may be used separately or in combinations up to the specified maximum percentage by mass according to the following:

(1) General Limits - SCM may be used separately or in combination as shown:

Separate SCM	Maximum
Fly Ash + Other Pozzolans	25%
GGBFS	50%
Silica Fume	5%
Combined SCM	Maximum
Fly Ash + Other Pozzolans + GGBFS + Silica Fume	50%*
Fly Ash + Other Pozzolans + Silica Fume	30%*

* Fly ash + other pozzolans shall constitute no more than 25% and silica fume shall constitute no more than 5% of the total weight of cementitious materials.

When silica fume is added to truck mixed concrete, mix the batch a minimum of 100 revolutions at the mixing speed specified by the manufacturer before leaving the batch plant.

(2) HPC Cementitious Composition - Provide HPC with one of the following:

- Cementitious material with 66 percent portland cement, 30 percent fly ash, and 4 percent silica fume.
- 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 coulombs at 90 days when tested according to AASTHO T 277.

(c) Blended Hydraulic Cement - Blended hydraulic cement may be used subject to the limits of 02001.30(b) and 02010.20.

(d) Chemical Admixtures - Use chemical admixtures according to the manufacturer's recommendations. Use WRA in all seal concrete and in Class 5000 concrete or greater. Use HRWRA in all HPC.

Use a superset extender from the QPL in all concrete for bridge decks. Use an appropriate amount to extend the initial set time of the concrete by 90 minutes.

(e) Aggregate - If the nominal maximum size of the coarse Aggregate is not included as a part of the class of concrete, or shown on the Plans, any size from 1 1/2-inch to 3/8-inch nominal maximum size Aggregate may be used according to ACI guidelines except:

- Use 1 1/2 inch nominal maximum size Aggregates in bridge deck concrete.

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- Use 1 1/2 inch nominal maximum size Aggregates in paving concrete unless otherwise indicated.
- Use 3/8 inch nominal maximum size Aggregates in drilled shafts unless otherwise indicated.

(f) Synthetic Fiber Reinforcing for Concrete - Use synthetic fiber reinforcing from the QPL and according to Section 02045 in all bridge deck and silica fume overlay concrete. 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.

Proportion all HPC for a minimum coarse Aggregate absolute solid volume according to Table 02001-4:

Table 02001-4

Absolute Solid Volume	
Maximum Nominal Aggregate Size	Cu. Yd. (Aggregate) / Cu. Yd. (Concrete)
3/8"	0.36
1/2"	0.38
3/4"	0.40
1"	0.42
1 1/2"	0.44

Two or more Aggregate products or sources meeting Specifications may be blended to improve concrete properties. Blending non-specification Aggregate Materials, except for gradation, with specification Materials is not allowed.

02001.31 Concrete Constituents - Replace this subsection with the following subsection:

02001.31 Concrete Mix Design - Submit new or current mix designs, prepared by a CCT, for each required class of structural or paving 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. 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 requirements.

02001.32(a) Trial Batch - 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 will be used in the Project. Simulate haul time and mixing conditions to ensure proper workability at the jobsite. Furnish all materials, Equipment and Work required for designing the mixes, testing Materials, and making trial batches to verify the final design for final use at no additional cost to the Agency.

02001.32(b) Plastic Concrete - Replace this subsection, except for the subsection number and title, with the following:

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For each trial batch, test the temperature, slump, density, and air content and compute the w/cm ratio and yield according to the following test methods:

Test	Test Method
Sampling Fresh Concrete	WAQTC TM 2
Slump	AASHTO T 119 ¹
Density	AASHTO T 121
Yield	AASHTO T 121
Air Content	AASHTO T 152
Concrete Temperature	AASHTO T 309
Molding Concrete Specimens	AASHTO T 23 or R 39 ²
Water-Cement Ratio	³

¹ For drilled shaft concrete test the slump retention characteristics by subsequent tests at half-hour intervals for the duration of the estimated drilled shaft placement, including temporary casing extraction. Report in table or graphical format.

² Cast cylinders in single-use plastic molds

³ Use ODOT's Field Operating Procedure for AASHTO T 121 in the MFTP

02001.32(c) Strength Tests - Replace this subsection with the following subsection:

02001.32(c) Hardened Concrete - When applicable, test properties according to the following test methods:

Test	Test Method
Compressive Strength	AASHTO T 22
Flexural Strength	AASHTO T 97
Length Change	ASTM C157
Permeability	AASHTO T 277

(1) Compressive Strength Tests - For each trial batch, cast and cure at least three test cylinders according to AASHTO T 23 or AASHTO R 39, in 6 inch by 12 inch or 4 inch by 8 inch single use plastic molds. Test at 28 days according to AASHTO T 22.

(2) Flexural Strength Tests - For each paving concrete trial batch, cast and cure at least three flexural beams according to AASHTO T 23 or AASHTO R 39. Test flexural beams at 28 days according to AASHTO T 97.

(3) Length Change Tests - For all HPC and SFC mix designs, except for precast bridge rail elements, make at least three specimens from the trial batch for length change testing. Sample prisms shall have 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. Store and measure samples according to ASTM C157, Section 11.1.2. Report length change results at 28 days.

(4) Permeability Tests - For alternate HPC mix designs, 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.

02001.32(d) Length Change Tests - Delete this subsection.

02001.32(e) Permeability Tests - Delete this subsection.

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02001.33 Required Over Design Strength (f'_{cr}) for New Mix Designs - Delete this subsection.

02001.34(a) Length Change Tests - Delete this subsection.

02001.34(b) Permeability Tests – Delete this subsection.

02001.35 Required Submittals for Mix Designs - Replace this subsection, except for the subsection number and title with the following subsection:

Submit the following information for each concrete mix design:

(a) Supplier's Information - Provide the supplier's unique mix design identification number and batch plant location.

(b) Mix Design Constituent Proportions:

- Weight per cubic yard (pounds per cubic yard) of cement, SCM, fine Aggregates and coarse Aggregates (SSD), mix water, concrete modifiers, and chemical admixtures
- Absolute volumes of cement, SCM, fine Aggregates and coarse Aggregates (SSD), mix water, air content, concrete modifiers, and chemical admixtures
- Dosage rates for chemical admixtures (ounces per cubic yard)
- w/cm ratio including all chemical admixtures

(c) Aggregates - Identify the Aggregate source by the ODOT source number. Report current values of the following:

- Bulk specific gravities (SSD)
- Fine Aggregate absorptions
- Coarse Aggregate absorptions
- Dry-rodded density of coarse Aggregates
- Average stockpile gradations
- Fineness modulus of sand used in the mix design calculations

(d) Cement - For each cement used, provide the following:

- Manufacturer
- Brand name
- Type
- Source or location plant
- QPL product number

(e) SCM - For each SCM used, provide the following:

- Manufacturer
- Brand name
- Source
- Class
- QPL product number

(f) Concrete Modifiers - For each concrete modifier used, provide the following:

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- Manufacturer
- Brand name
- QPL product number

(g) Admixtures - For each admixture used, identify the following:

- Manufacturer
- Brand name
- Design dosage rate
- QPL product number

(h) Synthetic Fiber Reinforcing - For each synthetic fiber reinforcing used, provide:

- Manufacturer
- Brand name
- Design dosage rate
- QPL product number

(i) Water - Identify the source of water to be used and provide a certificate of compliance certifying that the water meets the requirements of 02020.10.

(j) Plastic Concrete Tests - Report the temperature, slump, density, air content, yield, and w/cm ratio of the trial batch or the average of these values for the cylinder sets presented for evaluation of a current mix design.

For drilled shaft concrete, report the following additional information:

- The total time estimate from initial batching through drilled shaft placement, including haul time, placing concrete, and temporary casing extraction.
- Initial slump test results and subsequent results at 15-minute intervals, verifying a minimum slump of 4 inches is maintained for the total time estimated for drilled shaft placement, including temporary casing extraction. Report data in a table or graph format.

(k) Compressive Strength Test Results - Report the individual test results and the ASTV of cylinders from the trial batch for new mix designs. For current designs, provide the individual tests and the average of the cylinder sets presented for evaluation.

(l) Strength Analysis - Provide an analysis, showing all calculations, demonstrating that the mix design meets the requirements of 02001.20(a).

(m) HPC and SFC Test Results - For all HPC and SFC designs, report the length change according to 02001.32(c)(3).

For alternate HPC designs, report the permeability according to 02001.32(c)(4). An SFC permeability report is not required.

HPC test results are not required for precast bridge rail elements.

(n) Quality Control Personnel - Provide the name and certification number of the CCT who prepared the mix design, the QCT who performed the plastic concrete tests and cast the test cylinders, the CSTT who tested the cylinders, and the ODOT certification number of the laboratory where the cylinders were tested.

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02001.36 Adjusting Concrete Proportions - Replace this subsection, except for the subsection number and title, with the following:

After a mix design has been reviewed and accepted, submit any proposed adjustments to concrete proportions for review. Significant changes to the mix design, as determined by the Engineer, may require verification of performance by trial batch according to 02001.32. Significant changes include, but are not limited to the following:

- Decreases in cementitious material content.
- Changes in cement source.
- Increases in SCM quantity replacing cement.
- Changes in SCM source.
- Substitution of aggregates from a different source.
- Admixture product changes.
- Large admixture dosage adjustments.
- Excluding seasonal adjustments for air entraining agents and Type A or D water reducers (\pm 25 oz/cubic yard).

02001.37 Trial Batch Costs – Delete this subsection.

02001.50(a) Certified Aggregate Technician (CAgT) - Add the following bullet to the bullet list of duties:

- Notify the CCT whenever a fine aggregate fineness modulus varies by more than \pm 0.20 from the mix design it is to be used in.

02001.50(b) Quality Control Technician (QCT) - Replace this subsection, except for the subsection number and title, with the following:

- Duties:
 - Attend pre-placement meetings for bridge deck pours and paving.
 - Be at the concrete placement site when concrete placement is in progress.
 - Have a copy of the mix design on site and available during concrete placement.
 - Obtain and check each batch ticket upon arrival of the concrete at the jobsite for the correct mix design.
 - Sample the concrete and test for ambient air temperature, plastic concrete temperature, slump, air content, density, w/cm ratio and yield at the frequencies required by and according to the tests listed in the MFTP, after concrete mixture proportions are adjusted in the field, and at such times as requested by the Engineer.
 - Notify the Contractor and the Engineer immediately when the concrete is not in compliance with the Specifications.
 - Be in direct contact with the CCT by telephone, radio or other means to convey information.
 - Notify the CCT of loads rejected and the reason for rejection.
 - Notify the CCT immediately whenever the w/cm ratio varies from the mix design target by more than \pm 0.03.
 - Notify the CCT immediately whenever the air content varies from the mix design target by more than \pm 1.5 percent.
 - Notify the CCT immediately whenever the slump varies from the allowable limits of Table 02001-3.

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- Notify the CCT immediately whenever the density of the plastic concrete varies from the mix design target by more than ± 3.0 pounds per cubic foot.

02001.50(c) Concrete Control Technician (CCT) - Replace this subsection, except for the subsection number and title, with the following:

- Duties:
 - Prepare new concrete mix designs.
 - Adjust current mix designs.
 - Notify the Engineer 48 hours prior to trial batching.
 - Control the quality of concrete during production.
 - Submit proposed adjustments of the mix design, in writing, to the Engineer for approval by the middle of the following work shift.
 - Ensure approved adjustments are implemented prior to proceeding with production.
 - Test the fine and coarse aggregates for total moisture content according to AASHTO T 255 before batching is started and when there is a significant change in the slump of the concrete. Moisture testing may be by an alternate method if approved by the Engineer. Provide moisture content test results to the Engineer upon request.
 - Visually inspect the coarse aggregate for changes in moisture content throughout the day. Perform necessary testing for total moisture, and make mixture adjustments if necessary.
 - Monitor concrete properties and compressive strength tests throughout the duration of the Project.
 - Make adjustments to loads that fail to meet the air content or slump criteria of these Specifications prior to the 90-minute time limit. Adjustments shall comply with the provisions of ASTM C94.
 - Make adjustments to maintain a satisfactory over-design f'_{cr} .
 - Perform an analysis and verify the accuracy of coarse and fine aggregate moistures whenever the w/cm ratio varies from the mix design target by more than ± 0.03 .
 - Perform an analysis and make necessary adjustments whenever the unit weight of the plastic concrete varies from the mix design by more than ± 3.0 pounds per cubic foot.
 - Perform an analysis whenever the fineness modulus of the fine aggregate varies by more than ± 0.20 from the established mix design. If necessary to maintain proper workability, ability to pump or ability to finish, make an adjustment to the coarse/fine aggregate ratio and submit to the Engineer by the middle of the following work shift.

SECTION 02040 - CHEMICAL ADMIXTURES

Comply with Section 02040 of the Standard Specifications modified as follows:

02040.10 Materials - Replace this subsection, except for the subsection number and title, with the following:

Furnish admixtures from the QPL.

SECTION 02050 - CURING MATERIALS

Comply with Section 02050 of the Standard Specifications modified as follows:

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02050.10 Liquid Compounds - Delete the paragraph that begins “Furnish liquid membrane-forming curing...” with the following paragraph:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309.

Delete the paragraph that begins “Before using liquid compounds, submit...”.

02050.20 Polyethylene Films - Delete the paragraph that begins “Furnish clear or white...” with the following paragraph:

Furnish clear or white polyethylene films for curing concrete meeting the requirements of ASTM C171.

SECTION 02080 - GROUT

Comply with Section 02080 of the Standard Specifications modified as follows:

02080.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

This Section includes the requirements for grout.

02080.30 Keyway Grout – Replace the sentence that begins “Furnish keyway grout from the QPL...” with the following sentence:

Furnish keyway grout from the QPL.

02080.60 Structural Grout - Replace the sentence that begins “Furnish structural grout from the QPL...” with the following sentence:

Furnish structural grout from the QPL.

Add the following subsection:

02080.70 UHPC Grout - Furnish Ultra-High Performance Concrete (UHPC) grout used in the keyways of precast prestressed concrete members or other applications when shown. Furnish UHPC grout from the QPL.

SECTION 02110 - POSTS, BLOCKS, AND BRACES

Comply with Section 02110 of the Standard Specifications.

SECTION 02440 - JOINT MATERIALS

Comply with Section 02440 of the Standard Specifications modified as follows:

02440.19 Steel Bridging Plate - Replace this subsection, except for the subsection number and title, with the following:

Furnish ASTM A36 steel bridging plate with a minimum thickness of 1/4 inch and a width of 8 inches, cut in lengths of 4 to 8 feet. Drill spike holes at 12 inch centers along the centerline of the plate.

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02440.20 Preformed Joint Seal - Replace this subsection, except for the subsection number, with the following:

02440.20 Strip Seal - Furnish strip seals from the QPL and conforming to ASTM D5973.

Add the following subsection:

02440.22 Preformed Compression Joint Seal - Furnish preformed compression joint seals from the QPL and conforming to the requirements of AASHTO M 297.

Add the following subsection:

02440.23 Precompressed Foam Silicone Joint Seal - Furnish precompressed foam silicone joint seals from the QPL.

02440.30 Hot Poured Joint Filler - Replace this subsection with the following subsection:

02440.30 Hot Applied Joint Sealant - Furnish hot applied joint sealant from the QPL.

02440.40 Gaskets for Concrete Pipe and Precast Manhole Section Joints - Replace this subsection, except for the subsection number and title, with the following:

(a) **Preformed Flexible Joint Sealant** - Furnish Materials for tongue and groove or key lock manhole joints conforming to the requirements of ASTM C990.

(b) **Rubber Gaskets** - Furnish Materials for O-ring manhole and concrete pipe joints conforming to ASTM C443.

02440.70(b) Rubber - Replace this subsection, except for the subsection number and title, with the following:

Provide rubber water stops to the dimension shown and conforming to the requirements of ASTM C923, ASTM C1478, or ASTM F2510 as appropriate for the specific structure and pipe types.

SECTION 02510 - REINFORCEMENT

Comply with Section 02510 of the Standard Specifications modified as follows:

02510.10 Deformed Bar Reinforcement - Replace this subsection, except for the subsection number and title, with the following:

Furnish deformed bar reinforcement from the QPL and conforming to the requirements of ASTM A 706, AASHTO M31 (ASTM A615), or AASHTO M334 (ASTM A1035 CS). Unless otherwise specified or shown, all reinforcing bars shall be Grade 60.

02510.20 Mechanical Splices - Replace this subsection, except for the subsection number and title, with the following:

Furnish mechanical splices from the QPL. Where bars of different sizes or strengths are connected, the governing strength shall be the strength of the smaller or weaker 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.

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- 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.
- Total slip displacement - Measure displacement after loading in tension to 30.0 ksi and relaxing to 3.0 ksi. The displacement for bars up to No. 14 shall not exceed 0.01 inches. The displacement for No. 18 bar shall not exceed 0.03 inches.

02510.25 Headed Bar Reinforcement - Replace this subsection, except for the subsection number and title, with the following:

Furnish Class HA headed steel bar from the QPL for concrete reinforcement. The headed steel bar shall develop 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.

SECTION 02520 - STEEL AND CONCRETE PILES

Comply with Section 02520 of the Standard Specifications modified as follows:

02520.10(b) Steel Pipe Piles - Replace this subsection, except for the subsection number and title, with the following:

Steel pipe piles shall be either spirally welded or longitudinally welded, and shall be constant in section. Steel piles shall conform to ASTM A252 or API 5L and the grade shown.

SECTION 02530 - STRUCTURAL STEEL

Comply with Section 02530 of the Standard Specifications modified as follows:

02530.70 Galvanizing - Replace the paragraph that begins "Steel that will be finished by hot-dip galvanizing..." with the following paragraph:

Steel that will be 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" shall have controlled silicon content. The silicon content shall be in either of the ranges 0 - 0.06 percent or 0.13 - 0.25 percent. Before galvanizing, submit mill test certificates verifying silicon content to the Engineer and the galvanizer.

SECTION 02560 - FASTENERS

Comply with Section 02560 of the Standard Specifications modified as follows:

Add the following subsection:

02560.05 Geometry - Bolt or rod length used shall be 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(b) Nuts— Replace this subsection, except for the subsection number and title, with following:

Nuts for carbon steel bolts shall conform to the requirements of the following, or equivalent:

Plain (Noncoated) Bolts:

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

- 1/4" - 1 1/2" - ASTM A563, Grade A, hex
- Over 1 1/2" - 4" - ASTM A563, Grade A, heavy hex

Galvanized Bolts:

- All - ASTM A563, Grade A, C, D, or DH, heavy hex

02560.20(a) Bolts – Replace this subsection, except for the subsection number and title, with following:

High-strength bolts used in noncoated weathering steel connections shall be Type 3. High-strength bolts shall conform to the requirements of the following:

Heavy Hex Head:

- ASTM F3125, Grade A325

Twist-Off:

- ASTM F3125, Grade F1852

02560.20(b) Nuts – Replace this subsection, except for the subsection number and title, with following:

Nuts for high-strength bolts shall conform to the requirements of the following, or equivalent:

Type 1 Plain (Noncoated) Bolts:

- All - Heavy hex ASTM A563, Grade C, D, or DH

Type 1 Galvanized Bolts:

- All - Heavy hex ASTM A563, Grade DH

Type 3 Bolts:

- All - Heavy hex ASTM A563, Grade C3 or DH3

02560.20(f) Lock-Pin and Collar Fasteners - Delete this subsection.

02560.30(c) Nuts – Replace this subsection, except for the subsection number and title, with following:

Nuts for tie rods, anchor bolts, and anchor rods shall conform to the requirements of the following, or equivalent:

Plain Steel Tie Rods, Anchor Bolts, and Anchor Rods:

- All - Heavy hex ASTM A563, Grade A

Galvanized Steel Tie Rods, Anchor Bolts, and Anchor Rods:

- All - Heavy hex ASTM A563, Grade A, C, D, or DH

Plain or Galvanized High-Strength Tie Rods, Anchor Bolts, or Anchor Rods:

- All - Heavy hex ASTM A563, Grade DH

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02560.40 Galvanizing and Coating - Replace this subsection with the following subsection:

02560.40 Galvanizing and Coating:

(a) High Strength Fasteners - When specified, hot-dip galvanize Grade A325 fasteners or mechanically deposit zinc to Grade F1852 fasteners according to ASTM F3125.

(b) Tie Rods, Anchor Bolts, Anchor Rods and Carbon Fasteners - Hot-dip galvanize, tie rods, anchor bolts, anchor rods, nuts, washers and carbon fasteners according to ASTM F2329 as appropriate to the product.

Overtap nuts for galvanized fasteners, galvanized tie rods, galvanized anchor bolts, and galvanized anchor rods according to ASTM A563.

Measure the zinc thickness on the wrench flats or top of bolt head of galvanized bolts and on the wrench flats of galvanized nuts.

(c) Direct Tension Indicators – When specified, apply mechanically deposited zinc according to ASTM F959.

(d) Repair of Hot-Dip Galvanizing - Repair damaged hot-dip galvanizing according to ASTM A780. Minimum zinc content for Method A2 is 94 percent on the dry film.

02560.60(b) Other Test Requirements - In the paragraph that begins "Wedge test all bolts according..." replace the words "AASHTO M 164 (ASTM A325)" with the words "ASTM F3125, Grade A325 or Grade F1852".

02560.70 Lubricating Fasteners - Replace this subsection, except for the subsection number and title, with 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. Black fasteners shall be "oily" to the touch when installed.

Field lubricate galvanized bolts in tapped holes, galvanized anchor rods, and galvanized tie rods with a lubricant from the QPL. Apply lubricant to threads and to bearing surfaces that will turn during installation.

Protect fasteners from dirt and moisture at the Project site.

Retest heavy hex head fasteners that do not pass the field rotational capacity test. Clean and relubricate heavy hex head fasteners with a lubricant from the QPL prior to retesting.

Relubrication of Twist-Off fasteners is not permitted.

SECTION 02690 - PCC AGGREGATES

Replace Section 02690 of the Standard Specifications with the following Section 02690:

**One Horse Slough (Brewster Road) Bridge
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SECTION 02690 - PCC AGGREGATES

Description

02690.00 Scope - This Section includes the requirements for coarse and fine aggregates for portland cement concrete.

02690.01 Definitions:

Coating - Foreign or deleterious substances found adhering to the aggregate particles.

Detrimental Materials - Materials that adversely affect concrete, including but not limited to clay, shale, mica, silt, bark, alkali, sticks, organic matter, soft and flaky particles.

Nominal Maximum Size Of Aggregate - One sieve larger than the first sieve that retains more than 10 percent of the material using an agency specified set of sieves based on cumulative percent retained. Where large gaps in specification sieves exist, intermediate sieves may be inserted to determine nominal maximum size.

Materials

02690.10 Materials - PCC Aggregates shall consist of natural or crushed rock that is hard, strong, durable and free from adherent coatings or other detrimental materials.

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 - The Contractor may request approval to produce coarse and fine aggregates in sizes other than those stated in 02690.20 and 02690.30. The request shall be in writing, and shall 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 - Acceptance of aggregate will be 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 indicated in Table 00165-2 for a PF of 1.00. Each required sample represents a subplot. When the quality level indicated 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 will be rejected by the Engineer unless non specification material is removed from the stockpile. Do not add additional material to the stockpile until enough non-specification material is removed so that the quality level for each constituent is equal to or greater than the quality level in Table 00165-2 for a 1.00 PF.

Reprocessing of non-conforming material and the testing required for acceptance will be at no additional cost to the Agency. Acceptance of reprocessed material will be based on passing test results or accepted visually by the Engineer.

02690.20 Coarse Aggregate:

**One Horse Slough (Brewster Road) Bridge
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(a) **Harmful Substances** - Harmful substances shall not exceed the following limits:

Test	Test Method		Percent (by Weight)
	ODOT	AASHTO	
Lightweight Pieces	-	T 113	1.0
Material passing No. 200 sieve	-	T 11	1.0
Wood Particles	TM 225	-	0.05

(b) **Soundness** - Coarse aggregates for concrete shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 12 percent by weight.

(c) **Durability** - Coarse aggregates shall meet 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** - Provide 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** - Provide 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 for Prestressed Concrete** - Sampling shall be according to AASHTO T 2 and sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. PCC coarse aggregate shall conform to grading and separated sizes as follows:

(1) Where indicated in Table 02690-1, the coarse aggregate shall be separated into two sizes and each separated size shall be measured into the batch in the quantity determined by the mix design.

For each of the indicated maximum sizes of coarse aggregates, the separated sizes shall be as indicated in Table 02690-2:

Table 02690-1

Maximum Nominal Size of Aggregates	Separated Sizes
1"	1" - No. 4
3/4"	3/4" - No. 4
3/4"	3/4" - 1/2" and 1/2" - No. 4

**One Horse Slough (Brewster Road) Bridge
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3/4"

3/4" - 3/8" and 3/8" - No. 4

(2) The grading of each of the specified separated sizes of coarse aggregate shall conform to the following:

Table 02690-2

Separated Sizes

Sieve Size 1" - No. 4 3/4"- No. 4 3/4"- 1/2" 3/4"- 3/8" 1/2"- No. 4 3/8"- No. 4

Percent Passing (by Weight)

1 1/2"	100	—	—	—	—	—
1"	90 - 100	100	100	100	—	—
3/4"	50 - 80	90 - 100	85 - 100	85 - 100	100	100
1/2"	—	—	0 - 15	—	85 - 100	—
3/8"	15 - 40	20 - 50	—	0 - 15	35 - 65	85 - 100
No. 4	0 - 10	0 - 10	—	—	0 - 15	0 - 15
No. 200	*	*	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

(f) **Grading and Separation by Sizes for Other Concrete** - Sampling shall be according to AASHTO T 2. Sieve analysis shall be according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Tables 02690-3 and 02690-4 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-3

Gradation of Coarse Aggregates

Sieve Size **Combined*
Sizes** **Separated
Sizes** **Separated
Sizes** **Separated
Sizes**

1 1/2" - No. 4 **1 1/2" - 3/4"** **1" - No. 4** **3/4" - 1/2"**

Percent Passing (by Weight)

2"	100	100	—	—
1 1/2"	90 - 100	90 - 100	100	—
1"	70 - 89	20 - 55	90 - 100	100
3/4"	35 - 70	0 - 15	—	85 - 100
1/2"	—	—	25 - 60	0 - 15
3/8"	10 - 30	0 - 5	—	—
No. 4	0 - 5	—	0 - 10	—
No. 8	—	—	0 - 5	—
No. 200	**	**	**	**

* For 1 1/2 inch coarse aggregate use two or more separated sizes which when combined shall meet the gradation limits for 1 1/2" - No. 4

** See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

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**Table 02690-4
Gradation of Coarse Aggregates**

Sieve Size	Separated or Combined			
	Separated Sizes 3/4" - 3/8"	Combined Sizes 3/4" - No. 4	Separated Sizes 1/2" - No. 4	Separated Sizes 3/8" - No. 8
	Percent Passing (by Weight)			
1"	100	100	—	—
3/4"	90 - 100	90 - 100	100	—
1/2"	20 - 55	—	90 - 100	100
3/8"	0 - 15	20 - 55	40 - 70	85 - 100
No. 4	0 - 5	0 - 10	0 - 15	10 - 30
No. 8	—	0 - 5	0 - 5	0 - 10
No. 16	—	—	—	0 - 5
No. 200	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

02690.30 Fine Aggregates:

(a) Different Sources - Do not mix fine aggregates from different sources of supply, or store in the same pile. Do not use alternately in the same class of mix, without prior approval.

(b) Harmful Substances - The amount of harmful substances shall not exceed the following limits:

Test	Test Method (AASHTO)	Percent (by Weight)
Lightweight Pieces	T 113	2.0%
Material passing No. 200 sieve	T 11	3.0%

(c) Soundness - Fine aggregate shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 10 percent by weight.

(d) Organic Impurities - All fine aggregate shall meet the requirements of AASHTO M 6 for organic impurities.

(e) Sand Equivalent - Fine aggregate shall be tested according to AASHTO T 176 and shall have a sand equivalent of not less than 75.

(f) Sand for Mortar - Sand for mortar shall conform to the requirements of this Section.

(g) Grading - Sampling shall be according to AASHTO T 2. Sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation

One Horse Slough (Brewster Road) Bridge Bridge and Roadway

requirements of Table 02690-5 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-5
Gradation of Fine Aggregate*

Sieve Size	Percent Passing (by Weight)
3/8"	100
No. 4	90 - 100
No. 8	70 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	5 - 30
No. 100	0 - 10
No. 200	**

* Determine the fineness modulus according to AASHTO T 27 and AASHTO T 11. Maintain the fine aggregate fineness modulus within plus or minus 0.20 from the fineness modulus used in the Contractor's mix design. Fine aggregates in which the fineness modulus varies by more than 0.20 from the mix design target shall not be incorporated until an assessment is done to determine whether an adjustment in the aggregate proportions is necessary. Proportion changes must be performed by a CCT according to the provisions of ACI 211. Submit analysis of FM and mix design adjustments to the Engineer for approval.

** See 02690.30(b). Do not evaluate material passing No. 200 sieve according to 0165.40.

SECTION 02810 - BRIDGE RAIL

Comply with Section 02810 of the Standard Specifications modified as follows:

02810.10 Shapes, Plates, and bars - Replace this subsection, except for the subsection number and title, with the following:

Shapes, plates and bars shall conform to the following, or as shown or specified:

- ASTM A36
- ASTM A572 Grade 50
- ASTM F1554 Grade 105

The silicon content of all exposed shapes, plates and bars that are called out on drawings as "Galvanize - Control Silicon", shall be according to 02530.70.

Add the following subsection:

02810.15 Anchor Adhesive - Use one of the following epoxy adhesive from the QPL:

- Hilti HIT-HY200-A
- Hilti HIT-RE 500v3, Red Head C6+
- Ultrabond HS-1CC

**One Horse Slough (Brewster Road) Bridge
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SECTION 02820 - METAL GUARDRAIL

Comply with Section 02820 of the Standard Specifications modified as follows:

02820.40 Guardrail Anchor Hardware - Replace the paragraph that begins “Provide cable and fittings...” with the following paragraph:

Provide cable and fittings for guardrail anchors that conform to the requirements of AASHTO M 30, Class A, for Type II cable. Galvanize all fittings according to AASHTO M 111 (ASTM A123).

02820.50 Acceptance of Materials - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of metal guardrail Materials will be according to Section 00165.35.

SECTION 02910 - SIGN MATERIALS

Comply with Section 02910 of the Standard Specifications modified as follows:

02910.20 Reflective and Retroreflective Sheeting - Replace the title of this subsection with “**Retroreflective Sheeting**”

02910.20(a) General - Replace the paragraph that begins “Use retroreflective sheeting Type...” with the following paragraph:

Use retroreflective sheeting from the QPL and the following:

02910.32(b) Retroreflective Sheeting Legend – Replace the paragraph that begins “The Silver-white or white letters...” with the following paragraph:

Removable legend shall be fabricated with sheeting conforming to 02910.20 that is permanently adhered to a flat aluminum frame.

02910.40 Hardware - Replace the paragraph that begins "The bolts, nuts, and washers..." with the following paragraph:

The bolts, nuts, and washers used to fabricate and erect signs shall be aluminum alloy, stainless steel, or hot-dip galvanized steel. Aluminum for bolts and nuts shall conform to ASTM B211, alloys 2024-T4 or 6061-T6 as the Contractor elects. Aluminum washers shall conform to ASTM B209, alloy Alclad 2024-T4. Stainless steel for bolts, nuts, and washers shall be Type 304 or Type 316. Galvanized steel bolts, nuts and washers shall be medium carbon steel. Galvanize steel hardware according to AASHTO M 232 (ASTM A153).

02910.75(a) Warranty Period – Replace the bullet that begins “For retroreflective Type III and Type IV ...” with the following paragraph:

- For retroreflective ASTM Type III and Type IV sheeting used for permanent signs, the warranty period shall be for 10 years.

Replace the bullet that begins “For retroreflective Type IX sheeting used ...” with the following paragraph:

- For retroreflective ASTM Type IX and Type XI sheeting used for permanent signs, the warranty period shall be for 12 years.

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

APPENDIX A - PROJECT PLANS

Under Separate Cover

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

Bridge and Roadway
One Horse Slough (Brewster Road) Bridge
Brewster Road
Linn County
April 2020

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

APPENDIX B - BID SECTION

ATTENTION:

DO NOT INCLUDE THE PLANS AND SPECIFICATIONS WHEN SUBMITTING YOUR BID PROPOSAL. SUBMIT ONLY THE ITEMS INCLUDED IN THE BID SECTION AND ANY ADDENDUM THAT MAY HAVE BEEN ISSUED FOR THIS PROJECT.

INCLUDED IN THIS SECTION:

- BID SCHEDULE
- PROPOSAL
- BID PROPOSAL BOND
- FIRST TIER SUBCONTRACTOR DISCLOSURE FORM
- DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM

INCLUDED BY REFERENCE:

- SUBCONTRACTORS SOLICITATION AND UTILIZATION REPORT, ODOT FORM 734-2721 CAN BE FOUND AT:

<https://www.oregon.gov/ODOT/CS/CIVILRIGHTS/Pages/forms.aspx>

(SUBMIT PER SECTION 130.40(f))

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

BID SCHEDULE

One Horse Slough (Brewster Road) Bridge
Bridge and Roadway

Bid Opening: April 7, 2020 at 9:35 a.m., P.D.T.

ITEM	UNIT	QUANT.	UNIT PRICE	TOTAL
1. Mobilization	LS	All	\$	\$
2. Temporary Work Zone Traffic Control, Complete	LS	All	\$	\$
3. Erosion Control	LS	All	\$	\$
4. Plastic Sheeting	SQYD	35	\$	\$
5. Sediment Barrier	FOOT	855	\$	\$
6. Sediment Barrier, Type 8	FOOT	40	\$	\$
7. Pollution Control Plan	LS	All	\$	\$
8. Work Containment Plan and System	LS	All	\$	\$
9. Health and Safety Plan	LS	All	\$	\$
10. Written Lead Compliance Plan	LS	All	\$	\$
11. Contaminated Soil Disposal	TON	70	\$	\$
12. Construction Survey Work	LS	All	\$	\$
13. Asphalt Pavement Saw Cutting	FT	474	\$	\$
14. Clearing and Grubbing	LS	All	\$	\$
15. General Excavation	CUYD	457	\$	\$
16. Subgrade Geotextile	SQYD	109	\$	\$
17. Bridge Removal Work	LS	All	\$	\$
18. Structure Excavation	LS	All	\$	\$
19. Granular Structure Backfill	CUYD	35	\$	\$
20. Furnish Pile Driving Equipment	LS	All	\$	\$
21. Furnish PP 16 x 0.5 Steel Piles	FT	864	\$	\$
22. Drive PP 16 x 0.5 Steel Piles	EA	12	\$	\$
23. PP 16 x 0.5 Steel Pile Splices	EA	12	\$	\$
24. Reinforcement, Grade 60	LS	All	\$	\$
25. General Structural Concrete, Class 3300	CUYD	51	\$	\$
26. Reinforced Concrete End Panels	SQYD	163	\$	\$
27. 48" Precast Concrete Box Beams	FOOT	909	\$	\$
28. Type "F" Concrete Bridge Rail	LS	All	\$	\$
29. Rolled Waterproofing Membrane	SQFT	3,433	\$	\$

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

PROPOSAL

TO: COUNTY BOARD OF COMMISSIONERS, LINN COUNTY, OREGON

The undersigned, as bidder, declares that:

This bid is for the work described on the "Description of Work" sheet bound in this bid.

This bid has been prepared from documents obtained from Linn County Road Department website at: <http://www.co.linn.or.us/Roads/ContractConst.asp> - Project Title

The only persons or parties interested in this bid as principals are those named in this bid.

The bidder submits this bid in accordance with and subject to the terms and conditions stated in Sections 00120 and 00130 of the specifications.

The bidder has obtained and become acquainted with the applicable standard specifications, special provisions, plans, and other required provisions applicable to the particular work for which the bid is submitted.

The bidder has personally inspected the location and the site of the work and has become acquainted with all conditions, local and otherwise, affecting it.

The bidder has obtained and become acquainted with the forms of contract and bond which are to be signed by the successful bidder.

The bidder is satisfied as to the quantities and conditions and understands that in signing this bid the bidder waives all right to claim any misunderstanding regarding these quantities and conditions.

The bid guaranty submitted with this bid, if a bid bond, is by this reference made a part of this bid.

The bidder also proposes and agrees that:

If this bid is accepted, the bidder will execute the contract form furnished by the Agency, will provide all necessary machinery, equipment, tools, apparatus, labor and other means of construction, and will do all work and furnish all the materials specified in or called for by the contract in the manner and time prescribed in the contract and according to the requirements of the Engineer as given in the contract.

The bidder will accept, as full payment for the work performed and the materials, labor, equipment, machinery, tools, apparatus and other means of construction furnished, the amount earned under the contract as computed in the manner described in the specifications from the quantities of the various classes of work performed and the respective unit prices bid as these prices are given in the "Bid Schedule" bound in this bid.

Any contract awarded to the bidder shall include the provisions required by ORS 279C.830 or 40 U.S.C. 276a.

The bidder also certifies to the following:

A. Noncollusion:

One Horse Slough (Brewster Road) Bridge Bridge and Roadway

The price(s) and amount of this bid have been arrived at independently and without consultation, communication, or agreement with any other contractor, bidder, or potential bidder except as disclosed on a separately attached statement.

Neither the price(s) nor the amount of this bid, and neither the approximate price(s) nor approximate amount of this bid has been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before the opening of bids.

No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid.

This bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid.

The bidder, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted of or found liable for any act, prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract except as described on a separately attached statement.

The bidder understands and acknowledges that the above representations are material and important and will be relied on by the Agency, in awarding the contract(s) for which this bid is submitted. The bidder understands that any misstatement in this certification is and shall be treated as fraudulent concealment from the Agency, of the true facts relating to the submission of bids for this contract.

B. Noninvolvement in Any Debarment and Suspension:

The bidder, its owners, directors, and officers:

Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

Have not within a three-year period preceding this bid 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.

Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in the preceding paragraph of this certification.

Have not within a three-year period preceding this bid had one or more public transactions (Federal, State, or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, the prospective primary participant shall attach an explanation to this bid.

One Horse Slough (Brewster Road) Bridge Bridge and Roadway

List exceptions. (For each exception noted, indicate to whom the exception applies, initiating agency, and dates of action. If additional space is required, attach another page with the following heading: Certification Exceptions continued, Bid Insert.)

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

C. Lobbying Activities:

To the best of my knowledge and belief, that:

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 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.

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" to the Agency.

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 Section 1352, Title 31, U.S. Code. 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.

The prospective participant also agrees by submitting his or her bid that he or she shall require that the language of this certification be inserted in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

D. Compliance With Oregon Tax Laws:

By signature on this bid, the undersigned hereby certifies under penalty of perjury that the undersigned is authorized to act on behalf of bidder, that the undersigned has authority and knowledge regarding bidder's payment of taxes, and that bidder is, to the best of the undersigned's knowledge, not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 (Amusement Device Taxes), ORS 403.200 to 403.250 (Tax For Emergency Communications),

One Horse Slough (Brewster Road) Bridge Bridge and Roadway

and ORS Chapters 118 (Inheritance Tax), 314 (Income Tax), 316 (Personal Income Tax), 317 (Corporation Excise Tax), 318 (Corporation Income Tax), 321 (Timber And Forestland Tax), 323 (Cigarettes And Tobacco Products Tax), and the elderly rental assistance program under ORS 310.657, and any local taxes administered by the Department of Revenue under ORS 305.620.

E. Employee Drug Testing Program:

Pursuant to ORS 279C.505(2), that the bidder has an employee drug testing program in place, and will maintain such program for the entire period of this contract. Failure to maintain such program shall constitute a material breach of contract.

F. Nondiscrimination:

Pursuant to ORS 279A.110, that the bidder has not discriminated and will not discriminate against a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns, or an emerging small business in obtaining any required subcontracts. The bidder understands that it may be disqualified from bidding on this public improvement project if the Agency finds that the bidder has violated subsection (1) of ORS 279A.110.

G. Use of Registered Subcontractors:

That all subcontractors performing work on this public improvement contract will be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS Chapter 701 before the subcontractors commence work under this contract.

H. Incorporation of All Addenda:

The bidder has incorporated into this bid all addenda issued for this Project.

The bidder understands and acknowledges that the Agency will provide all addenda only by publishing them on the Agency's website. Addenda may be downloaded from the Agency's website.

The bidder shall be responsible for diligently checking the Agency's website for addenda. Bidders should check the website at least weekly until the week of Bid Closing and daily during the week of Bid Closing.

By submitting this bid, the bidder assumes all risks associated with its failure to access all addenda and waives all claims, suits, and actions against the State, the Transportation Commission, the Department of Transportation and their members, officers, agents, and employees that may arise out of the bidder's failure to access all addenda, in spite of any contingencies such as website failure, down-time, service interruptions, and corrupted, inaccurate, or incomplete addenda or information.

The party by whom this proposal is submitted, and by whom the contract will be entered into in case the award is made to bidder is:

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

_____ [“An Individual,” “A Partnership,” “A Corporation,” “An Association”]

doing business under the name of _____

at _____
[Street] [City] [State] [Zip Code]

which address is the address to which all communications concerning this bid and the contract should be sent.

The name of the surety by which the Performance Bond and Payment Bond covering the contract, if awarded, will be furnished and the name and address of the surety's local agent are as follows:

Name of Surety _____

Name of Agent _____

Accompanying this proposal is _____
[“Proposal Bond,” “Cashier’ s Check,” “Certified Check”]

in the amount of _____ percent of the bid.

The bidder further proposes to accept as full payment for the work proposed herein the amount computed under the provision of the contract documents and based on the unit price amounts, under Bid Schedule bound herein, it being expressly understood that the unit prices are independent of the exact quantities involved. The bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these contract documents.

If this proposal shall be accepted and the undersigned shall fail or neglect to contract as aforesaid, and to give bonds in the amount specified, with surety satisfactory to the Linn County Board of Commissioners, within ten (10) days [not including Sunday], from the date of receiving from the Board of Commissioners the contract and prepared and ready for execution, the Board of Commissioners may, at its option, determine that the bidder has abandoned the contract, and thereupon forfeiture of the guaranty accompanying the bid shall operate and the same shall be the property of the Linn County Board of Commissioners.

Bidder

Dated _____, 20__

By: _____

By: _____

**One Horse Slough (Brewster Road) Bridge
Bridge and Roadway**

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Project Name One Horse Slough (Brewster Road) Bridge

Highway Brewster Road

County Linn

Bid Opening Date April 7, 2020

Name of Bidding Contractor _____

Email Address _____

CHECK THIS BOX IF YOU WILL NOT BE USING ANY FIRST-TIER SUBCONTRACTORS OR IF YOU ARE NOT SUBJECT TO THE DISCLOSURE REQUIREMENTS (SEE INSTRUCTIONS).

FIRST-TIER SUBCONTRACTORS

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

(Attach additional sheets as necessary)

Project Name _____ Bid Opening Date _____

DBE COMMITMENT CERTIFICATION AND UTILIZATION FORM

This DBE Certification and Utilization Form applies solely to meeting the assigned DBE contract goal for DBE participation. If the assigned DBE contract goal is greater than zero, each Bidder, including DBE prime Bidders, shall complete and submit this form with their Bid. SHOULD THE BIDDER FAIL TO COMPLETELY FILL OUT, SIGN, AND SUBMIT THIS FORM WITH THE BID WHEN THE ASSIGNED DBE CONTRACT GOAL IS GREATER THAN ZERO, THE BIDDER WILL BE CONSIDERED NON-RESPONSIVE. This certification shall be deemed a part of the resulting contract.

The Bidder acknowledges and certifies that this form accurately represents receipt of and consent from the listed DBE firm as to the use of the referenced itemized quote below for the performance of this project. Bidder certifies that it had direct contact with the named DBE firms regarding participation of this project. Bidder certifies, if awarded this project, that it shall award subcontracts to or enter into agreements with the named DBE's.

If the Bidder is submitting evidence of good faith efforts to secure participation, Bidder certifies that the good faith efforts documentation is true, accurate and correctly reports the actions taken by the Bidder.

Bidder's Authorized Representative (PRINT)

Bidder's Authorized Representative (SIGN)

Date

Name of Contractor (Company Name)

PART I

These columns to be completed by Bidder				These columns to be completed by Agency	
Name of DBE Firm	Type of Work *	Function ** (examples: Sub., Supp., DBE Man., Serv., Brok.)	Subcontract Amount (or expenditure amount or fee/commission amount)	Goal Participation % ***	DBE Amount ****

* From " Certification Office of Business Inclusion and Diversity " ** From "Function" column below. *** From "Goal Participation %" column below.
**** (Subcontract Amount x Goal Participation %)

Function	Goal Participation %	This section to be completed by Agency	
Subcontractor	100% (of subcontract amount)	ASSIGNED DBE CONTRACT GOAL %	
Supplier (Regular Dealer)	60% (of supply expenditure amount)	TOTAL DBE AMOUNT	\$
DBE Manufacturer	100% (of material expenditure amount)	TOTAL BID AMOUNT	\$
Service Provider	100% (of fee or commission)	DBE COMMITMENT	%
Broker	100% (of brokerage fee only)	(TOTAL DBE AMOUNT ÷ TOTAL BID AMOUNT) (calculated to two decimal places (0.01))	

Additional sheets may be used by copying this form.
Bidder must sign each additional sheet to certify its content and completion of form.

PART II

If Bidder's participation commitment to eligible DBEs is less than the assigned DBE contract goal, Bidder shall submit documentation of "good faith efforts" as evidence of actions to secure DBE participation.

Bidder's documentation of "good faith efforts" shall meet the requirements provided in the Disadvantaged Business Enterprise (DBE) Commitment Requirements, item no. 4(c) DBE Commitment Certification Form Part II - Good Faith Efforts, which outlines the activities considered for good faith efforts.