

CITY OF COTTAGE GROVE

CONTRACT DOCUMENTS

for

BOHEMIA PARK EXPANSION

EDA AWARD NUMBER: 07-79-07918; URI 118958

APRIL 12TH, 2024

Project Administrated by



CITY OF COTTAGE GROVE
CONTRACT DOCUMENTS
FOR
COTTAGE GROVE BOHEMIA PARK EXPANSION

Candace Solesbee – Mayor

CITY COUNCIL

Chalice Savage
Dana Merryday
Mike Fleck

Jon Stinnett
Greg Ervin
Alex Dreher

Send questions or requests to:


Name: Damien Gilbert, P.E., Branch Engineering, Inc
Title: City Engineer
Telephone: 541-746-0637
Email: damieng@branchengineering.com

Name: Julie Leland, P.E., Branch Engineering, Inc
Title: Project Engineer
Telephone: 541-746-0637
Email: juliel@branchengineering.com


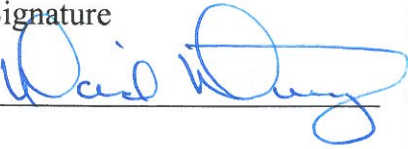
Name: Faye Stewart
Title: Public Works & Development Director
City of Cottage Grove
400 E. Main Street
Cottage Grove, OR 97424
Telephone: (541) 942-3340
Email: pwdirector@cottagegrove.org

CERTIFICATIONS PAGE

Professional of Record Certification(s):

<p>Stamp</p> <div style="text-align: center;">  <p>EXPIRES: 12/31/24</p> </div>	<p>I certify the Sections listed below were prepared under my supervision:</p> <p>CSI Sections: 311000, 312000, 321313 (partial), 331415, 333000, 334200</p> <p>City Standard Section: 000, 100, 200, 300, 400, 500, 600</p> <p>City Standard Section: 900 (partial)</p>
<p>Signature</p> <hr style="width: 80%; margin-left: 0;"/>	<p>Civil Design Engineer Branch Engineering, Inc. 310 5th Street, Springfield, OR 97477 P: 541-746-0637</p>

<p>Stamp</p> <p style="text-align: center; margin-top: 50px;">To Be Issued in Addendum #1</p>	<p>I certify the Sections listed below were prepared under my supervision:</p> <p>CSI Sections: 000111, 033000, 042000, 055000, 061000, 062000, 072100, 076100, 079005, 081113, 087100, 092116, 099000, 101400, 102800, 220000, 220300, 220700</p> <p>City Standard Section: 900 (partial)</p>
<p>Signature</p> <hr style="width: 80%; margin-left: 0;"/>	<p>Civil Design Engineer Branch Engineering, Inc. 310 5th Street, Springfield, OR 97477 P: 541-746-0637</p>

<p>Stamp</p> 	<p>I certify the Sections listed below were prepared under my supervision:</p> <p>CSI Sections: 116813, 129300, 321313, 321316, 328400, 329300</p> <p>City Standard Section: 900 (partial)</p>
<p>Signature</p> 	<p>Landscape Architect DLA Inc. 474 Willamette Street, Suite 305, Eugene, Or 97401 P: 541-683-5803</p>

CITY OF COTTAGE GROVE, OREGON

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ADVERTISEMENT FOR BIDS

COTTAGE GROVE BOHEMIA PARK EXPANSION

NOTICE IS HEREBY GIVEN THAT Sealed bids for the Bohemia Park Expansion, City of Cottage Grove, Oregon, shall be addressed to the City Engineer, Julie Leland, PE, 310 5th Street, Springfield, Oregon 97477 and will be received at Branch Engineering, Inc., 310 5th Street, Springfield, Oregon 97477. Acceptance of bids will be officially closed at **2:00 pm Pacific Time, May 2nd, 2024**, and immediately thereafter the bids will be publicly opened and read at Branch Engineering. The bid shall be submitted under sealed cover and marked with the Contractor's name and project name. Bids received after the date and time fixed for opening will not be considered. No electronic or facsimile submittals will be accepted.

The project involves the construction of new park amenities that include: installation of a water tank as a water feature, a splash play area, a public restroom, walkways, a playground, and landscape features at the north of the undeveloped portion of the Bohemia Park in Cottage Grove, Lane County, Oregon. The work involves site preparation, excavating, grading, compaction for the building pad and foundation, utility connections to the building including wastewater service pipe and water service line installation, rock and concrete paving, and restoration. The Engineer's Estimate for this Project is approximately \$1,050,000-\$1,200,000.

The Project Manual including; Plans, Specifications, Agreement, and Bid Forms are available at the City of Cottage Grove's website <https://www.cottagegroveor.gov/> where they can be viewed and printed. Any Addenda will also be posted on the city's website City of Cottage Grove's website <https://www.cottagegroveor.gov/>. All prospective bidders must be added to the Plan Holders List by sending an e-mail with company contact information to jessicam@branchengineering.com with the project title in the subject line. **Prospective bidders must be on the Plan Holders List for their bid to be considered. Bidders are responsible for checking the website for addenda and changes prior to submitting bid, however notification of Addenda issuance will be issued via e-mail to the addresses listed on the Plan Holders List.** No hard copy of the bid documents will be available. A **Non-Mandatory Pre-Bid Meeting** will be held at **Bohemia Park** on **Wednesday, April 24th, 2024 at 2 PM.**

Bidders must be pre-qualified with the City of Cottage Grove in accordance with Oregon Revised Statutes (ORS) Chapter 279C.430 by submitting either a completed City of Cottage Grove Pre-qualification form or an Oregon Department of Transportation form on or before 5:00 p.m., Tuesday, April 30th, 2024 to Branch Engineering. Bidders and/or subcontractors must be prequalified in street repair construction, water and wastewater construction, Buildings, Earthwork and Drainage to complete the project. City of Cottage Grove Pre-qualification forms are available at 310 5th Street, Springfield, Oregon 97477 or by emailing jessicam@branchengineering.com. You may pre-qualify with the Oregon Department of Transportation at 121 Transportation Building, Salem, Oregon 97310.

Notice is hereby given that this contract is for a Public Work, subject to ORS 279C.800 to 279C.870.

All bids must be sealed and plainly marked on the outside showing the name of the bidder: the project name: the date and time of bid opening: the words "sealed bid": and addressed to Julie Leland, PE, City Engineer, 310 5th Street, Springfield, Oregon 97477. There is no pre-bid conference scheduled for this project.

Published Date: April 12, 2024
CITY OF COTTAGE GROVE
COTTAGE GROVE, OREGON

**SECTION 020
COTTAGE GROVE BOHEMIA PARK EXPANSION
SCOPE OF WORK**

Requirements of Project:

The project involves the construction of new park amenities that include: installation of a water tank as a water feature, a splash play area, a public restroom, walkways, a playground, and landscape features at the north of the undeveloped portion of the Bohemia Park in Cottage Grove, Lane County, Oregon. The work involves site preparation, excavating, grading, compaction for the building pad and foundation, utility connections to the building including wastewater service pipe and water service line installation, rock and concrete paving, and restoration. The Engineer's Estimate for this Project is approximately \$1,050,000-\$1,200,000.

Location of Project:

The project is located in Tax Lot 11600, Tax Map 20-03-28-34, west of South 10th Street and south of East Main Street in Cottage Grove, Lane County, Oregon.

Purpose of Project:

The purpose of the project is to establish the Bohemia Park Entry Plaza by the construction of new park amenities at the north of the undeveloped portion of the Bohemia Park.

Project Engineer:

All questions should be directed to:

Julie Leland, P.E., Branch Engineering 541-746-0637
juliel@branchengineering.com

City Schedule:

Non-Mandatory Pre-Bid Meeting:	2:00 PM, APRIL 24TH, 2024
BOHEMIA PARK - 101 S 10TH STREET, COTTAGE GROVE, 97424	
Bids Closed / Opened & Read:	2:00 PM, MAY 2ND, 2024
310 5TH STREET, SPRINGFIELD, OR 97477	
Projected Award Date:	MAY 14TH, 2024
Projected Start Date:	MAY 28TH, 2024
Substantial Completion Date:	NOVEMBER 29TH, 2024
Final Completion Date:	DECEMBER 27TH, 2024

SECTION 100 – BID INSTRUCTIONS

- **110 – INSTRUCTIONS TO BIDDERS**

Section 110
INSTRUCTIONS TO BIDDERS

COTTAGE GROVE BOHEMIA PARK EXPANSION

1. Form of Bid

All bids must be made upon the blank form of bid attached hereto, and must give prices for each item and aggregate amount for the work.

The City of Cottage Grove reserves the right to reject any bid not in compliance with all prescribed public contracting procedures and requirements, including the requirement to demonstrate the bidder's responsibility under ORS 279C.375(3)(b) and may reject for good cause all bids after finding that doing so is in the public's interest.

The bidder shall sign his/her bid in the blank space provided therefore. Bids made by corporations or partnerships shall contain the name and address of such organization, together with the names and addresses of partners or officers. If the Bid is made by a corporation, it must be signed by one of the officers thereof; if made by a partnership, by one of the partners.

All bids must be submitted at the time and place, and in the manner prescribed in the "Advertisement for Bids".

No bid for this contract shall be received or considered by the City of Cottage Grove unless the bidder is registered and in good standing with the Construction Contractors Board, as required by ORS Chapter 701, or licensed by the State Landscape Contractors Board, as required ORS 671.530.

2. Contract Documents.

The contract documents under which awardee shall execute this work consists of the Advertisement for Bids, the Instructions to Bidders, Bid Security, the Bid, the signed Contract, the Performance Bond, the Payment Bond, the Public Works Bond, General Conditions, the Special Provisions, the Technical Specifications, Oregon Standard Specifications for Construction 2024, Insurance Certification, and signed addenda; all bound herewith.

Any person contemplating the submission of a bid and being in doubt as to the meaning or intent of said contract documents should request, in writing, that the City of Cottage Grove's Project Administrator provide a written interpretation thereof.

3. Prevailing Wage Rates

The Provisions of ORS 279C.800 to ORS 279C.870 relating to the prevailing wage rates will be complied with.

- a. The hourly rate of wage to be paid by Contractor or any Subcontractor to workers in each trade or occupation required for the public works employed in the

performance of the Contract shall not be less than the specified minimum rate of wage in accordance with ORS 279C.838 and ORS 279C.840.

- b. The latest prevailing wage rates for public works contracts in Oregon are contained in the following publications: The January 5, 2024 Prevailing Wage Rates for Public Works Projects in Oregon, including any current amendments. Such publications can be reviewed electronically at:

<https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx>

and are hereby incorporated as part of the contract documents.

- c. When a public works project is subject to the Davis Bacon Act (40 U.S.C.3141 et seq.), the Contractor and every Subcontractor shall pay the higher of the two (BOLI and Davis Bacon) prevailing wage rates.
- d. Contractor and all Subcontractors shall keep the prevailing wage rates for this Project posted in a conspicuous and accessible place in or about the project.
- e. The City of Cottage Grove shall pay a fee to the Commissioner of the Oregon Bureau of Labor and Industries as provided in ORS 279C.825. The fee shall be paid to the Commissioner as required by the administrative rules adopted by the Commissioner.
- f. If Contractor or any Subcontractor also provides for or contributes to a health and welfare plan or a pension plan, or both, for its employees on the Project, it shall post notice describing such plans in a conspicuous and accessible place in or about the Project. The notice shall contain information on how and where to make claims and where to obtain future information.

4. Estimate of Quantities

The estimate of quantities of work to be done as given in the Bid, although stated with as much accuracy as possible, is approximate only and is assumed solely for the purpose of comparing bids. The quantities on which payments will be made to the Contractor are to be determined by measurement of the work actually performed by the Contractor as specified in the contract documents. The Owner reserves the right to increase or diminish the amount of any class of work as may be deemed necessary. At the Owner's sole option and if it is determined to be in the Owner's best interest, any one or more bid items may be deleted from the work without penalty to the Owner.

5. Bid Security

Bids must be accompanied by a certified check from a bank in good standing or a bid bond issued by a surety company authorized to issue such bonds in Oregon in an amount not less than ten (10) percent of the total amount of the Bid submitted payable to the City of Cottage Grove. All checks and Bid Bonds excepting that of the successful bidder will be returned within thirty (30) days after the contract has been awarded. The bid security of the successful bidder will be retained until he/she has entered into a satisfactory contract with the Owner. In addition, a Performance Bond will be required in

the full amount of the contract and a Payment Bond will be required in the full amount of the contract in accordance with ORS 279C.380.

6. Conditions of Work

It is understood that the Contractor, before submitting his/her bid, has made a careful examination of the contract documents; that she/he has fully informed herself/himself as to the quality and quantity of materials and the character of the work required; and that she/he has made a careful examination of the locations and conditions of the work and the source of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to fully inform herself/himself in advance in regard of all conditions pertaining to the work.

7. Award and Basis of Award of Contract

Within ten (10) days after the opening of the bids, the Owner will accept one of the bids or reject all of the bids received. The City of Cottage Grove will provide notice of its intent to award in writing per City Rule 137-049-0395.

It is the Owner's intent to award a single contract to the responsible bidder who submits the lowest total bid and whose Bid packet complies with these and all other contract documents.

In determination of the lowest responsible bidder, the City of Cottage Grove reserves the right to take into account and give reasonable weight to the extent of the bidder's experience on work of the nature involved, on the bidder's record as to dependability in the carrying out of other contracts, and evidence of present ability to perform the contract in a satisfactory manner.

The Owner also reserves the right to reject any or all bids, and to waive any informality or technicality in the bids received or in the bidding procedure.

8. Execution of Contract and Damages for Failure to Execute

The bidder whose bid packet is accepted will be required within ten (10) calendar days after notice that a contract has been awarded to him/her, to appear and execute a contract with the City of Cottage Grove for the full and complete performance of all work and payment for all labor and materials specified therein, and execute bonds for the faithful performance and payment of such contract in the sum of the total amount of the contract satisfactory to the Owner. Said bonds shall be with a surety company as bondsman whose financial standing and record of service is satisfactory to the Owner. Said performance, payment, and public works bonds shall be in force for one year after acceptance of the completed work to cover all guarantees against defective workmanship and materials.

At the time of executing the contract, the successful bidder shall also submit to the Owner the required Certificate of Insurance. Should the successful bidder fail or refuse to execute the contract and furnish the bonds and insurance certification, then the bid security deposited by said bidder shall be retained as liquidated damages by the Owner.

9. Beginning of the Work

It is the intent of the Owner that this work begins without delay. The Contractor shall commence the work contemplated under these contract documents within ten (10) calendar days of receipt of Owner's "Notice to Proceed", unless otherwise directed by the Engineer, and shall complete the same within the time specified in the Bid packet, it being expressly understood and agreed that the time of beginning, the rate of progress and time of completion of the work are of the essence of this contract.

10. Submission of Pre-qualification Forms

3. Bidders must be pre-qualified with the City of Cottage Grove in accordance with Oregon Revised Statutes (ORS) Chapter 279C.430 by submitting either a completed City of Cottage Grove Pre-qualification form or an Oregon Department of Transportation form on or before 5:00 p.m., Tuesday, April 30th, 2024 to Branch Engineering. Bidders and/or subcontractors must be prequalified in street repair construction, water and wastewater construction, Buildings, Earthwork and Drainage to complete the project. City of Cottage Grove Pre-qualification forms are available at 310 5th Street, Springfield, Oregon 97477 or by emailing jessicam@branchengineering.com. You may pre-qualify with the Oregon Department of Transportation at 121 Transportation Building, Salem, Oregon 97310.

11. Submission of Bids

Each bid shall be sealed in an envelope, properly addressed to the City Engineer Damien Gilbert, P.E., 310 5th Street, Springfield, OR, 97477 and will be received at Branch Engineering, Inc., 310 5th Street, Springfield, Oregon 97477, and showing on the outside of the envelope the name of the bidder, the project, the date and hour of opening, and the words "sealed bid" per City Rule 137-049-0200(1)(a)(D). Bids will be received at the time and place stated in the Advertisement for Bids.

12. Funding

This project will be partially funded with Federal funds from the United States Department of Commerce, Economic Development Administration (EDA) and therefore is subject to the Federal laws and regulations associated with that program.

13. Minimum Wage

The minimum rate to be paid all crafts and labor on this contract shall be the prevailing wage rate for the individual crafts involved in the Lane County area during the life of the contract or the minimum wage specified in a wage determination decision of the State of Oregon, Commissioners of the Bureau of Labor, whichever is higher.

14. Indemnity

Each bidder agrees that his/her performance under this contract is at his/her sole risk and that she/he shall indemnify the City of Cottage Grove and, officers, agents and employees, against and hold them harmless from, any and all liability for damages, costs, losses and expenses resulting from, arising out of or in any way connected with this contract, or from Contractor's failure to perform fully hereunder, and bidder further agrees

to defend the City of Cottage Grove, their officers, agents and employees against all such suits, actions or proceedings brought by any third party against them for which the Contractor would be liable there under.

15. Withdrawal of Bids

Any bidder may withdraw their bid, either personally or by written request, in accordance with City Rule 137-049-0320(2)(a), at any time prior to closing. However, upon opening, all bids shall be irrevocable for a period of SIXTY (60) days from the time of opening.

16. Items to be Returned with Submission of Bid

- a. Schedule of Bid Items.
- b. Bid security not less than ten (10) percent of the total bid.
- c. All addenda or acknowledgment therefore, if any.

Note: A completed City of Cottage Grove Pre-qualification form or Oregon Department of Transportation Pre-qualification form must be submitted no later than 5:00 p.m., Tuesday, April 30th, 2024.

17. Addenda

The City of Cottage Grove will not mail notice of Addenda, but will publish notice of any Addenda on the City's website. Prospective bidders should frequently check the City's website until closing (i.e., at least once weekly until the week of closing and at least once daily the week of or before closing). In all other ways, addenda shall be issued as set forth in City Rule 137-049-0250.

18. Solicitation and Award Protests

Solicitation protests will be handled pursuant to City Rule 137-049-0260(3) and award protests will be handled pursuant to City Rule 137-049-0450(4).

19. Items to be Returned Within 2 hours of Bid Opening

In accordance with ORS 279C.370, all bidders must submit to the City of Cottage Grove at Branch Engineering, 310 5th St, Springfield, OR, 97477, on the attached form (next page) within two (2) hours following the date and time of bid opening, a list of all first tier Subcontractors, who will furnish labor or labor and materials on the project and whose subcontract amounts are at least 5% of the Contractor's total bid amount, but at least \$15,000, or \$350,000, regardless of the percentage of the total project bid.

20. Asbestos Abatement Projects

A Contractor or Subcontractor under this contract will not be required to be licensed under ORS 468A.720 regarding asbestos abatement projects. City Rule 137-049-0200(1)(a)(L)

21. Non-mandatory Pre-bid Conference

There is no pre-bid conference scheduled for this project.

SECTION 200 – BID PACKAGE DOCUMENTS

- **210 – FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM**
- **220 – PROJECT BID**
- **230 – SCHEDULE OF BID ITEMS**
- **240 – EDA “NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION”**
- **250 – LOBBYING RESTRICTION FORM (CD-512)**

SECTION 210

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

PROJECT NAME: COTTAGE GROVE BOHEMIA PARK EXPANSION

JOB #: 22-001K

BID CLOSING: Date: May 2nd, 2024

Time: 2:00 p.m.

This form must be submitted at the location specified in the invitation to Bid on the advertised bid closing date and within two working hours after the advertised bid closing time.

List below the name of each Subcontractor that is required to be disclosed, the category of work that the Subcontractor will be performing and the dollar value of the subcontract. enter "NONE" if there are no Subcontractors that need to be disclosed. (ATTACH ADDITIONAL SHEETS IF NEEDED.)

NAME AND CCB NUMBER	DOLLAR VALUE	CATEGORY OF WORK
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____
_____	\$ _____	_____

Failure to submit this form by the disclosure deadline will result in a non-responsive bid. A non-responsive bid will not be considered for award.

Form submitted by (bidder name): _____

Contact name: _____

Phone number: _____

SECTION 220

PROJECT BID

PROJECT: COTTAGE GROVE BOHEMIA PARK EXPANSION

TO: Branch Engineering
310 5th Street
Springfield, Oregon 97477

1. The undersigned bidder agrees and certifies as follows:
 - (a) Bidder shall be bound by and will comply with the provisions of ORS 279C.840 and 40 U.S.C. 276a;
 - (b) Bidder will comply with the provisions of ORS 305.385 relating to Oregon tax laws;
 - (c) Bidder has not and will not discriminate against minority, women, or emerging small businesses, business enterprises, or a business enterprise that is controlled by or that employs a disabled veteran, as defined in ORS 408.225 in obtaining any required subcontracts. Bidder acknowledges that failure to do so shall be grounds for disqualification;
 - (d) Bidder, its subcontractors, if any, and all employers working on this project are subject employers under the Oregon Workers' Compensation law and shall comply with ORS 656.017, which requires them to provide worker's compensation coverage for all their subject workers;
 - (e) Bidder is registered and in good standing with the Construction Contractors Board, in accordance with ORS 701.035 to 701.055;
 - (f) All sub-Contractors performing work as described in ORS 701.005(2) will be registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 before the sub-Contractors commence work under the contract.
2. The undersigned bidder, having familiarized her/himself with the drawings, specifications, and other contract documents related to the City of Cottage Grove's COTTAGE GROVE BOHEMIA PARK EXPANSION hereby proposes to furnish all materials, equipment, and labor necessary to perform all work to complete the COTTAGE GROVE BOHEMIA PARK EXPANSION in strict accordance with the plans, specifications and this bid packet, all of which are made a part of the contract documents herein by this reference.
3. This bid includes all fees, taxes, profit, overhead, tools, expendable equipment, utilities, transportation costs and other expenses necessary to complete this project.
4. It is understood that the sum of the bid item amounts shall constitute complete compensation for the COTTAGE GROVE BOHEMIA PARK EXPANSION and all appurtenances

complete and ready for operation as shown in the plans and specifications.

The City reserves the right to delete any bid item from a Bid Schedule and/or delete an entire Bid Schedule(s) and the undersigned bidder will make no claims for anticipated profits or additional compensation for any such decrease in the work.

5. The bidder declares that he/she has visited the site of the proposed work and has become fully acquainted with conditions relating to construction and labor and understands fully the facilities, difficulties and restrictions attending the execution of the work under the contract.

6. The bidder agrees, if awarded the contract, to execute and deliver to the City of Cottage Grove, within ten (10) calendar days after formal award, signed copies of the contract, in triplicate: satisfactory performance, payment and public works bonds; and appropriate certificates of insurance.

7. The bidder further agrees that the required bid security consisting of a certified check or bid bond, in the amount of ten (10) percent of the bid is hereto attached, and that the bid security will be placed in escrow with the City of Cottage Grove; that should the undersigned fail to execute an agreement, the performance bond, the public works bond, the payment bond, and certificate of insurance within ten (10) calendar days after his/her bid has been accepted, the bid security shall be forfeited as liquidated damages; but if this bid is not accepted within ten (10) days of the time set for the opening of the bids, or if the undersigned executes and timely delivers said agreement and documents, the bid security shall be returned.

8. It is understood that the undersigned bidder may withdraw his bid at any time prior to the date and time of bid opening, but that all bids shall be irrevocable for a period of SIXTY (60) days from the time of opening.

9. The bidder proposes to commence the work on or before a date to be specified in the "Notice to Proceed" and to complete the work in all respects within two hundred and thirteen (213) calendar days thereafter; whichever comes first, in accordance with the plans, specifications, and contract documents for:

COTTAGE GROVE BOHEMIA PARK EXPANSION

10. In the event the bidder is awarded a contract and shall fail to complete the work within the time limit specified, or the extended time limit as provided in the specifications, liquidated damages shall be paid by the Contractor to the City of Cottage Grove, at the rate per day specified in the General Conditions until the work is complete in all respects.

11. Receipt of the following addenda to the plans and/or specifications is hereby acknowledged:

<u>Addendum No.</u>	<u>Date of Receipt of Addendum</u>	<u>Signed Acknowledgment</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____

(NOTE: Failure to acknowledge receipt of Addenda may be considered an irregularity in the bid)

12. The undersigned as bidder declares that the only person or parties interested in this bid, as principals, are those named herein; that his/her bid is made without collusion with any other person, firm or corporation; that she/he has carefully examined the contract documents, including the specifications and special provisions and project site, and that she/he will contract with Owner to furnish the services and materials as specified, in the manner and the time therein prescribed and according to all the requirements set forth therein, and that the contents of this bid have not been communicated by the bidder, his/her employees or agents to any person not an employee or agent of the bidder.

NAME OF BIDDER: _____

ADDRESS: _____

SIGNATURE: _____

TITLE: _____

IF CORPORATION (ATTEST): _____

Dated this _____ day of _____, 2024

Notary: _____

My Commission Expires: _____

SECTION 230

SCHEDULE OF BID ITEMS

ITEM No. ODOT SPEC	ITEM DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL BID PRICE
1 210	Mobilization, Bonds, And Insurance	1	Lump Sum	\$	\$
2 225	Temporary Work Zone Traffic Control, Complete	1	Lump Sum	\$	\$
3 280	Erosion and Sediment Control	1	Lump Sum	\$	\$
4 305	Construction Survey Work	1	Lump Sum	\$	\$
5 320	Removal of Existing Tree and Root Ball, Complete	1	Lump Sum	\$	\$
6 310	Saw Cutting (Includes second cut)	195	Foot	\$	\$
7 320	Clearing and Grubbing	1	Lump Sum	\$	\$
8 330	General Excavation	550	Cubic Yard	\$	\$
9 350	Subgrade Geotextile	104	Square Yard	\$	\$
10 445	4-Inch Sanitary Sewer Pipe, Class B Backfill, Depth TBD	228	Foot	\$	\$
11 445	4-inch Sanitary Sewer Cleanout Assembly	3	each	\$	\$
12 445	4-Inch Stormwater Pipe, Class B Backfill, 1 - 5 Foot Depth	185	Foot	\$	\$
13 445	4-inch Stormwater Cleanout Assembly	3	each	\$	\$
14 445	Area Drain assembly per detail 3 on sheet C402	3	each	\$	\$
15 445	Downspout connection assembly per detail 4 on sheet C402	2	each	\$	\$
16 490	Adjust Meter and Valve Boxes	7	each	\$	\$
17 445	Pothole Existing Utility	2	each	\$	\$

18 641	Aggregate Base - 3/4" Minus Quarry Rock	376	Ton	\$	\$
19 745	Level 2, 1/2" Dense HMAC, including pavement repair areas	22	Ton	\$	\$
20 759	Concrete Walk, 4-Inch Thick Concrete Pavement	8,092	Square Foot	\$	\$
21 759	Concrete Walk, Colored 4-Inch Thick Concrete Pavement	3,120	Square Foot	\$	\$
22 759	Concrete Walk, Stamped 4-Inch Thick Concrete Pavement	1,070	Square Foot	\$	\$
23 759	Concrete Walk, 6-inch Thick PCC	320	Square Foot	\$	\$
24 759	Concrete ADA Parking Stall and Aisle, 8-inch Thick PCC	352	Square Foot	\$	\$
25 759	Concrete Curb & Gutter, including incidental steel reinforcement at matchlines	72	Foot	\$	\$
26 759	Concrete Standard Curb, including incidental steel reinforcement at matchlines	338	Foot	\$	\$
27 759	Concrete "V" Type gutter (symmetrical), including incidental steel reinforcement at matchlines	338	Foot	\$	\$
28 759	Truncated Dome Texturing	67	Square Foot	\$	\$
29 860	Signs and Striping (including removal and relocation of permanent and temporary signs)	1	Lump Sum	\$	\$
30 962	Light Post Foundation	12	Each	\$	\$
31 970	Illumination Appartenances, Conduit, and Junction Boxes	1	Lump Sum	\$	\$
32 1010	Infiltration Rain Garden per detail 1 on sheet C200 and details 5 & 6 on sheet C402, two facilities total	1	Lump Sum	\$	\$
33 1010	Soakage Trench per detail 2 on sheet C200, one facility total	1	Lump Sum	\$	\$
34 1030	Landscaping (installation of groundcover, shrubs and trees) and Irrigation	1	Lump Sum	\$	\$
35	Concrete Containment Edge per detail 6 on sheet L600	73	Square Foot	\$	\$
36	Concrete Mow Edge per detail 7 on sheet L600	222	Foot	\$	\$

37	Playground – Swing: Installation, Surfacing, Sub-base & Drainage	1	Lump Sum	\$	\$
38	Concrete Base for Art	5	Each	\$	\$
39	Basalt Columns on Concrete Base	5	Each	\$	\$
40	Skate Deterrents	40	Each	\$	\$
41	Information Plaques	5	Each	\$	\$
42	Concrete Seatwall	15	Foot	\$	\$
43	Basalt Bench	5	Each	\$	\$
44	Bench - Installation	15	Each	\$	\$
45	Litter Receptacles: Equipment and Installation	2	Each	\$	\$
46	Bike Rack: Equipment and Installation	5	Each	\$	\$
47	Water Tower Building (complete)	1	Lump Sum	\$	\$
48	Restroom Building (complete)	1	Lump Sum	\$	\$
49	Splash Pad Plumbing and installation of features	1	Lump Sum	\$	\$
BID TOTAL					

Total Amount of Base Bid \$ _____

Total Base Bid price written out in words

Note: All Unit Price Bids should be considered as "Furnished and Installed". Billing is to be as complete units and partial bills will not be paid.

To Be Considered Responsive, the following must be signed and completed by your firm:

We hereby certify to do the work as specified and at the price as quoted in conformance to all the City, State and Federal Regulations that are applicable and will indemnify the 'City of Cottage Grove' against all claims arising out of any actions caused by our company during the performance of this contract.

We hereby certify that we will comply with the provisions of ORS279C.840 (BOLI Wage Requirements).

Company _____

We hereby certify that we will comply with the provisions of ORS279C.840 (BOLI Wage Requirements).

Company _____

Address _____

By _____
(Signature of Authorized Official)

Date _____

By _____
(Type or Print Name)

Phone _____

Federal I.D. # _____

Fax _____

Surety Company (Performance Bond) _____

Contact at Surety _____ Phone _____

CCB# _____ No. Years Registered w/CCB _____

Are there any outstanding claims against your firm: Yes _____ No _____

Protest of Contractor Selection/Contract Award must be made by Written Notice within Five (5) Days of the Posted Award Date in accordance with OAR 137-049-0450

All the prospective bidders will have specific line items to bid on and the award will be made on the lowest qualified bid on the total bid items. The City will reserve the right to add or delete items as the project goes forward.

- 1. Liquidated Damages: See General Conditions Section 450, item 5.3.**
- 2. Please invoice referencing the above exact line-item numbers and line items. All quantities must be approved by the Project Engineer before invoicing.**

SECTION 240

EDA “NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION”

Contractor shall meet requirements for affirmative action to ensure Equal Employment Opportunity (Executive Order 11246 and 41 CFR Part 60-4) and use the “Notice of Requirements for Affirmative Action” form.

**NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)**

The following Notice 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.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

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:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade
	%	6.9%

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.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working 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. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is:

State of _____

County of _____

City of _____

SECTION 250

LOBBYING RESTRICTION FORM (CD-512)

Contractor shall review, fill and submit the Lobbying Restriction Form (CD-512). Signature on this form provides for compliance with certification requirements under 15 CFR Part 28 "New Restrictions on Lobbying".

CERTIFICATION REGARDING LOBBYING LOWER TIER COVERED TRANSACTIONS

Applicants should review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying."

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) 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 agency, 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.

(2) 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 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.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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 occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement 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 statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

SECTION 300 – SAMPLE CONTRACT

- **310 – CONTRACT FOR CONSTRUCTION**
 - **EXHIBIT A – SCOPE OF WORK**
 - **EXHIBIT B – PUBLIC CONTRACTING CODE REQUIREMENTS**
 - **EXHIBIT C – EDA CONTRACTING PROVISIONS**
- **320 – PERFORMANCE BOND**
- **330 – PAYMENT BOND**
- **340 – PUBLIC WORKS BOND**

SECTION 310

CONTRACT FOR CONSTRUCTION

OF

COTTAGE GROVE BOHEMIA PARK EXPANSION

THIS CONTRACT, made and entered into this ____ day of _____, 2024 by and between the City of Cottage Grove hereinafter called the OWNER and _____ hereinafter called the CONTRACTOR.

WITNESSETH:

Said CONTRACTOR, in consideration of the sum to be paid by the said OWNER and of the covenants and agreements herein contained, hereby agrees to commence and complete the construction described as follows:

COTTAGE GROVE BOHEMIA PARK EXPANSION

hereinafter called the PROJECT and to the extent of the Bid made by the CONTRACTOR on the ____ day of _____, 2024, all in full compliance with the Contract Documents referred to herein.

The term "Contract Documents" used herein includes this Contract, Exhibits A-C, attached and incorporated herein by this reference; the "Advertisement for Bids", the "Instructions to Bidders", the signed copy of the "Bidder's Packet", the signed copy of the "Addenda", the "General Conditions", the "Special Provisions", the "Technical Specifications", the "Performance Bond", the "Payment Bond", the "Public Works Bond", and the "Insurance Certification", all bound herewith; and , the "Oregon Standard Specifications for Construction – 2024," including modifications and revisions, and the "Plans", which include all maps, plats and prints, referred to and by reference made a part of this Contract as fully and completely as if same were fully set forth herein and are mutually cooperative herewith.

In consideration of the faithful performance of the work herein embraced, as set forth in these Contract Documents, and in accordance with the direction of the Engineer and to his satisfaction to the extent provided in the Contract Documents, the OWNER agrees to pay the CONTRACTOR the amount bid as adjusted in accordance with and as determined by the provisions of these Contract Documents, and based on the said Bid made by the CONTRACTOR, and to make such payments in the manner and at the times provided in these Contract Documents.

The CONTRACTOR agrees to indemnify and save harmless the OWNER from any and all defects appearing or developing in the workmanship performed or furnished under this Contract while in progress and for a period of two (2) years after the final acceptance thereof by the OWNER.

It is agreed that the time limit for the completion of the contract, based on the Bidder's packet shall be two hundred and thirteen (213) calendar days. In the event the CONTRACTOR shall fail to complete the work within the time limit, or extended time limit agreed upon as more particularly set forth in these Contract Documents, liquidated damages

shall be computed at the rate indicated in the SCHEDULE OF LIQUIDATED DAMAGES, Item 3.00 of the General Conditions Section 450.

The parties further agree that this amount of liquidated damages is a reasonable forecast of just compensation for the harm caused by any breach and that this harm is one which is impossible or very difficult to accurately estimate.

Contractor shall comply with all applicable provisions of federal, state, and local laws, including without limitation, applicable provisions of the Oregon Public Contracting Code ORS 279C, as more specifically set forth on Exhibit B. (See attached "Exhibit B")

Contractor shall not assign, sell, dispose of, or transfer rights, nor delegate duties under the Contract, wither in whole or in part, without the City of Cottage Grove's prior written consent. Such consent shall not relieve Contractor of any obligations under the Contract. Any assignee or transferee shall be considered the agent of the Contractor and bound to abide by all provisions of the Contract. If the City of Cottage Grove consents in writing to an assignment, sale, disposal, or transfer of the Contractor's rights or delegation of Contractor's duties, the Contractor and its surety shall remain liable to the City of Cottage Grove for complete performance of the Contract as if no such assignment, sale, disposal, transfer, or delegation had occurred, unless the City of Cottage Grove otherwise agrees in writing.

IN WITNESS WHEREOF, we the parties hereto each herewith subscribe the

same this _____ day of _____, 2024.

OWNER

CONTRACTOR

BY: _____

BY: _____

TITLE: _____

TITLE: _____

ATTEST: _____
CITY RECORDER

IF THE CONTRACTOR IS A CORPORATION:

ATTEST: _____

TITLE: _____

(SEAL)

EXHIBIT A

SCOPE OF SERVICES TO BE PERFORMED (Bid Schedule)

EXHIBIT B

PUBLIC CONTRACTING CODE

Requirements for Public Improvement Contracts Over \$50,000

1. Contractor shall pay promptly, as due, all persons supplying labor or materials for the prosecution of the work provided for in the contract, and shall be responsible for such payment of all persons supplying such labor or material to any Subcontractor.
 - (a) ORS 279C.580(3)(a) requires the prime contractor to include a clause in each subcontract requiring contractor to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the prime contractor by the public contracting agency; and
 - (b) ORS 279C.580(3)(b) requires the prime contractor to include a clause in each subcontract requiring contractor to pay an interest penalty to the first-tier subcontractor if payment is not made within 30 days after receipt of payment from the public contracting agency.
 - (c) ORS 279C.580(4) requires the prime contractor to include in every subcontract a requirement that the payment and interest penalty clauses required by ORS 279C.580(3)(a) and (b) be included in every contract between a subcontractor and a lower-tier subcontractor or supplier.
2. Contractor shall promptly pay all contributions or amounts due the Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the contract, and shall be responsible that all sums due the State Unemployment Compensation Fund from Contractor or any Subcontractor in connection with the performance of the contract shall promptly be paid.
3. Contractor shall not permit any lien or claim to be filed or prosecuted against the Contracting Agency on account of any labor or material furnished and agrees to assume responsibility for satisfaction of any such lien so filed or prosecuted.
4. A notice of claim on contractor's payment bond shall be submitted only in accordance with ORS 279C.600 and 279C.605.
5. Contractor and any Subcontractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
6. Contractor shall demonstrate to the Contracting Agency that an employee drug-testing program is in place within 10 days of receiving a Notice of Award.
7. Pursuant to ORS 279C.515, if Contractor fails, neglects or refuses to make prompt payment of any claim for labor or materials furnished to the Contractor or a Subcontractor by any person in connection with the contract as such claim becomes due, the Contracting Agency

may pay such claim to the persons furnishing the labor or material and charge the amount of payment against funds due or to become due Contractor by reason of the contract. The payment of a claim in the manner authorized hereby shall not relieve the Contractor or his surety from his or its obligation with respect to any unpaid claim. If the Contracting Agency is unable to determine the validity of any claim for labor or material furnished, the Contracting Agency may withhold from any current payment due Contractor an amount equal to said claim until its validity is determined and the claim, if valid, is paid.

8. Pursuant to ORS 279C.515, if the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract for a public improvement within 30 days after receipt of payment from the Contracting Agency or contractor, the contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10 day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to Contractor or first-tier Subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve District that includes Oregon on the date that is 30 days after the date when payment was received from the public contracting agency or from the Contractor, but the rate of interest shall not exceed 30%. The amount of interest may not be waived.

9. As provided in ORS 279C.515, if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract, the person may file a complaint with the Construction Contractor's Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.

10. Pursuant to ORS 279C.530, Contractor shall promptly, as due, make payment to any person, co-partnership, association, or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all monies and sums which the Contractor collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.

11. Contractor shall employ no person for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where public policy absolutely requires it, and in such cases, except in cases of contracts for personal services designated under ORS 279A.055, Contractor shall pay the employee at least time and one-half pay for all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work is five (5) consecutive days, Monday through Friday; or for all overtime in excess of 10 hours a day or 40 hours in any one week when the work week is 4 consecutive days, Monday through Friday; and for all work performed on Saturday and on any legal holidays as specified in ORS 279C.540.

12. Pursuant to ORS 279C.540(2), the Contractor must give notice to employees who work on this contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and the days per week that the employees may be required to work.

13. The provisions of ORS 279C.800 to ORS 279C.870 relating to the prevailing wage rates will be complied with. The hourly rate of wage to be paid by Contractor or any Subcontractor to workers in each trade or occupation required for the public works employed in the performance

of this Contract shall not be less than the specified minimum rate of wage in accordance with ORS 279C.838 and ORS 279C.840.

- (a) The latest prevailing wage rates for public works contracts in Oregon are contained in the following publications: The January 5, 2024 Prevailing Wage Rates for Public Works Projects in Oregon, including any amendments. Such publications can be reviewed electronically at:

<https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx>

and are hereby incorporated as part of the contract documents.

- (b) Contractor and all Subcontractors shall keep the prevailing wage rates for this Project posted in a conspicuous and accessible place in or about the Project.
- (c) The Owner shall pay a fee to the Commissioner of the Oregon Bureau of Labor and Industries as provided in ORS 279C.825. The fee shall be paid to the Commissioner as required by the administrative rules adopted by the Commissioner.
- (d) If Contractor or any Subcontractor also provides for or contributes to a health and welfare plan or a pension plan, or both, for its employees on the Project, it shall post notice describing such plans in a conspicuous and accessible place in or about the Project. The notice shall contain information on how and where to make claims and where to obtain future information.

14. Unless exempt under ORS 279C.836(4), (7), (8) or (9), before starting work on this contract, or any subcontract hereunder, contractor and all subcontractors must have on file with the Construction Contractors Board a public works bond with a corporate surety authorized to do business in the state of Oregon in the amount of \$30,000. The bond must provide that the contractor or subcontractor will pay claims ordered by the Bureau of Labor and Industries to workers performing labor upon public works projects. The bond must be a continuing obligation, and the surety's liability for the aggregate of claims that may be payable from the bond may not exceed the penal sum of the bond. The bond must remain in effect continuously until depleted by claims paid under ORS 279C.836(2), unless the surety sooner cancels the bond. The surety may cancel the bond by giving 30 days' written notice to the contractor or subcontractor, to the board and to the Bureau of Labor and Industries. When the bond is canceled, the surety is relieved of further liability for work performed on contracts entered into after the cancellation. The cancellation does not limit the surety's liability for work performed on contracts entered into before the cancellation. Contractor further certifies that contractor will include in every subcontract or provision requiring a subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836(4), (7), (8), or (9).

(a) Unless exempt under ORS 279C.836(4), (7), (8), or (9), before permitting a subcontractor to start work on this public works project, the contractor shall verify that the subcontractor has filed a public works bond as required under this section or has elected not to file a public works bond under ORS 279C.836(7).

(b) Unless public contracting agency has been notified of any applicable exemptions under ORS 279C.836(4), (7), (8), or (9), the public works bond requirement above is in addition to any other bond contractors or subcontractors may be required to obtain under this contract.

15. As may be required by ORS 279C.845, Contractor or contractor's surety and every subcontractor or subcontractor's surety shall file certified payroll statements with the Contracting Agency in writing.

(a) If a contractor is required to file certified statements under ORS 279C.845, the Contracting Agency shall retain 25% of any amount earned by the contractor on the public works project until the contractor has filed with the Contracting Agency statement as required by ORS 279C.845. The Contracting Agency shall pay the contractor the amount retained within 14 days after the contractor files the required certified statements, regardless of whether a subcontractor has failed to file certified statements required by statute. The Contracting Agency is not required to verify the truth of the contents of certified statements filed by the contractor under this section and ORS 279C.845.

(b) The contractor shall retain 25% of any amount earned by a first-tier subcontractor on this public works contract until the subcontractor has filed with the Contracting Agency certified statements as required by ORS 279C.845. The contractor shall verify that the first-tier subcontractor has filed the certified statements before the contractor may pay the subcontractor any amount retained. The contractor shall pay the first-tier subcontractor the amount retained within 14 days after the subcontractor files the certified statements as required by ORS 279C.845. Neither the Contracting Agency nor the contractor is required to verify the truth of the contents of certified statements filed by a first-tier subcontractor.

16. All employers, including Contractor, that employ subject workers who work under this contract shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its subcontractors complies with these requirements.

17. All sums due the State Unemployment Compensation Fund from the Contractor or any Subcontractor in connection with the performance of the contract shall be promptly so paid.

18. The contract may be canceled at the election of Contracting Agency for any willful failure on the part of Contractor to faithfully perform the contract according to its terms.

19. Contractor certifies that it has not discriminated and will not discriminate against minorities, women, minority-owned or women-owned businesses, or emerging small businesses or a disadvantaged business enterprise in obtaining any required Subcontractors, or against a business enterprise that is owned or controlled by, or that employs a service-disabled veteran as defined in ORS 408.225. ORS 279A.110.

20. Contractor certifies its compliance with the Oregon tax laws, in accordance with ORS 305.385.

21. As may be applicable, Contractor certifies that all subcontractors performing construction work under this contract will be registered and in good standing with the Construction Contractors Board or licensed by the state Landscaping Contractors Board in accordance with ORS 701.035 to ORS 701.055 before the subcontractors commence work under this contract.

22. Pursuant to ORS 279C.510, if feasible and cost-effective and contract is for demolition, Contractor shall salvage or recycle construction and demolition debris.

23. Pursuant to ORS 279C.510, if feasible and cost-effective and contract is for lawn and landscape maintenance, Contractor shall compost or mulch yard waste material at an approved site.

24. Pursuant to [Contracting Agency Public Contracting Rule/OAR] 137-049-0880, the Contracting Agency may, at reasonable times and places, have access to and an opportunity to inspect, examine, copy, and audit the records relating to the Contract.

25. In compliance with the provisions of ORS 279C.525, the following is a list of federal, state and local agencies, of which the Contracting Agency has knowledge, that have enacted ordinances or regulations dealing with the prevention of environmental pollution and the preservation of natural resources that may affect the performance of the contract:

FEDERAL AGENCIES:

- Agriculture, Department of
 - Forest Service
 - Soil Conservation Service
- Defense, Department of
 - Army Corps of Engineers
- Environmental Protection Agency
- Interior, Department of
 - Bureau of Sport Fisheries and Wildlife
 - Bureau of Outdoor Recreation
 - Bureau of Land Management
 - Bureau of Indian Affairs
 - Bureau of Reclamation
- Labor, Department of
 - Occupational Safety and Health Administration
- Transportation, Department of
 - Federal Highway Administration
 - Homeland Security, Department of
 - Coast Guard

STATE AGENCIES:

- Agriculture, Department of
- Environmental Quality, Department of
- Fish and Wildlife, Department of
- Forestry, Department of
- Geology and Mineral Industries, Department of
- Human Resources, Department of
- Land Conservation and Development Commission
- Soil and Water Conservation Commission
- State Engineer
- State Land Board
- Water Resources Board

LOCAL AGENCIES:

- City Council
- County Court
- County Commissioners, Board of
- Port Districts
- Metropolitan Service Districts
- County Service Districts
- Sanitary Districts
- Water Districts
- Fire Protection Districts

26. The following notice is applicable to Work involving excavation. "ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503) 232-1987."

GENERAL CONDITIONS

Section 1. Definitions. Whenever used in these General Conditions or in the other contract documents, the following terms have the meanings indicated which are applicable in both the singular and plural or masculine or feminine thereof:

1. **Addenda.** Written or graphic instruments issued prior to the execution of the Contract which modify or interpret the contract documents, drawings and specifications by additions, deletions, clarifications, or corrections.
2. **Bid.** The offer of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.
3. **Bonds.** Bid, performance and payment bonds and other instruments of security.
4. **Change Order.** A written order to the Contractor signed by the Owner authorizing an addition, deletion or revision in the work, or an adjustment in the contract price or the contract time issued after the effective date of the Contract.
5. **Contract Price.** The total monies payable to the Contractor under the terms and conditions of the contract documents.
6. **Contract Time.** The number of calendar days stated in the contract documents for completion of the work.
7. **Contractor.** The person, firm, or corporation with whom the Owner has executed the Contract.
8. **Drawings.** The part of the contract documents which show the characteristic and scope of the work to be performed and are referred to in the contract documents.
9. **Owner Representative.** That person appointed by the Board of the Owner to act as the Owner's representative in all matters relating to this contract.

10. Field Order. A written order issued by the Owner representative which orders minor changes in work not involving an adjustment in the contract price or an extension of the contract time.
11. Substantial Completion. The date certified by the Owner representative when the construction of the project or a specified part thereof is sufficiently completed in accordance with the contract documents so that the project or a specified part can be utilized for purposes for which it is intended.
12. Subcontractor. An individual, firm, or corporation having a direct contract with the Contractor or with any other subcontractor for the performance of a part of the work at the site.
13. Supplier. Any person or organization who supplies materials or equipment for the work, including that fabricated to a special design but who does not perform labor at the site.
14. Work. All labor necessary to produce the construction required by the contract documents and all materials and equipment incorporated or to be incorporated in the project.
15. Written Notice. Any notice to any party to the Contract, or relative to any part of this Contract, in writing is considered delivered and service completed when posted by certified mail or registered mail to the party at the party's last given address as shown on the Contract, or when delivered in person to the party or his authorized representative on the worksite.

Section 2. Preliminary Matters.

1. Delivery of Bonds. When the Contractor delivers the executed Contracts to the Owner, Contractor shall also deliver to Owner such bonds as the Contractor may be required to furnish.
2. Copies of Documents. Owner shall furnish to Contractor up to three (3) copies of the contract documents. Additional copies will be furnished upon request at the cost of reproduction.
3. Commencement of Contract Time. The contract time will commence to run on the day indicated in the Notice to Proceed.
4. Insurance. Before undertaking any work on the project, Contractor shall provide Owner with certificates of insurance including a comprehensive general liability and other insurance as will provide protection for the claims set out below which may arise out of or result from Contractor's performance of the work and Contractor's other obligations under the contract documents whether such performance is by Contractor or any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
 - (a) Claims under workers or worker's compensation disability benefits or other similar employee benefits;

- (b) Claims for damages because of bodily injury, occupational sickness or disease or death of Contractor's employees;
- (c) Claims for damages because of bodily injury, sickness or disease of any person other than Contractor's employees;
- (d) Claims for damages insured by personal injury liability coverage which is sustained by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor or by any other person for any other reason;
- (e) Claims for damages other than to the work itself because of injury or destruction of tangible property, including loss of use resulting therefrom;
- (f) Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The limits of such liability shall be as follows:

(1) Comprehensive general liability	\$2,000,000
(2) Automobile	\$1,000,000
(i) Bodily Injury	\$1,000,000
(ii) Property Damage	\$1,000,000

- 5. Owner Insurance. Owner shall be responsible for purchasing and maintaining its own liability insurance. Owner shall also purchase and maintain property insurance upon the work at the site to the full insurable value thereof and shall include the interest of the Owner, Contractor and subcontractors in the work against the perils of fire and extended coverage. All other risk of loss at the work site shall be borne by Contractor until acceptance of building by Owner.
- 6. Subrogation Waiver. Owner and Contractor waive all rights against each other and the subcontractors and their agents and employees for damages caused by fire or other perils to the extent covered by insurance provided in the above paragraph. The Contractor shall require similar written waivers from each subcontractor and each such waiver shall be in favor of all other parties enumerated in this paragraph.

Section 3. Contract Documents.

- 1. The contract documents comprise the entire agreement between Owner and Contractor concerning work. They may be altered only by written modification.
- 2. The contract documents are complementary; what is called for by one is binding as if called for by all. If, during the performance of the work, Contractor finds a conflict, error or discrepancy in the contract documents, Contractor shall report it to the Owner representative in writing at once and before proceeding with the work affected by the conflict.
- 3. It is the intent of the specifications and drawings to describe the complete project to be constructed in accordance with the contract documents. Any work which may reasonably be inferred from the specifications or drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. When words which have a well known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals, or codes of any technical

society, organization, or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual or code in effect at the time of the opening of the bid, except as may be otherwise specifically stated. However, no provision of any reference, standard, specification, manual or code shall change the duties and responsibilities of the Owner, Contractor, or any of their agents or employees from those set forth in the contract documents. Clarifications and interpretations of the contract documents shall be issued by the Owner representative.

4. Re-Use of Documents. Neither Contractor nor any subcontractor, manufacturer, fabricator, supplier, or distributor shall have or acquire any title to or ownership rights in any of the drawings, specifications, or other documents which are a part of this contract. They may not be re used by any party without the express written consent of the owner and of the preparer of the drawings.

Section 4. Materials, Service and Facilities.

1. It is understood that, except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, lights, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the work within the specified time.
2. Materials and equipment shall be stored so as to ensure the preservation of their quality and fitness for the work. Stored materials and equipment to be incorporated in the work shall be located so as to facilitate prompt inspection. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
3. All materials and equipment shall be of good quality and new except as otherwise provided in the contract documents.
4. Equivalent Materials and Equipment. Whenever materials or equipment are specified or described in drawings or specifications by using the name of proprietary item or the name of a particular manufacturer, fabricator, supplier or distributor, the name of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other manufacturers, fabricators, suppliers, or distributors may be accepted by the Owner representative if sufficient information is submitted by Contractor to allow the Owner representative to determine that the material proposed is equivalent to that named.
5. Contractor shall be fully responsible for all acts and omissions of his subcontractors and of persons and organizations directly or indirectly employed by them and of persons or organizations for whose acts any of them may be liable to the same extent Contractor is responsible for the acts and omissions of persons directly employed by Contractor. Nothing in these documents creates any obligation on the part of the Owner to pay or to see to the payment of any monies due any subcontractor or other person or organization except as may otherwise be required by law.

Section 5. Fees, Taxes and Permits.

1. Contractor shall pay all applicable royalties and license fees required to perform the work. Contractor shall defend all suits or claims for infringement of any patent rights and save Owner harmless from loss on account thereof.
2. Contractor shall obtain all permits and licenses for construction from agencies with jurisdiction over the project at Owner's expense. Owner may assist the Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the work; Contractor shall pay all charges of utility service companies for connections to the work. Contractor shall pay all sales, consumer, use and other similar taxes required to be paid in accordance with the laws of the place of the project.

Section 6. Survey, Permits and Regulations.

1. Owner shall furnish all boundary surveys and establish all base lines for locating principal component parts of the work together with a suitable number of bench marks adjacent to the work as shown in the contract documents. From the information provided by Owner, unless otherwise specified in the contract document, Contractor shall develop and make all detailed surveys needed for construction such as slope stakes, stakes for piling locations, and other working points, lines, elevations and cut sheets.
2. The Contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, Contractor shall be charged with the resulting expense and shall be responsible for any mistakes which may be caused by unnecessary loss or disturbance.

Section 7. Protection of Work, Property and Persons.

Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Contractor will take all necessary precautions for the safety of, or provide the necessary protection to prevent injury, damage, or loss, to all employees on the worksite and other persons who may be affected. Contractor shall also be responsible for all safety precautions regarding all work and all materials or equipment to be incorporated into the work, whether in storage on or off the site, and the property at the site or adjacent to it, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designed for removal, relocation, or replacement in the course of construction. Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or any for whose acts any of them may be liable except for acts directly attributable to Owner or Owner's representative or any employed by either of them whose acts are not attributable directly or indirectly in whole or in part to the fault or negligence of Contractor.

Section 8. Supervision by Contractor.

The Contractor will supervise and direct the work. Contractor will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor will employ and maintain on the work a qualified supervisor who shall have been designated in

writing by Contractor as Contractor's representative at the site. The supervisor shall have full authority to act on behalf of Contractor and all communications given to the supervisor shall be as binding as if given to Contractor. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the work.

Section 9. Changes in Work.

Owner at any time the need arises, may order changes in the scope of the work without invalidating the Contract. If such changes increase or decrease the amount due under the contract documents, or in the time required for performance of the work, an equitable adjustment shall be authorized by change order. Owner or its representative may also, at any time, by issuing a field order, make changes in the details of the work. Contractor shall proceed with the performance of any changes in the work so ordered unless Contractor believes that such field order entitled him to a change in contract price or contract time, or both, in which event he shall give Owner's representative written notice within two (2) days after receipt of the field order. Contractor shall document in Contractor's notice the basis for the change in contract price or contract time within five (5) days. Contractor shall not execute such changes pending the receipt of an executed change order or further instruction from Owner.

Section 10. Changes in Contract Price.

The contract price may be changed only by a change order. The value of any work covered by a change order or of any claim for increase or decrease in the contract price shall be determined by one or more of the following methods in the order of precedence listed below:

1. Unit prices previously approved.
2. An agreed lump sum.
3. The actual cost of labor, direct overhead, materials, supplies, and other services necessary to complete the work plus an amount not to exceed 10% of the actual work to cover the cost of general overhead profit.

Section 11. Limitation on Liquidated Damages.

Contractor shall not be charged with liquidated damages when the delay in completion of the work is due to the following and Contractor has promptly given written notice of such delay to Owner or its representative:

1. Unforeseeable causes beyond the control and without the fault or negligence of Contractor, including but not restricted to acts of God or of the public enemy, acts of Owner, acts of another Contractor in performance of the contract with the Owner, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, and abnormal and unforeseen weather; and
2. Any delays of subcontractors occasioned by any of the causes specified above.

Section 12. Correction of Work.

1. Contractor shall promptly remove from the premises all work rejected by Owner's representative for failure to comply with the contract documents, whether incorporated in construction or not, and Contractor shall promptly replace and re execute the work in

accordance with the contract documents and without expense to Owner and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

2. All removal and replacement work shall be done at Contractor's expense. If Contractor does not take action to remove rejected work within five (5) days after receipt of written notice, Owner may remove such work and store the materials at the expense of Contractor.

Section 13. Subsurface Conditions.

Contractor shall promptly and before such conditions are disturbed, except in the event of an emergency, notify Owner by written notice of:

1. Subsurface or latent physical conditions at the site differing materially from those indicated in the contract documents.
2. Unknown physical conditions at the site of an unusual nature, differing markedly from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

Owner shall promptly investigate the conditions and if found that such conditions do so materially differ and cause an increase or decrease in the cost of or in the time required for performance of the work, an equitable adjustment shall be made and the contract documents shall be modified by a change order. Any claim of Contractor for adjustment hereunder shall not be allowed unless he has given the required written notice.

Section 14. Suspension of Work, Termination Delay.

1. If Contractor is adjudged a bankrupt or insolvent or if Contractor makes a general assignment for the benefit of Contractor's creditors, or if a trustee or receiver is appointed for the Contractor or for any of Contractor's property, or if Contractor files a petition to take advantage of any debtor's act or to reorganize under bankruptcy or applicable laws, or if Contractor repeatedly fails to supply sufficient skilled workmen or suitable material or equipment, or if Contractor repeatedly fails to make prompt payments to subcontractors for labor, materials, or equipment, or if Contractor disregards laws, ordinances, rules, regulations, or orders of any public body having jurisdiction of the work, or if Contractor disregards the authority of Owner's representative or if Contractor otherwise violates any provision of the contract documents, then Owner may, without prejudice to any other right or remedy, after giving Contractor and Contractor's surety a minimum of five (5) days' notice from delivery of the written notice, terminate the services of the Contractor and take possession of the project and all materials, equipment, tools, construction equipment, machinery thereon owned by Contractor and finish the work by whatever method Owner may deem expedient. In such case, Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the project, including compensation for additional professional services, such excess shall be paid to Contractor. If the costs exceed such unpaid balances, Contractor will pay the difference to Owner. Such costs incurred by Owner will be determined by Owner and incorporated in a change order.

2. Where Contractor's services have been terminated under Section 14.1, by Owner, the termination shall not affect any right of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of monies by Owner due Contractor will not release Contractor from compliance with the contract documents.
3. After five (5) days from delivery of written notice under Section 14.1 to Contractor, Owner may, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the contract. In such case, Contractor shall be paid for all work executed and any reasonable expense sustained plus reasonable profit.

Section 15. Equal Opportunity.

Contractor agrees to comply with the applicable provisions of the Equal Opportunity Act of 1972 and the Civil Rights Act of 1964 as amended. Contractor shall have the obligation to ensure that the employees and applicants for employment are not discriminated against because of race, creed, color, sex, or national origin.

Section 17. Warranty and Guarantee.

1. Contractor warrants and guarantees to Owner that all work will be in accordance with the contract documents and will not be defective. Prompt notice of all defects shall be given to Contractor. All defective work, whether or not in place, may be rejected, corrected or accepted. Contractor understands that Lane County, its various departments, and agencies, must be consulted and be allowed to inspect the work and sign off in each particular area. At all times Owner's representative and appropriate inspectors shall have access to the work for inspection and testing. Contractor shall provide proper and safe conditions for such access.
2. Where any law, ordinance, rule, regulation, code, or other order of any public body having jurisdiction requires any work or part thereof to specifically inspected, tested or approved, Contractor shall assume full responsibility for such inspection, testing, or approval, and pay all costs in connection therewith and furnish Owner's representative with the required certificates of inspection, testing or approval. If any work to be inspected, tested, or approved is covered without written concurrence of Owner's representative, it must be, if requested, uncovered for observation. Such uncovering shall be at Contractor's expense.
3. Neither observations by the Owner representative nor inspection tests or approvals by others shall relieve the Contractor from his obligations to perform the work in accordance with the contract documents.
4. If, within two (2) years after the date of final completion and sign off and payment of any retainage by Owner to Contractor, there is any defect in materials or workmanship, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such defective work or, if it has been rejected by Owner, remove it from the site and replace it with non-defective work. If Contractor does not promptly comply with the terms of such instructions, or in an emergency where a delay would cause serious risk of loss or damage, Owner may have the defective work corrected or the rejected work removed and replaced. All direct or indirect costs of such removal or replacement, including compensation for additional professional services,

shall be paid by Contractor. Such additional professional services include the services of any attorney employed by Owner to assist it in dealings with Contractor. If Contractor does not pay for such work, or does not see that such work is performed as required by this section, a claim may be made upon Contractor's bond for payment of such work. All notices sent to Contractor shall have copies sent to Contractor's surety.

5. Contractor warrants and guarantees that title to all work, materials, and equipment covered by the application for payment, whether incorporated in the project or not, will pass to Owner at the time of payment, free and clear of all liens, claims, security interests and encumbrances of any party whomsoever.

Section 18. Bond Form.

All bonds shall be in the form provided within the Invitation to Bid packet.

Section 19. Payments to Contractor.

1. By the 5th day of each month, Contractor will submit to Owner's representative a partial payment estimate filled out and signed by Contractor covering the work performed during the period covered by the partial payment estimate and supported by such data as Owner's representative may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the work but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to Owner, as will establish Owner's title to the material and equipment, and protect its interest therein, including applicable insurance. Owner's representative will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to Owner, or return the partial payment estimate to Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, Contractor may make the necessary corrections and resubmit the partial payment estimate. Owner will, within 10 days of the next Board meeting after presentation to it of an approved partial payment estimate, pay Contractor a progress payment on the basis of the approved partial payment estimate. Owner shall retain five percent (5%) of the amount of each payment until final completion and acceptance of all work covered by the contract documents. Owner may, after fifty percent (50%) of the work has been completed, reduce or eliminate retainage on the current and remaining estimates. On completion and acceptance of a part of the work on which the price is stated separately in the contract documents, payment may be made in full, including retained percentages, less authorized deductions.
2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
3. Prior to substantial completion, Owner, with the approval of Owner's representative and with the concurrence of the Contractor, may use any completed or substantially completed portions of the work. Such use shall not constitute an acceptance of such portions of the work.
4. Owner shall have the right to enter the premises for the purpose of doing work not covered by the contract documents. This provision shall not be construed as relieving Contractor of the sole responsibility for the care and protection of the work, or the

restoration of any damaged work except such as may be caused by agents or employees of Owner. Such entry or work shall only be allowed to the extent it does not interfere with Contractor's work.

5. Upon completion and acceptance of the work, Owner's representative shall issue a certificate attached to the final payment request that the work has been accepted by him under the conditions of the contract documents. The entire balance found to be due the Contractor, including the retained percentages, but except such sums as may be lawfully retained by Owner's, shall be paid to the Contractor within thirty (30) days of completion and acceptance of the work.
6. Contractor will indemnify and save Owner or Owner's agents harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, materialmen, and furnishers or machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work. Contractor shall, at Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived. If Owner fails to do so, Owner may, after having notified Contractor, either pay unpaid bills or withhold from Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to Contractor shall be resumed in accordance with the terms of the contract documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon Owner to either Contractor, Contractor's surety or any third party. In paying any unpaid bills of Contractor, any payment so made by Owner shall be considered as a payment made under the contract documents by Owner to Contractor and Owner shall not be liable to Contractor for any such payments made in good faith.

Contractor shall defend, hold harmless and indemnify Owner, its officers, agents, engineers, attorneys and employees from any and all losses, liability, damages, costs, expenses (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs), claims, suits or actions whatsoever in nature, including intentional acts, resulting from or arising out of the activities of the Contractor or its subcontractors, agents, or employees under this Contract.

7. If Owner fails to make payment thirty (30) days after approval by Owner representative, in addition to the other remedies available to Contractor, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the Contractor.

Section 20. Cleanup.

1. From time to time as the work progresses and immediately after completion of the work, Contractor shall clean up and remove all refuse and unused materials of any kind resulting from the work. Upon failure to do so within 24 hours after directed, the work may be done by Owner and the cost thereof to be deducted from any payment due Owner.
2. After all other work embraced in the contract is completed and before final acceptance of the contract, the entire right of way and driveways, alleys, and side street approaches,

slopes, ditches, utility trenches, and construction areas shall be neatly finished to the lines, grades and cross sections shown in the specifications.

3. As a condition precedent to final acceptance of the project, Contractor shall remove all equipment and temporary structures, and all rubbish, waste and generally clean the right of way and premises.

Section 21. Use of Light, Power and Water.

Contractor shall furnish temporary light, power, and water complete with connecting piping, wiring, lamps, and similar equipment necessary before the work is improved. Contractor shall install, maintain and remove temporary lines upon completion of work. Contractor shall obtain all permits and bear all costs for completion of project and in connection with temporary services and facilities at no expense to the owner.

Section 22. Claims.

1. Continuing Contract Performance. Pending final resolution of a Claim except as otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.
2. Claims for Additional Costs. If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property. In an emergency affecting the safety of persons or property, the Contractor shall act to prevent threatened damage, injury, or loss and shall immediately notify the Owner.
3. Claims for Additional Time. If the Contractor wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of the cost and of probable effect of delay on progress of the Work. In the case of continuing delay, only one Claim is necessary.
4. Injury or Damage to Person or Property. If any person suffers physical injury or property damage arising from the Work regardless of the cause, notice of such injury or damage, whether or not insured, shall be given immediately to the Owner's authorized representative and the Contractor's authorized representative. The notice shall provide sufficient detail to enable the Owner and any other party affected to investigate the matter.

Section 23. Arbitration.

1. All claims, disputes, and other matters in question between Owner and Contractor arising out of, or relating to the contract documents, or the breach thereof except for claims which may have been waived by the making or acceptance of final payment or for acquisition of property subject to eminent domain, may be decided by arbitration. Owner shall have the sole discretion as to whether or not dispute will be decided by arbitration conducted in Lane County, Oregon, rather than through the court process.

2. No demand for arbitration of any claimed dispute or other matter shall be effective until after a claim or demand is made to Owner and its Board, at its next regularly scheduled meeting, has rendered a written decision with respect thereto denying the claim or demand. No demand for arbitration of any such claim, dispute, or other matter shall be made later than thirty (30) days after the date on which the Board has rendered a written decision in respect herein. The failure to demand arbitration within said 30 days shall result in the board's decision being binding upon Owner and Contractor.
3. Notice of demand for arbitration shall be filed in writing with the other party to the Contract. The demand for arbitration shall be made within the 30 day period specified above. Owner, if not the party demanding arbitration, has the option of allowing the matter to proceed with arbitration or by written notice within five (5) days after receipt of a demand for arbitration, reject arbitration and require the other party to proceed through the courts for relief. Arbitration shall be conducted under the Uniform Arbitration Act, ORS 36.600 et seq. If the parties are unable to mutually select an arbitrator within twenty (20) days following Owner's decision to pursue arbitration, then each party shall select an arbitrator, and the two arbitrators shall select a single arbitrator. The arbitrator(s) shall have substantial experience in construction disputes. The parties agree that any award rendered by the arbitrator(s) will be final, and judgment may be entered upon the award in any court having jurisdiction thereof, and will not be subject to modification or appeal except to the extent permitted by Oregon law.

Section 24. Attorney Fees.

If suit, action or arbitration is brought either directly or indirectly to rescind or enforce the terms of this Contract, the prevailing party shall recover and the losing party hereby agrees to pay reasonable attorney's fees incurred in such proceeding, in both the trial and appellate courts, as well as the costs and disbursements. Further, if it becomes necessary for Owner to incur the services of an attorney to enforce any provision of this Contract without initiating litigation, Contractor agrees to pay Owner's attorney's fees so incurred. Such costs and fees shall bear interest at the maximum legal rate from the date incurred, until the date paid by losing party.

EXHIBIT C

EDA CONTRACTING PROVISIONS

U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION



EDA CONTRACTING PROVISIONS FOR CONSTRUCTION PROJECTS

These EDA Contracting Provisions for Construction Projects (EDA Contracting Provisions) are intended for use by recipients receiving federal assistance from the U. S. Department of Commerce - Economic Development Administration (EDA). They contain provisions specific to EDA and other federal provisions not normally found in non-federal contract documents. The requirements contained herein must be incorporated into all construction contracts and subcontracts funded wholly or in part with federal assistance from EDA.

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1. **DEFINITIONS**

Agreement – The written instrument that is evidence of the agreement between the Owner and the Contractor overseeing the Work.

Architect/Engineer - The person or other entity engaged by the Recipient to perform architectural, engineering, design, and other services related to the work as provided for in the contract.

Contract – The entire and integrated written agreement between the Owner and the Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Documents – Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.

Contractor – The individual or entity with whom the Owner has entered into the Agreement.

Drawings or Plans – That part of the Contract Documents prepared or approved by the Architect/Engineer that graphically shows the scope, extent, and character of the Work to be performed by the Contractor.

EDA - The United States of America acting through the Economic Development Administration of the U.S. Department of Commerce or any other person designated to act on its behalf. EDA has agreed to provide financial assistance to the Owner, which includes assistance in financing the Work to be performed under this Contract. Notwithstanding EDA's role, nothing in this Contract shall be construed to create any contractual relationship between the Contractor and EDA.

Owner – The individual or entity with whom the Contractor has entered into the Agreement and for whom the Work is to be performed.

Project – The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

Recipient – A non-Federal entity receiving a Federal financial assistance award directly from EDA to carry out an activity under an EDA program, including any EDA-approved successor to the entity.

Specifications – That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

Subcontractor – An individual or entity having direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

Work – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

2. **APPLICABILITY**

The Project to which the construction work covered by this Contract pertains is being assisted by the United States of America through federal assistance provided by the U.S. Department of Commerce - Economic Development Administration (EDA). Neither EDA, nor any of its departments, entities, or employees is a party to this Contract. The following EDA Contracting Provisions are included in this Contract and all subcontracts or related instruments pursuant to the provisions applicable to such federal assistance from EDA.

3. **FEDERALLY REQUIRED CONTRACT PROVISIONS**

(a) All contracts in excess of the simplified acquisition threshold - currently fixed at \$150,000 (*see* 41 U.S.C. §§ 134 and 1908) must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.

(b) All contracts in excess of \$10,000 must address termination for cause and for convenience by the Recipient including the manner by which it will be effected and the basis for settlement.

(c) All construction contracts awarded in excess of \$10,000 by recipients of federal assistance and their contractors or subcontractors shall contain a provision requiring compliance with Executive Order 11246 of September 24, 1965, *Equal Employment Opportunity*, as amended by Executive Order 11375 of October 13, 1967, and Department of Labor implementing regulations at 41 C.F.R. part 60.

(d) All prime construction contracts in excess of \$2,000 awarded by Recipients must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3148) as supplemented by Department of Labor regulations at 29 C.F.R. part 5. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations at 29 C.F.R. part 3.

(e) All contracts awarded by the Recipient in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704 (the Contract Work Hours and Safety Standards Act) as supplemented by Department of Labor regulations at 29 C.F.R. part 5.

(f) All contracts must include EDA requirements and regulations that involve a requirement on the contractor or sub-contractor to report information to EDA, the Recipient or any other federal agency.

- (g) All contracts must include EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.
- (h) All contracts must include EDA requirements and regulations pertaining to copyrights and rights in data.
- (i) All contracts and subgrants in excess of \$150,000 must contain a provision that requires compliance with all applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. § 7401 *et seq.*) and the Federal Water Pollution Control Act (Clean Water Act) (33 U.S.C. § 1251 *et seq.*), and Executive Order 11738, *Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans*.
- (j) Contracts must contain mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).
- (k) Contracts must contain a provision ensuring that contracts are not to be made to parties on the government wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. part 180.
- (l) Contracts must contain a provision ensure compliance with the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352) under which contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- (m) If the Recipient is a state agency or agency of a political subdivision of a state, any contract awarded must contain a provision ensuring compliance with section 6002 of the Solid Waste Disposal Act (42 U.S.C. § 6962), as amended by the Resource Conservation and Recovery Act related to the procurement of recovered materials.

4. **REQUIRED PROVISIONS DEEMED INSERTED**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

5. **INSPECTION BY EDA REPRESENTATIVES**

The authorized representatives and agents of EDA shall be permitted to inspect all work, materials, payrolls, personnel records, invoices of materials, and other relevant data and records.

6. **EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS**

(a) The Owner, EDA, or the Comptroller General of the United States, or any of their duly authorized representatives shall, generally until three years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.

(b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders that do not exceed \$10,000.

(c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Owner, EDA, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

7. **CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES**

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in a form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only to determine the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

8. **CONTRACTOR'S TITLE TO MATERIAL**

No materials, supplies, or equipment for the work shall be purchased by the Contractor or by any subcontractor that is subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants and guarantees that he/she has good title to all work, materials, and equipment used by him/her in the Work, free and clear of all liens, claims, or encumbrances.

9. **INSPECTION AND TESTING OF MATERIALS**

All materials and equipment used in the completion of the Work shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. Materials of construction, particularly those upon which the strength and durability of any structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended uses.

10. **"OR EQUAL" CLAUSE**

Whenever a material, article, or piece of equipment is identified in the Contract Documents by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard. Any material, article, or equipment of other manufacturers and vendors that will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. However, such substitution material, article, or equipment shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

11. **PATENT FEES AND ROYALTIES**

(a) Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Architect/Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents.

(b) To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner and the Architect/Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

12. **CLAIMS FOR EXTRA COSTS**

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

13. **CONTRACTORS AND SUBCONTRACTORS INSURANCE**

(a) The Contractor shall not commence work under this Contract until the Contractor has obtained all insurance reasonably required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

(b) Types of insurance normally required are:

- (1) Workers' Compensation
- (2) Contractor's Public Liability and Property Damage
- (3) Contractor's Vehicle Liability
- (4) Subcontractors' Public Liability, Property Damage and Vehicle Liability
- (5) Builder's Risk (Fire and Extended Coverage)

(c) **Scope of Insurance and Special Hazards:** The insurance obtained, which is described above, shall provide adequate protection for the Contractor and his/her subcontractors, respectively, against damage claims that may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him/her and also against any of the special hazards that may be encountered in the performance of this Contract.

(d) **Proof of Carriage of Insurance:** The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates, and dates of expiration of applicable insurance policies.

14. **CONTRACT SECURITY BONDS**

(a) If the amount of this Contract exceeds \$150,000, the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for the faithful performance of this Contract and also a payment bond in an amount equal to one hundred percent (100%) of the Contract price or in a penal sum not less than that prescribed by State, Territorial, or local law, as security for the payment of all persons performing labor on the Work under this Contract and furnishing materials in connection with this Contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by EDA. If the amount of this Contract does not exceed \$150,000, the Owner shall specify the amount of the payment and performance bonds.

(b) All bonds shall be in the form prescribed by the Contract Documents except as otherwise provided in applicable laws or regulations, and shall be executed by such sureties as are named in the current list of *Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies* as published in Treasury Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's

authority to act. Surety companies executing the bonds must also be authorized to transact business in the state where the Work is located.

15. **LABOR STANDARDS - DAVIS-BACON AND RELATED ACTS**
(as required by section 602 of PWEDA)

(a) **Minimum Wages**

(1) All laborers and mechanics employed or working upon the site of the Work in the construction or development of the Project 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 at 29 C.F.R. part 3, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at the 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 that 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 29 C.F.R.

§ 5.5(a)(1)(iv); 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 C.F.R. § 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 determined under 29 C.F.R. § 5.5(a)(1)(ii) 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.

(2) (i) Any class of laborers or mechanics to be employed under the Contract, but not listed in the wage determination, shall be classified in conformance with the wage determination. EDA shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

(B) The classification is utilized in the area by the construction industry; and

(C) The proposed wage rate, including any bona fide fringe benefits, bears a

reasonable relationship to the wage rates contained in the wage determination.

(ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and EDA or its designee 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 EDA or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210.

(iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and EDA or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), EDA or its designee shall refer the questions, including the views of all interested parties and the recommendation of EDA or its designee, to the Administrator for determination.

(iv) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(2)(ii) or (iii) 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.

(3) 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.

(4) 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.

(b) **Withholding**

EDA or its designee 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 in the construction or development of the Project, all or part of the wages required by the Contract, EDA or its designee may, after written notice to the Contractor, sponsor, applicant, or owner, 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. EDA or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(c) **Payrolls and basic records**

(1) 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 in the construction or development of the Project. 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 C.F.R. § 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, the plan or program is financially responsible, and the plan or program has been communicated in writing to the laborers or mechanics affected, and provide records that 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.

(2) (i) For each week in which Contract work is performed, the Contractor shall submit a copy of all payrolls to the Owner for transmission to EDA or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 C.F.R. part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose. It may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402; or downloaded from the U.S. Department of Labor's website at <https://www.dol.gov/whd/forms/wh347.pdf>. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors

(ii) 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:

(A) That the payroll for the payroll period contains the information required to be maintained under 29 C.F.R. § 5.5(a)(3)(i) and that such information is correct and complete;

(B) 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 29 C.F.R. part 3; and

(C) 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.

(iii) 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 15(c)(2)(ii) of this section.

(iv) 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 3729 of Title 31 of the U.S. Code.

(3) The Contractor or subcontractor shall make the records required under paragraph 15(c)(1) of this section available for inspection, copying, or transcription by authorized representatives of EDA or its designee 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, EDA or its designee may, after written notice to the Contractor or Owner, 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 C.F.R. § 5.12.

(d) **Apprentices and Trainees.**

(1) **Apprentices.** 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, Bureau of Apprenticeship and Training (Bureau), or with a State Apprenticeship Agency recognized by the Bureau, 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 Bureau of Apprenticeship and Training 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 Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, 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.

(2) **Trainees.** Except as provided in 29 C.F.R. § 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 that 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's 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.

(3) **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, *Equal Employment Opportunity*, as amended, and 29 C.F.R. part 30.

(e) **Compliance with Copeland Anti-Kickback Act Requirements.** The Contractor shall comply with the Copeland Anti-Kickback Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations (29 C.F.R. part 3, “Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States”). The Act provides that the Contractor and any subcontractors shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which they are otherwise entitled. The Owner shall report all suspected or reported violations to EDA.

(f) **Subcontracts.** The Contractor and any subcontractors will insert in any subcontracts the clauses contained in 29 C.F.R. §§ 5.5(a)(1) through (10) and such other clauses as EDA or its designee may require, and also a clause requiring the subcontractors to include these clauses 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 C.F.R. § 5.5.

(g) **Contract termination; debarment.** The breach of the contract clauses in 29 C.F.R. § 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 C.F.R. § 5.12.

(h) **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 C.F.R. parts 1, 3, and 5 are herein incorporated by reference in this contract.

(i) **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 C.F.R. parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and EDA or its designee, the U.S. Department of Labor, or the employees or their representatives.

(j) **Certification of Eligibility.**

(1) By entering into this Contract, the Contractor certifies that neither it nor any person or firm that 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 C.F.R. § 5.12(a)(1).

(2) 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 C.F.R. § 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. § 1001.

16. **LABOR STANDARDS - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(a) **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 that person 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.

(b) **Violation; liability for unpaid wages, liquidated damages.** In the event of any violation of the clause set forth in paragraph (a) of this section, the Contractor and any subcontractor responsible therefore 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 (a) 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 (a) of this section.

(c) **Withholding for unpaid wages and liquidated damages.** EDA or its designee 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 monies 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 (b) of this section.

(d) **Subcontracts.** The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (c) 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 (a) through (c) of this section.

17. **EQUAL EMPLOYMENT OPPORTUNITY**

(a) The Recipient hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 C.F.R. chapter 60, which is paid for in whole or in part with funds obtained from EDA, the following equal opportunity clause:

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

Economic Development Administration
Contracting Provisions for Construction Projects

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: 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. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by EDA and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of

this Contract or with any of the said 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 or federally-assisted construction 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.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph 17(a)(1) and the provisions of paragraphs 17(a)(1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as EDA or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by EDA or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

(9) The Recipient further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally-assisted construction work. Provided, however, that if the Recipient so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government that does not participate in work on or under the Contract.

(10) The Recipient agrees that it will assist and cooperate actively with EDA and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish EDA and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist EDA in the discharge of the EDA's primary responsibility for securing compliance.

(11) The Recipient further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a Contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by EDA or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the Recipient agrees that if it fails or refuses to comply with these undertakings, EDA may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this EDA financial assistance; refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case

to the Department of Justice for appropriate legal proceedings.

(b) Exemptions to Above Equal Opportunity Clause (41 C.F.R. chapter 60):

(1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading, and other than contracts and subcontracts with depositories of Federal funds in any amount and with financial institutions which are issuing and paying agents for U.S. savings bonds and savings notes) are exempt. The amount of the Contract, rather than the amount of the federal financial assistance, shall govern in determining the applicability of this exemption.

(2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.

(3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

18. **CONTRACTING WITH SMALL, MINORITY AND WOMEN'S BUSINESSES**

(a) If the Contractor intends to let any subcontracts for a portion of the work, the Contractor shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services.

(b) Affirmative steps shall consist of:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;

(4) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises;

(5) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies;

(6) Requiring each party to a subcontract to take the affirmative steps of this section; and

(7) The Contractor is encouraged to procure goods and services from labor surplus area firms.

19. **HEALTH, SAFETY, AND ACCIDENT PREVENTION**

(a) In performing this contract, the Contractor shall:

- (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
- (2) Protect the lives, health, and safety of other persons;
- (3) Prevent damage to property, materials, supplies, and equipment; and
- (4) Avoid work interruptions.

(b) For these purposes, the Contractor shall:

- (1) Comply with regulations and standards issued by the Secretary of Labor at 29 C.F.R. part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 3701 – 3708); and
- (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

(c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this Contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 C.F.R. part 1904.

(d) The Owner shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the Work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Owner may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

(e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as EDA, or the Secretary of Labor shall direct as a means of enforcing such provisions.

20. **CONFLICT OF INTEREST AND OTHER PROHIBITED INTERESTS**

- (a) No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part hereof.
- (b) No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the Project.
- (c) The Contractor may not knowingly contract with a supplier or manufacturer if the individual or entity who prepared the Contract Documents has a corporate or financial affiliation with the supplier or manufacturer.
- (d) The Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, may be involved. Such a conflict may arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest in the Contractor. The Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from the Contractor or subcontractors.
- (e) If the Owner finds after a notice and hearing that the Contractor, or any of the Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the Owner or EDA in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, the Owner may, by written notice to the Contractor, terminate this Contract. The Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which the Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.
- (f) In the event this Contract is terminated as provided in paragraph (e) of this section, the Owner may pursue the same remedies against the Contractor as it could pursue in the event of a breach of this Contract by the Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, the Owner may pursue exemplary damages in an amount (as determined by the Owner) which shall not be less than three nor more than ten times the costs the Contractor incurs in providing any such gratuities to any such officer or employee.

21. **RESTRICTIONS ON LOBBYING**

(a) This Contract, or subcontract is subject to 31 U.S.C. § 1352, regarding lobbying restrictions. The section is explained in the common rule, 15 C.F.R. part 28 (55 FR 6736-6748, February 26, 1990). Each bidder under this Contract or subcontract is generally prohibited from using federal funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with this EDA Award.

(b) **Contract Clause Threshold:** This Contract Clause regarding lobbying must be included in each bid for a contract or subcontract exceeding \$100,000 of federal funds at any tier under the EDA Award.

(c) **Certification and Disclosure:** Each bidder of a contract or subcontract exceeding \$100,000 of federal funds at any tier under the federal Award must file Form CD-512, *Certification Regarding Lobbying – Lower Tier Covered Transactions*, and, if applicable, Standard Form-LLL, *Disclosure of Lobbying Activities*, regarding the use of any nonfederal funds for lobbying. Certifications shall be retained by the Contractor or subcontractor at the next higher tier. All disclosure forms, however, shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(d) **Continuing Disclosure Requirement:** Each Contractor or subcontractor that is subject to the Certification and Disclosure provision of this Contract Clause is required to file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person. Disclosure forms shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(e) **Indian Tribes, Tribal Organizations, or Other Indian Organizations:** Indian tribes, tribal organizations, or any other Indian organizations, including Alaskan Native organizations, are excluded from the above lobbying restrictions and reporting requirements, but only with respect to expenditures that are by such tribes or organizations for lobbying activities permitted by other federal law. An Indian tribe or organization that is seeking an exclusion from Certification and Disclosure requirements must provide EDA with the citation of the provision or provisions of federal law upon which it relies to conduct lobbying activities that would otherwise be subject to the prohibitions in and to the Certification and Disclosure requirements of 31 U.S.C. § 1352, preferably through an attorney's opinion. Note, also, that a non-Indian subrecipient, contractor, or subcontractor under an award to an Indian tribe, for example, is subject to the restrictions and reporting requirements.

22. **HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION**

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction. Any excavation by the Contractor that uncovers an historical or archaeological artifact shall be immediately reported to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the State Historic

Preservation Officer (SHPO) for recovery of the items. *See* the National Historic Preservation Act of 1966 (54 U.S.C. § 300101 *et seq.*, formerly at 16 U.S.C. § 470 *et seq.*) and Executive Order No. 11593 of May 31, 1971.

23. **CLEAN AIR AND WATER**

Applicable to Contracts in Excess of \$150,000

(a) **Definition.** “Facility” means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by the Contractor or any subcontractor, used in the performance of the Contract or any subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the United States Environmental Protection Agency (EPA) determines that independent facilities are collocated in one geographical area.

(b) In compliance with regulations issued by the EPA, 2 C.F.R. part 1532, pursuant to the Clean Air Act, as amended (42 U.S.C. § 7401 *et seq.*); the Federal Water Pollution Control Act, as amended (33 U.S.C. § 1251 *et seq.*); and Executive Order 11738, the Contractor agrees to:

(1) Not utilize any facility in the performance of this contract or any subcontract which is listed on the Excluded Parties List System, part of the System for Award Management (SAM), pursuant to 2 C.F.R. part 1532 for the duration of time that the facility remains on the list;

(2) Promptly notify the Owner if a facility the Contractor intends to use in the performance of this contract is on the Excluded Parties List System or the Contractor knows that it has been recommended to be placed on the List;

(3) Comply with all requirements of the Clean Air Act and the Federal Water Pollution Control Act, including the requirements of section 114 of the Clean Air Act and section 308 of the Federal Water Pollution Control Act, and all applicable clean air and clean water standards; and

(4) Include or cause to be included the provisions of this clause in every subcontract and take such action as EDA may direct as a means of enforcing such provisions.

24. **USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES**

(a) If the work under this Contract involves construction or rehabilitation of residential structures over \$5,000, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (42 U.S.C. § 4831). The Contractor shall assure that paint or other surface coatings used in a residential property does not contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight. For purposes of this section, “residential property” means a dwelling unit, common areas, building exterior surfaces, and any surrounding land, including outbuildings, fences and play equipment affixed to the land, belonging to an owner and available for use by residents, but not

including land used for agricultural, commercial, industrial or other non-residential purposes, and not including paint on the pavement of parking lots, garages, or roadways.

- (b) As a condition to receiving assistance under PWEDA, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of federal funds.

25. **ENERGY EFFICIENCY**

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201) for the State in which the Work under the Contract is performed.

26. **ENVIRONMENTAL REQUIREMENTS**

When constructing a Project involving trenching and/or other related earth excavations, the Contractor shall comply with the following environmental constraints:

- (1) **Wetlands.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert wetlands.
- (2) **Floodplains.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert 100 year floodplain areas delineated on the latest Federal Emergency Management Agency (FEMA) Floodplain Maps, or other appropriate maps, i.e., alluvial soils on Natural Resource Conservation Service (NRCS) Soil Survey Maps.
- (3) **Endangered Species.** The Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the Contractor, the Contractor will immediately report this evidence to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the U.S. Fish and Wildlife Service.

27. **DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSIONS**

As required by Executive Orders 12549 and 12689, *Debarment and Suspension*, 2 C.F.R. Part 180 and implemented by the Department of Commerce at 2 C.F.R. part 1326, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subrecipient will have a critical influence on or substantive control over the award), the Contractor agrees that:

- (1) By entering into this Contract, the Contractor and subcontractors certify, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared Economic Development Administration Contracting Provisions for Construction Projects

ineligible, or voluntarily excluded from participation in this Contract by any federal department or agency.

(2) Where the Contractor or subcontractors are unable to certify to any of the statements in this certification, the Contractor or subcontractors shall attach an explanation to this bid.

See also 2 C.F.R. part 180 and 2 C.F.R. § 200.342.

28. **EDA PROJECT SIGN**

The Contractor shall supply, erect, and maintain in good condition a Project sign according to the specifications provided by EDA. To the extent practical, the sign should be a free standing sign. Project signs shall not be located on public highway rights-of-way. Location and height of signs will be coordinated with the local agency responsible for highway or street safety in the Project area, if any possibility exists for obstructing vehicular traffic line of sight. Whenever the EDA site sign specifications conflict with State law or local ordinances, the EDA Regional Director will permit such conflicting specifications to be modified so as to comply with State law or local ordinance.

29. **BUY AMERICA**

To the greatest extent practicable, contractors are encouraged to purchase American-made equipment and products with funding provided under EDA financial assistance awards.

SECTION 320

PERFORMANCE BOND

(Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable)

Contractor (Name and Address):

Surety (Name and Principal Place of Business):

Owner (Name and Address): CITY OF COTTAGE GROVE
400 EAST MAIN STREET
COTTAGE GROVE, OR 97424

Construction Contract:
Date:
Amount:
Description (Name and Location):

Bond
Date (Not earlier than Construction Contract Date):
Amount:
Modifications to this Bond: None See Page 4

CONTRACTOR AS PRINCIPAL SURETY
Company: (Corporate Seal) Company: (Corporate Seal)

Signature: _____ Signature: _____

Name and Title: _____ Name and Title: _____

(Any additional signatures appear on page 4)

(FOR INFORMATION ONLY - Name, Address and Telephone)

AGENT OR BROKER: OWNER'S REPRESENTATIVE:
(Architect, Engineer or other Party):

1 The Contractor and the Surety, jointly and severally bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

- 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
- 3 If there is not Owner Default, the Surety's obligation under this Bond shall arise after:
 - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed to reasonably time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
 - 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a Contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
- 4 When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
 - 4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent Contractors; or
 - 4.3 Obtain bids or negotiated bid packets from qualified Contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the Contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new Contractor and with reasonable promptness under the circumstances;
 - .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefore to the Owner; or

- .2 Deny liability in whole or in part and notify the Owner citing reasons therefore.
- 5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
- 6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
 - 6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
 - 6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner of its heirs, executors, administrators or successors.
- 8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- 9 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suite shall be applicable.
- 10 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

- 11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- 12 DEFINITIONS
- 12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- 12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract documents and changes thereto.
- 12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or other wise to comply with the terms of the Construction Contract.
- 12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company:

SURETY
Company:

Signature: _____ Signature: _____

Name and Title: _____ Name and Title: _____

Address: _____ Address: _____

SECTION 330

PAYMMENT BOND

(Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable)

Contractor (Name and Address):

Surety (Name and Principal Place of Business):

Owner (Name and Address): CITY OF COTTAGE GROVE
400 EAST MAIN STREET
COTTAGE GROVE, OR 97424

Construction Contract:
Date:
Amount:
Description (Name and Location):

Bond
Date (Not earlier than Construction Contract Date):
Amount:
Modifications to this Bond: None See Page 4

CONTRACTOR AS PRINCIPAL SURETY
Company: (Corporate Seal) Company: (Corporate Seal)

Signature: _____ Signature: _____

Name and Title: _____ Name and Title: _____

(Any additional signatures appear on page 4)

(FOR INFORMATION ONLY - Name, Address and Telephone)
AGENT OR BROKER: OWNER'S REPRESENTATIVE:
(Architect, Engineer or other Party):

- 1. The Contractor and the Surety, jointly and severally bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2. With respect to the Owner, this obligation shall be null and void if the Contractor:
 - 2.1 Promptly makes payment, directly or indirectly for all sums due Claimants, and
 - 2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.
3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
4. The Surety shall have no obligation to claimants under this Bond until:
 - 4.1 Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
 - 4.2 Claimants who do not have a direct contract with the Contractor:
 - 4.1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment including in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and
 - 4.2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
 - 4.3 Not having been paid within the above 30 days has sent a written notice to the Surety (at the address described in Paragraph 12) and stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety that is sufficient compliance.
6. When the Claimant has satisfied the conditions of the Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

- 6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are disputed and the basis for challenging any amounts that are disputed.
 - 6.2 Pay or arrange for payment of any undisputed amounts.
7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this bond shall be credited for any payments made in good faith by the Surety.
8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owners priority to use the funds for the completion of the work.
9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligation to Claimants under this bond.
10. The Surety hereby waives notice of any change, including changes of time to the Construction Contract or to related subcontracts, purchase orders and other obligations.
11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
12. Notice to the Surety, the Owner and the Contractor shall be mailed or delivered to the address shown on the signature age. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

- 15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a Subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms labor, materials or equipment and that part of water, gas, power, light, heat, oil gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- 15.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract documents and changes thereto.
- 15.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company:

SURETY
Company:

Signature: _____
Name and Title: _____
Address: _____

Signature: _____
Name and Title: _____
Address: _____



STATE OF OREGON

STATUTORY PUBLIC WORKS BOND

Surety Bond #: _____ CCB # (if applicable): _____

We, _____, as principal, and business in the State of Oregon, as surety, are held and firmly bound unto the State of Oregon for the use and benefit of the Oregon Bureau of Labor and Industries (BOLI) in the sum of thirty thousand dollars (\$30,000) lawful money of the United States of America to be paid as provided in ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, for which payment will and truly to be made, we bind ourselves, our heirs, personal representatives, successors and assigns, jointly and severally, firmly by this agreement.

WHEREAS, the above-named principal wishes to be eligible to work on public works project(s) subject to the provisions of ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, and is, therefore, required to obtain and file a statutory public works bond in the penal sum of \$30,000 with good and sufficient surety as required pursuant to the provisions of section 2, chapter 360, Oregon Laws 2005, conditioned as herein set forth.

NOW THEREFORE, the conditions of the foregoing obligations are that if said principal with regard to all work done by the principal as a Contractor or Subcontractor on public works project(s), shall pay all claims ordered by BOLI against the principal to workers performing labor upon public works projects for unpaid wages determined to be due, in accordance with ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, and OAR 839, then this obligation shall be void; otherwise to remain in full force and effect.

The bond is for the exclusive purpose of payment of wage claims ordered by BOLI to workers performing labor upon public works projects in accordance with ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360.

This bond shall be one continuing obligation, and the liability of the surety for the aggregate of any and all claims which may arise hereunder shall in no event exceed the amount of the penalty of this bond.

This bond shall become effective on the date it is executed by both the principal and surety and shall continuously remain in effect until depleted by claims paid under ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, unless the surety sooner cancels the bond. This bond may be cancelled by the surety and the surety be relieved of further liability for work performed on contracts entered after cancellation by giving 30 days written notice to the principal, the Construction Contractors Board, and BOLI. Cancellation shall not limit the responsibility of the surety for the payment of claims ordered by BOLI relating to work performed during the work period of a contract entered into before cancellation of this bond.

IN WITNESS WHEREOF, the principal and surety execute this agreement. The surety fully authorizes its representatives in the State of Oregon to enter into this obligation.

SIGNED, SEALED AND DATED this _____ day of _____, 20____

Surety by: _____ (Seal)

Principal by: _____

Company Name

Name

Signature

Title (e.g. Attorney-in-Fact)

SEND BOND TO: Construction Contractors Board

**P.O. Box 14140
Salem, OR 97309-5052
Telephone: (503) 378-4621**

Zip

Signature

Title

Address

City

State

SECTION 400 – GENERAL CONDITIONS

- **410 – DEFINITIONS AND ABBREVIATIONS**
- **420 – PLANS AND SPECIFICATIONS**
- **430 – THE ENGINEER**
- **440 – THE CONTRACTOR**
- **450 – PROSECUTION AND PROGRESS OF THE WORK**
- **460 – PAYMENT FOR THE WORK**
- **470 – PREVAILING WAGE RATES**

GENERAL CONDITIONS

SECTION 410 DEFINITIONS AND ABBREVIATIONS

1.00 - DEFINITIONS. In the material bound herewith, certain words or expressions shall be understood to have the following meanings:

1.01 - Bidder. Any individual, firm or corporation formally submitting a bid for the work contemplated herein, acting either directly or through an authorized representative.

1.02 - City. Wherever the word "City" occurs in these Contract Documents, the term shall signify the incorporated City of Cottage Grove, Oregon, acting through its governing body or authorized employees.

1.03 - Contractor. The individual, firm or corporation undertaking the execution of the work under the terms of the Contract and acting either directly or through his or its agents or employees.

1.04 - Engineer. The word "Engineer" shall signify the City Engineer of the City of Cottage Grove, acting either directly or through an authorized City employee.

1.05 - Contract Documents. The Contract Documents consist of the Instructions to Bidders, General Conditions, the Advertisement for Bids, Project Bid, all Addenda, Special Provisions, Technical Specifications, the Contract, the Performance Bond, Payment Bond, Public Works Bond, Bid Schedules, and the Plans, all bound herewith. The Contract Documents shall also include the BOLI Prevailing Wage Rate Schedule dated July 5, 2023 including any current amendments, the Oregon Standard Specifications for Construction, 2024 edition, published by the Oregon Department of Transportation, including all modifications thereof, incorporated into the Contract Documents before their execution; and all Change Orders entered into by mutual agreement between the City and the Contractor.

1.06 - Work. Work shall be understood to mean the furnishing of all labor, materials, equipment and other incidentals necessary for the successful completion of the project and obligations imposed upon the Contractor by the Contract.

1.07 – Oregon Standard Specifications for Construction, 2024 Edition. Oregon Standard Specifications for Construction, 2024 Edition shall be understood to mean: Oregon Standard specifications for Construction, 2024 Edition, and any modifications thereof.

2.00 - ABBREVIATIONS. In the material bound herewith, certain words or expressions shall be understood to have the following meanings:

AASHTO: American Association of State Highway and Transportation Officials
AGC: Associated General Contractors of America
AIA: American Institute of Architects
ANSI: American National Standards Institute
APWA: American Public Works Association
ASCE: American Society of Civil Engineers
ASME: American Society of Mechanical Engineers
ASTM: American Society for Testing and Materials
AWWA: American Water Works Association
BOLI: Bureau of Labor & Industries
CCB: Construction Contractors Board
CFR: Code of Federal Regulations
DBE: Disadvantaged Business Enterprise
DEQ: Department of Environmental Quality, State of Oregon
EPA: U.S. Environmental Protection Agency
FHWA: Federal Highway Administration, U.S. Department of Transportation
FSS: Federal Specifications & Standards, General Services Administration
GSA: General Services Administration
MIL: Military Specifications
MUTCD: Manual on Uniform Traffic Control Devices
NEC: National Electric Code
NEMA: National Electrical Manufacturers Association
NFPA: National Fire Protection Association
OAR: Oregon Administrative Rules
ORS: Oregon Revised Statutes
OSHA: Occupational Safety and Health Administration
ODOT: Oregon Department of Transportation
PUC: Public Utility Commission, State of Oregon
QA: Quality Assurance
QC: Quality Control
UBC: Uniform Building Code (as adopted by the State of Oregon)
UL: Underwriters Laboratories, Inc.
UPC: Uniform Plumbing Code (as adopted by the State of Oregon)
USC: United States Code

SECTION 420
PLANS AND SPECIFICATIONS

1.00 - Plans. The Plans that describe the work to be performed are as tabulated in the Contract. In the event of discrepancies between the Plans and Specifications, the Specifications shall govern, or as otherwise specified in the Special Provisions of the Specifications.

2.00 - Alteration in Details of Construction. The Engineer, during the progress of the work may alter any of the details of construction as may be found expedient, or suitable, and such alterations shall not invalidate the Contract nor release the surety, and the Contractor agrees to execute the altered work the same as if it had been part of the original Contract. Any claims for extension of time or payment for extra work involved shall be made by the Contractor at the time that such alterations are authorized. If alterations result in diminishing the quantity of work, they shall not constitute a claim for anticipated profits on the work so dispensed with.

SECTION 430
THE ENGINEER

1.00 - Engineer's Status. The Engineer shall have general supervision and direction of the work. He is the agent of the City to the extent provided in the Contract Documents. He has authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.

The Engineer shall, within a reasonable time, make decisions and recommendations on all claims of the City or Contractor and on all matters relating to the execution and progress of the work, and on interpretation of the Plans, and the City shall finally approve of all such decisions.

2.00 - Unnoticed Defects and Rejected Material. If any portion of the work shall prove defective and not in conformance with the Plans and Specifications, and if such defective or non-conforming work does not, in the opinion of the Engineer, detract from soundness or acceptability, the Engineer, subject to the written approval of the City, shall have full authority to retain such work and make such deductions in the payment to the Contractor as are determined just and reasonable. All other defective or non-conforming work and rejected material shall be removed and replaced at the Contractor's expense. Failure by the Engineer to condemn or reject defective or non-conforming work and materials shall not be construed to imply acceptance of such work and materials.

3.00 - Approval of Shop Drawings. The Contractor shall submit four (4) copies of all shop or setting drawings and schedules required for the work of the various trades, and the Engineer shall pass upon them with reasonable promptness, making desired corrections. The Contractor shall make any corrections required by the Engineer, file with him two corrected copies, and furnish such other copies as may be needed. The Engineer's approval of such drawings or schedules shall not relieve the Contractor from responsibility for deviations from the Plans and Specifications unless he has in writing called the Engineer's attention to such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any sort in shop drawings or schedules.

SECTION 440

THE CONTRACTOR

1.00 - Contractor's Representatives. The Contractor shall at all time during his absence from the work, have a competent superintendent or foreman as his agent on the work, who shall receive instructions from the engineer or his authorized representatives. The superintendent or foreman shall have full authority and responsibility to promptly supply such materials, tools, plant equipment, and labor as may be required.

2.00 - Laws, Permits and Licenses. The Contractor at all times shall observe and comply with all Federal and State laws, City ordinances and regulations in any manner affecting the conduct of the work, and shall further comply with such orders or decrees as exist at present, and those which may be enacted later by bodies or tribunals having any jurisdiction or authority over the work. The Contractor shall indemnify and save harmless the City, its officers and employees against the claim or liability arising from the violation of any such laws, ordinances, regulations, orders or decrees, whether such violation be by the Contractor, his Subcontractors or his employees.

The Contractor shall procure all permits and licenses, pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the work.

3.00 - Protection of Property and Persons. In the performance of the work to be done under the Contract, the Contractor shall use every reasonable means to avoid damage to property, injury to persons and loss, expense, inconvenience, and delay to the City, users, and others. He shall provide protective devices wherever and whenever needed in affording this protection and, in the performance of the work, he shall use no means or methods which will endanger either persons or property. He shall further comply with all Federal, State and Local Codes relating to the safety and protection of his employees.

All damages and injury to property that may be caused by or that may result from the carrying out of the work to be done under the Contract or from any act, omission, or neglect of the Contractor, shall promptly be made good by the Contractor either by repairing, rebuilding or replacing of the property damaged.

4.00 - Furnishing of Material. Unless otherwise specified in the Special Provisions, all material furnished in connection with the work shall be new and first quality.

5.00 - Inspection of the Work. The Engineer or his representatives shall be allowed access to all parts of the work at all times and shall be furnished with every reasonable facility for ascertaining whether or not the work as performed is in accordance with the requirements and intent of the Plans and specifications. The Contractor shall cut and replace with new materials, at his own expense, such samples as are customarily required for testing purposes. The Contractor shall, at any time before acceptance of the work, remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the Specifications. Should the work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or the making good of the parts removed, shall be paid for as "extra work", but should the work so exposed or examined prove unacceptable, the uncovering or removing, and replacing of the covering and the making good of the parts removed, shall be at the Contractor's expense.

6.00 - Subcontractors. Nothing in these Contract Documents shall be construed to imply a contractual relationship between the City and any Subcontractor engaged by the Contractor. The Contractor agrees that he is fully responsible to the City for all acts of his Subcontractors, material suppliers, employees and indirect employees.

7.00 - Responsibility for Damages. The Contractor shall be responsible for all loss, expense, inconvenience and delay that may be caused by or that may result from any act, omission or neglect of the Contractor in the performance of the work to be done under the Contract. The Contractor shall indemnify and save harmless the City and its officers and employees from all claims, demands, suits or actions of every name and description brought for or on account of any damage, injury, loss, expense, inconvenience or delay received or sustained, or claimed to be received or sustained, by any person or persons, which damage, injury, loss, expense, inconvenience, or delay may have been caused by or may have resulted from the performance of the work to be done under the Contract.

8.00 - Responsibility for the Work. Until final acceptance of the Contract, the Contractor shall be held responsible for any injury or damage to the work or to any part thereof by the action of the elements, or from any cause whatsoever, and he shall make good at his own expense all injuries or damages to any portion of the work before its completion and final acceptance.

9.00 - Taxes. The Contractor shall withhold all Federal, State and local taxes from wages, make all Social Security payments, and pay all taxes, charges and fees which are now or may hereafter be charged.

10.00 - Performance, Payment, and Public Works Bonds. The Contractor shall furnish surety bonds in amounts equal to the total amount of the Contract, as set forth in the Bidder's packet as satisfactory to the City. The bonds shall be on the forms bound herewith and shall remain in full force for one (1) year after conditional acceptance of the work, to cover all guarantees against defective workmanship and materials and to insure payment to all person supplying labor or materials in connection with the Contract.

Pursuant to Senate Bill 477, the Contractor shall be required have a Public Works Bond filed with the Construction Contractors Board (CCB) prior to the start of work on any Public Works project, unless exempt. The Contractor shall also require every Subcontractor to have a Public Works Bond filed with the CCB prior to starting work on a project, unless exempt. In addition, the Contractor shall provide proof to the City of Cottage Grove that his/her Public Works Bond and Public Works Bonds of all Subcontractors have been filed with the Construction Contractors Board.

11.00 - Insurance. Prior to the start of the work under the Contract, the Contractor shall furnish the City with satisfactory proof of hold-harmless, insurance and related requirements for both work in progress and completed operation as follows:

11.01 - General. In order to protect the financial assets and interests of the City of Cottage Grove and to clarify responsibility and liability between the City and the Contractor, the following procedures, language and conditions shall apply to the work and are hereby incorporated in the contract as if set out in full therein.

11.02 - Hold-Harmless and Indemnification Requirements. To the fullest extent of the law, the Contractor will defend, indemnify, hold harmless and reimburse the City of Cottage Grove (including its officers, Council members, agents and employees) from all

claims, demands, suits, actions, penalties, damage expenses for liability of any kind) including attorney's fees. To the extent that death or bodily injury to persons or damage to property arises out of the fault of the Contractor, the Contractor's indemnity obligation exists only to the extent it contributed to or caused such damage, whether or not such are contributed to or caused in any part by the City of Cottage Grove.

11.03 - General Insurance Requirements. The Contractor shall maintain in force for the duration of this agreement a Commercial General Liability insurance policy written on an occurrence basis with limits not less than \$2,000,000 per occurrence (for all claimants for claims arising out of a single accident or occurrence). Annual aggregate limit shall not be less than \$4,000,000.

11.04 - Automobile Liability. Automobile liability (owned, non-owned and hired) insurance with limits not less than \$2,000,000 per occurrence (for all claimants for claims arising out of a single accident or occurrence) shall be maintained. The City, its employees, officials and agents, the State of Oregon, ODOT, its officers, employees and agents will be named as additional insured with respect to work or services performed under this agreement. This shall apply to both work in progress and completed operations. This insurance coverage must be primary and non-contributory with any other insurance and self-insurance the City or State may carry on their own.

11.05 - Builder's Risk Insurance. If so specified in the Contract Documents, the Contractor shall maintain an all risk insurance policy covering the replacement cost of the work during the course of construction. The policy shall include the interest of the City and the design architect or engineer. The amount of the insurance shall equal the completed value of the contract amount.

11.06 - Worker's Compensation Insurance. The Contractor shall provide and maintain worker's compensation coverage for its employees, officers, agents or partners, in compliance with ORS 656.017, which requires all employers that employ subject workers, as defined in ORS 656.027, to provide workers' compensation coverage for those workers, unless they meet the requirement for an exemption under ORS 656.126(2). Employer's liability insurance with coverage limits of not less than \$500,000 must be included.

11.07 - "Tail" Coverage. If any of the required insurance policies is on a "claims made" basis, such as professional liability insurance, the contractor shall maintain either "tail" coverage or continuous "claims made" liability coverage, provided the effective date of the continuous "claims made" coverage is on or before the effective date of this Agreement, for a minimum of twenty-four (24) months following the later of : (i) the contractor's completion and acceptance of all Services required under this Agreement or, (ii) the expiration of all warranty periods provided under this Agreement. Notwithstanding the foregoing twenty-four (24) month requirement, if the Contractor elects to maintain "tail" coverage and if the maximum time period "tail" coverage reasonably available in the marketplace is less than the twenty-four (24) month period described above, then the Contractor may request and City may grant approval of the maximum "tail" coverage period reasonably available in the marketplace. If City approval is granted, the Contractor shall maintain "tail" coverage for the maximum time period that "tail" coverage is reasonably available in the marketplace.

11.08 - Evidence of Insurance Coverage. Evidence of the above coverages issued by a company satisfactory to the City of Cottage Grove shall be provided to the City by way of a certificate(s) of insurance prior to the commencement of any work or services. Contractor or its insurer must provide 30- days' written notice of cancellation, material change, potential exhaustion of aggregate limits of, or non-renewal of the required insurance coverage(s). Clauses such as "Company will endeavor to mail 30 days written notice" must be modified as follows: "Company will endeavor to mail 30 days written notice." Furthermore, clauses such as "but failure to mail such notice shall impose no obligation or liability of any kind upon the Company, its agents or representatives" must be stricken as follows: "~~but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives~~". Failure to maintain the proper insurance shall constitute a material breach of this Agreement and shall be grounds for immediate termination of this contract.

11.09 - Equipment and Material. The Contractor shall be responsible for any loss, damage or destruction of its own property, equipment and materials used in conjunction with the work.

11.10 - Subcontractors Insurance Requirements. The Contractor shall require all Subcontractors to provide and maintain general liability, auto liability, professional liability (where applicable) and worker's compensation insurance with coverages equivalent to those required of the general Contractor in this contract. The Contractor shall require certificates of insurance from all Subcontractors as evidence of coverage.

12.00 - Guarantee. The Contractor shall guarantee all work and materials furnished under the Contract for a period of one (1) year after conditional acceptance and he shall, at his own proper expense, repair and replace any such defective materials and workmanship to the satisfaction of the Engineer, and shall hold the City harmless from all claims arising from defective materials, and workmanship. Nothing herein contained, to furnish materials and workmanship in accordance with Plans and Specifications as herein provided, may be changed without written authorization of the City.

13.00 - Liens and Claims. The Contractor shall not permit a lien to be filed against the works, and prior to final payment for the work performed under the Contract, the Contractor shall furnish the City with an affidavit stating that all claims on labor, services or materials have been settled and filed with the City, the Contractor shall promptly refund to the City all monies that the City may have been compelled to pay in satisfying such liens, including attorney's fees and costs.

SECTION 450
PROSECUTION AND PROGRESS OF THE WORK

1.00 - Prosecution of the Work. The work to be done under the Contract shall not be commenced until the Contract, the Performance and Payment Bonds, the Public Works Bond, and Insurance Certification have been executed by the Contractor and his surety and delivered to the City. Performance of the work to be done under the Contract shall be commenced within ten (10) calendar days after the Contractor has been issued a Notice to Proceed.

After the award of the Contract and prior to the work commencing, the Contractor shall meet and consult with the Engineer on the Contractor's proposed arrangements for the prosecution of the work and timing schedules for the various phases of the work. It is agreed by the Contractor that time is the essence of the Contract; and from the time of commencement of the work to the time of completion; the work shall be prosecuted vigorously and continuously, and always in accordance with a schedule which will insure completion within the specified time limit.

2.00 - Character of Workman and Equipment. The Contractor shall employ only competent and efficient laborers, mechanics or artisans; and whenever, in the opinion of the Engineer, any employee is careless or incompetent, or obstructs the progress of the work, or acts contrary to instructions or conducts himself improperly, the Contractor shall, upon written complaint of the engineer, discharge or otherwise remove him from the work and not employ him again on it. The methods, equipment and appliances used and the quantity and quality of the personnel employed on the work shall be such as will produce a satisfactory quality of work and shall be adequate to complete the Contract within the time limit specified.

3.00 - Time of Completion and Liquidated Damages. Inasmuch as delay in the prosecution of the work will inconvenience and increase the cost to the City, it is essential that the work be pressed vigorously to completion. Therefore, the work to be done under the Contract shall be completed in its entirety before the elapse of the number of calendar days stated in the Contract. Recording of the elapse of the calendar days will begin with the tenth (10) calendar day following the date of the notice to proceed.

A calendar day is hereby defined as every day, except legal holidays, as designated by the State of Oregon, on which the Contractor is not prevented, by conditions resulting from inclement weather, or by suspension of work ordered by the Engineer or specifically required by provisions of the Contract or by acts of God from performing work under the Contract with daily productiveness equal to at least fifty (50) percent of the daily productiveness normally possible at the same stage of construction under favorable conditions. The relative productiveness as determined by the Engineer shall be conclusive.

It is agreed by the parties to the Contract that, in case all the work called for under the Contract in all parts and requirements, is not finished or completed within the number of calendar days called for in the Contract, damage will be sustained by the City, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the City will sustain in the event of and by reason of such delays; and it is therefore agreed that the Contractor will pay to the City as liquidated damages or the City at its option, may deduct from any monies due or to become due to the Contractor from the City, the sum indicated in the schedule shown for each and every calendar day elapsed in excess of the number of calendar days specified for the performance and completion of the work called for in the Contract.

The parties further agree that this amount of liquidated damages is a reasonable forecast of just compensation for the harm caused by any breach and that this harm is one which is impossible or very difficult to accurately estimate.

Schedule of Liquidated Damages

<u>Total Amount of Contractor's Bid</u>	<u>Per Diem of Liquidated Damages</u>
Less than \$5,000.00 .	\$20.00
\$5,000.00 but less than \$15,000.00 .	35.00
\$15,000.00 but less than \$25,000.00	55.00
\$25,000.00 but less than \$70,000.00	85.00
\$70,000.00 but less than \$130,000.00	140.00
\$130,000.00 but less than \$250,000.00	170.00
\$250,000.00 but less than \$500,000.00	210.00
\$500,000.00 but less than \$1,000,000.00	315.00
\$1,000,000.00 and over	420.00

Permitting the Contractor to continue and finish the work or any part thereof after the time or number of calendar days fixed for its completion, including any increase in calendar days which may have been granted as hereinafter provided, shall in no way operate as a waiver on the part of the City of any of its rights under the Contract.

Payment of liquidated damages shall not release the Contractor from obligation in respect to the fulfillment of the entire Contract, nor shall the payment of such liquidated damages constitute a waiver of the City's right to collect any additional damages which it may sustain by failure of the Contractor to carry out the terms of his Contract, it being the intention of the parties that said liquidated damages be full and complete payment only for failure of the Contractor to complete the work on time.

4.00 - Increase in Time for Performance of Contract. Temporary suspension of work and delays, occasioned by errors or changes in the Plans and Specifications of the Contract or failure of the City, its employees and its other Contractors to act promptly in carrying out obligations and duties shall be considered causes for increasing the number of calendar days specified for the completion of the work without assessment for liquidated damages, to the extent only that said causes actually increase the number of calendar days required for completion of the work to be done under the Contract.

Shortage or inadequacy of labor or equipment, or failure to supply the necessary materials, shall not be considered to be beyond the Contractor's control, and delays resulting there from shall not be considered cause for increase in the number of calendar days specified for the completion of the work.

In the event the Contractor is prevented from completing the work to be done within the number of calendar days, specified for completion by reason of one or more of the causes set forth above only, the Contractor may request the City to increase the number of calendar days specified for the completion of the work without assessment of liquidated damages. The request shall be in writing, shall set forth in full the conditions which have delayed or prevented completion of the work, shall state the dates of the calendar days during which prosecution of the work was actually prevented by such conditions. The decisions of the City as to whether and to what extent an

increase in the number of calendar days for completion of the work without assessment of liquidated damages shall be granted shall be final.

5.00 - Cancellation of Contract by the Owner. If the Contractor should be adjudged as bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently refuse or should fail to supply enough properly skilled workmen or proper materials for the efficient prosecution of the project, or if he should fail to make prompt payment to Subcontractors or for material or labor, or persistently disregard laws, ordinances or the instructions of the Engineer or otherwise be guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Engineer that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor and his surety seven (7) days written notice, terminate the employment of the Contractor, and require the surety to complete the Contract. In the event action as above is taken by the City, the Contractor shall not be entitled to receive any further payment and payments due shall be made directly to the surety; and upon completion of the work by the surety, the surety will be entitled to receive an amount equal to the difference of the sum of amounts previously paid to the Contractor and the amount the Contractor would have been entitled to receive for the work, under the terms of the Contract, had he himself completed the work.

In lieu of the above, the City may, if it so elects, take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method the City may deem expedient. In such cases the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price shall exceed the expense of finishing the work including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall with the surety's guarantee, pay the difference to the City. The expense incurred by the City, as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Engineer.

6.00 - Use of Premises by the City. The City reserves the right to enter upon the premises, to use same, and to let other contracts in connection with this Contract, or to use parts of the work of the Contractor before the final completion of the work, it being understood that such use by the City in no way relieves the Contractor from full responsibility of his obligations in completing his Contract. Taking possession of completed or partially completed portions of the work shall not constitute acceptance of any work not completed in compliance with the Contract Documents. The Contractor shall be entitled to extra compensation and/or an increase in the time limit if the Engineer determines that such possession by the City increases the Contractor's costs and delays the work.

7.00 - Cutting and Patching. The Contractor shall do all cutting, fitting or patching of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of other Contractors or existing facilities, as shown upon or reasonably implied by the Plans and Specifications for the completed structure, and he shall make good after them as the Engineer may direct. The Contractor shall not endanger any work by overloading, cutting, digging, or otherwise, and shall not alter the work of any other Contractor without the consent of the Engineer.

8.00 - Cleanup by Contractor. The Contractor shall at all times keep the premises free from accumulations of waste material or debris caused by his employees or work materials, and leave the work in a neat condition satisfactory to the City. The project area shall be cleaned up within two (2) weeks of the final acceptance of the project by the City.

SECTION 460
PAYMENT FOR THE WORK

1.00 - Application for Payments by the Contractor. Partial payments shall be made in accordance with ORS 279C.500 to ORS 279C.570 and shall be due the Contractor not later than 30 days after receipt of the invoice, for work performed during the preceding calendar month. Five (5) percent (%) of the amount invoiced will be retained out of progress payments as allowed under this statute.

The Contractor shall submit to the City an application for each payment, and if required, receipts or other vouchers showing his payment for materials and labor, including payments to Subcontractors. Such application shall be submitted at least thirty (30) days before each payment falls due and if required, the Contractor shall submit with the application to the City a schedule of values of various parts of the work upon which payment is requested.

No certificate issued or payment made to the Contractor shall be an acceptance of any work or materials not in accordance with the Contract. Five (5) percent of all monies earned by the Contractor will be retained no more than thirty (30) days after the date upon which the City accepts the work covered by the Contract, as evidenced by the Engineer's final inspection and recommendation of acceptance.

2.00 - Extra Work. Extra work shall not be performed by the Contractor, except in an emergency endangering life or property, unless it is in pursuance of a written supplemental agreement, signed by the City. No claim for an addition to the Contract price shall be valid unless the extra work involved has been ordered by supplemental agreement, with the amount of the extra claim established prior to the execution of the extra work.

3.00 - Suspension of Payments. No partial or final payment shall be made as long as any order made by the Engineer to the Contractor in accordance with the Specifications remains un-complied with. Neither shall any partial or final payment be made as long as any claim of lien filed or prosecuted against the City, contrary to the provisions of the Contract remains unsatisfied.

4.00 - Final Inspection. Unless otherwise provided, the Engineer shall make a final inspection of all work included in the Contract within ten (10) days after notification by the Contractor that the work is completed. If the work is not acceptable to the Engineer, he shall advise the Contractor as to the particular defects to be remedied before final acceptance can be made. When, in the opinion of the Engineer, the work is acceptable and has been completed in accordance with the Contract, the Engineer shall file a Certificate of Completion with the City. Neither the final certification nor the final Payment nor any provision of the Contract Documents shall relieve the Contractor of his responsibility for defective material and workmanship for the length of, and to the extent of his guarantee as provided under Item 4.12 of these General Conditions. The failure or neglect on the part of the Engineer to condemn unsatisfactory material or to reject inferior workmanship shall in no way release the Contractor, nor shall the Engineer's acceptance thereof be construed to mean the acceptance of such unsatisfactory work or material, and no payment therefore shall be construed as an acceptance of defective work or improper materials under the provisions of the Contract Documents.

5.00 - Final Payment. As soon as practicable after the completion and acceptance of the work under the Contract, as evidenced by the Engineer's certificate of completion, the Engineer will

prepare a final estimate of the total amount earned by the Contractor in accordance with the terms of the Contract and all supplemental agreements. Following this determination of the total amount earned by the Contractor, and final acceptance of the work by the City, final payment shall be made to the Contractor. All prior estimates and payments shall be subject to correction in the final estimate and payment.

The acceptance by the Contractor of final payment shall be and shall operate as a release to the City of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with this work and for every act and neglect of the City and others relating to or arising out of this work. Any payment, however, final or otherwise, shall not release the Contractor or its sureties from any obligations under the Contract Documents or the Performance, Payment, and Public Works Bonds.

SECTION 470

PREVAILING WAGE RATES

COTTAGE GROVE BOHEMIA PARK EXPANSION

In accordance with ORS 279C.800 et seq., copies of the general prevailing rate of per diem wages in the locality have been determined by the Commissioner of the Bureau of Labor. The January 5, 2024 Prevailing Wage Rates for Public Works Projects in Oregon, including all current amendments, are hereby incorporated as part of the contract documents. Such publications can be reviewed electronically at:

<https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx>

It shall be mandatory for the Contractor and all Subcontractors to pay not less than the applicable prevailing rates for each craft, classification or type of worker.

a. Basic Requirement

In accordance to ORS 279C.840, Contractor shall pay to workers in each trade or occupation the current, applicable State prevailing rate of wage as established by the Oregon State Bureau of Labor and Industries (BOLI). The wage rates applicable are those in effect at the time Project was first advertised.

b. Posting of Prevailing Wage Rates

Contractor, Subcontractor shall post the prevailing wage rates and fringe benefits in the locality where the labor is performed.

c. Certifications of Wage Rates to the City of Cottage Grove

Contractor shall furnish weekly to the City of Cottage Grove certified statements, in writing on a form prescribed by the Commissioner of the Bureau of Labor, certifying: (a) The hourly rate of wage paid each worker whom the Contractor the Subcontractor has employed upon the public works improvement; and (b) That no worker employed upon the public works has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract.

d. If the Contractor has not filed the certified statements as required under this contract, The City of Coburg is required by law to retain 25% of any amount earned by the Contractor until the Contractor has complied. Final payment cannot be made without all applicable wage rates on file with the City.

e. Applicability of both Federal (Davis-Bacon) and State (BOLI) Prevailing Wage Rates

When a public works project is subject to the Davis Bacon Act (40 U.S.C.3141 et seq.), the Contractor and every Subcontractor shall pay the higher of the two (BOLI and Davis Bacon) prevailing wage rates.

f. Access to Wage Rate Records – Worker Interview Verification

Contractor shall allow the Bureau of Labor and Industries (or Federal Officials) to enter the office or business establishment of Contractor at any reasonable time to determine whether the prevailing rate of wage and or the higher of the State prevailing wage rate and the Davis-Bacon

wage rate is actually being paid and shall make payment records available to BOLI or Federal Officials on request. Contractor shall require Subcontractors to provide the same right of entry and inspection. In addition, shall allow interviews with persons with each discipline (trade) to determine if the correct wage rate is actually being paid.

g. All BOLI Requirements Applicable

Contractor must comply with all laws and regulations relating to prevailing wages, whether or not set out in this Contract. Contractor is to use the most current Prevailing Wage Rates for Public Contracts in Oregon including any amendments to the prevailing rates at time of contract initiation. Further information regarding prevailing wages, including requirements applicable to Contractor, is available at:

http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx and available by contacting the Bureau of Labor & Industries at 971-673-0838.

See attached the applicable Davis Bacon Prevailing wage determination for this project "OR20240001, Lane County, Modification #3, dated 02/23/2024"

h. Notice of Award of Public Works Contract

As a condition of this contract the Contractor and all Subcontractors shall file with the City completed copies of the "Payroll/Certified Statement Form WH-38" included with these specifications.

FORM WH-81 "NOTICE OF AWARD OF PUBLIC WORKS CONTRACT"

In accordance with ORS 279C.835 the contracting agency is required to submit a copy of this form to the Bureau of Labor within thirty (30) days after the public works contract is awarded.

FORM WH-38 "PAYROLL/CERTIFIED STATEMENT"

This form will be provided to the prime Contractor at the time the contract is awarded with instructions to the prime Contractor to provide copies of the form to every Subcontractor on the project. Contractors may use their own forms to submit payroll information, but they must attach this revised WH-38 with the completed shaded agency information together with the signed certified statement information on the back.

"General Decision Number: OR20240001 02/23/2024

Superseded General Decision Number: OR20230001

State: Oregon

Construction Type: Highway

Counties: Oregon Statewide.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024
1	01/12/2024
2	02/02/2024

BROR0001-006 06/01/2020

BAKER, BENTON (NORTH), CLACKAMAS, CLATSOP, COLUMBIA, GILLIAM, HARNEY, HOOD RIVER, LINCOLN (NORTH), LINN (NORTH), MALHEUR (NORTH), MARION, MORROW, MULTNOMAH, POLK, SHERMAN, TILLAMOOK, UMATILLA, UNION, WALLOWA, WASCO (NORTH), WASHINGTON AND YAMHILL COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 41.20	22.39

BROR0001-007 06/01/2020

BENTON (SOUTH), CROOK, DESCHUTES, GRANT, JACKSON, JEFFERSON, KLAMATH, LAKE, LANE, LINCOLN (SOUTH), LINN (SOUTH), MALHEUR (SOUTH), WASCO (SOUTH) AND WHEELER COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 41.20	22.39

CARP9001-001 06/01/2022

ZONE 1:

	Rates	Fringes
Carpenters:		
CARPENTERS.....	\$ 42.31	19.21
DIVER STANDBY.....	\$ 58.32	19.21
DIVERS TENDERS.....	\$ 51.32	19.21
DIVERS.....	\$ 95.32	19.21
MANIFOLD AND/OR DECOMPRESSION CHAMBER OPERATORS.....	\$ 51.32	19.21
MILLWRIGHTS.....	\$ 43.26	19.21
PILEDRIVERS.....	\$ 45.74	19.21

DEPTH PAY:

50 to 100 feet \$2.00 per foot over 50 feet
101 to 150 feet 3.00 per foot over 50 feet
151 to 200 feet 4.00 per foot over 50 feet
over 220 feet 5.00 per foot over 50 feet

Zone Differential (Add to Zone 1 rates):

- Zone 2 - \$1.25
- Zone 3 - 1.70
- Zone 4 - 2.00
- Zone 5 - 3.00
- Zone 6 - 5.00
- Zone 7 - 10.00

ZONE 1 - All jobs or projects located within 30 miles of the respective City Hall

ZONE 2 - More than 30 miles and less than 40 miles from the respective City Hall

ZONE 3 - More than 40 miles and less than 50 miles from the respective City Hall

ZONE 4 - More than 50 miles and less than 60 miles from the respective City Hall

ZONE 5 - More than 60 miles and less than 70 miles from the respective City Hall

ZONE 6 - More than 70 miles from the respective City Hall.

ZONE 7 - More than 100 miles from the respective City Hall.

BASEPOINTS CITIES FOR CARPENTERS (EXCLUDING MILLWRIGHTS, PILEDRIVERS AND DIVERS)

ALBANY	ASTORIA	BAKER
BEND	BROOKINGS	BURNS
COOS BAY	CORVALLIS	EUGENE
GOLDENDALE	GRANTS PASS	HERMISTON
HOOD RIVER	KLAMATH FALLS	LAGRANDE
LAKEVIEW	LONGVIEW	MADRAS
MEDFORD	McMINNVILLE	NEWPORT
OREGON CITY	ONTARIO	PENDLETON
PORTLAND	PORT ORFORD	REEDSPORT
ROSEBURG	SALEM	ST. HELENS
THE DALLES	TILLAMOOK	VANCOUVER

BASEPOINTS FOR MILLWRIGHTS

EUGENE	NORTH BEND	LONGVIEW
PORTLAND	MEDFORD	THE DALLES
VANCOUVER		

BASEPOINTS FOR PILEDRIVERS AND DIVERS

ASTORIA	BEND	COOS BAY
EUGENE	KLAMATH FALLS	LONGVIEW
MEDFORD	NEWPORT	PORTLAND
ROSEBURG	SALEM	THE DALLES

* ELEC0048-006 01/01/2024

CLACKAMAS, CLATSOP, COLUMBIA, HOOD RIVER, MULTNOMAH, TILLAMOOK, WASCO, WASHINGTON, SHERMAN AND YAMHILL (NORTH) COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 66.55	29.34
ELECTRICIAN.....	\$ 60.50	28.64

HOURLY ZONE PAY:

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Portland, The Dalles, Hood River, Tillamook, Seaside and Astoria

Zone Pay:

- Zone 1: 31-50 miles \$1.50/hour
- Zone 2: 51-70 miles \$3.50/hour
- Zone 3: 71-90 miles \$5.50/hour
- Zone 4: Beyond 90 miles \$9.00/hour

*These are not miles driven. Zones are based on Delornne Street Atlas USA 2006 plus.

ELEC0112-001 06/01/2021

BAKER, GILLIAM, GRANT, MORROW, UMATILLA, UNION, WALLOWA, AND WHEELER COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 52.50	23.01
ELECTRICIAN.....	\$ 50.00	22.93

ELEC0280-003 01/01/2024

BENTON, CROOK, DESCHUTES, JEFFERSON, LANE (EAST OF A LINE RUNNING NORTH AND SOUTH FROM THE NORTHEAST CORNER OF COOS COUNTY TO THE SOUTHEAST CORNER OF LINCOLN COUNTY), LINN, MARION, POLK AND YAMHILL (SOUTHERN HALF) COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 60.80	22.24
ELECTRICIAN.....	\$ 55.27	22.24

ELEC0291-006 06/01/2023

MALHEUR COUNTY

	Rates	Fringes
CABLE SPLICER.....	\$ 41.69	6%+14.80
ELECTRICIAN.....	\$ 37.90	6%+14.80

* ELEC0659-004 01/01/2023

DOUGLAS (EAST OF A LINE RUNNING NORTH AND SOUTH FROM THE NE CORNER OF COOS COUNTY TO THE SE CORNER OF LINCOLN COUNTY), HARNEY, JACKSON, JOSEPHINE, KLAMATH AND LAKE COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 64.58	1.5%+22.34
ELECTRICIAN.....	\$ 43.97	19.26

ZONE PAY: BASE POINTS ARE FROM THE DOWNTOWN POST OFFICE IN GRANTS PASS, KLAMATH FALLS, ROSEBURG AND MEDFORD.

ZONE 1:	0-20 MILES	\$0.00 PER HOUR
ZONE 2:	> 20-30 MILES	\$1.50 PER HOUR
ZONE 3:	>30-40 MILES	\$3.30 PER HOUR
ZONE 4:	>40-50 MILES	\$5.00 PER HOUR
ZONE 5:	>50-60 MILES	\$6.80 PER HOUR
ZONE 6:	>60 MILES	\$9.50 PER HOUR

*THESE ARE NOT MILES DRIVEN. zONES ARE BASED ON DELORNE STREET ATLAS USA 5.0.

* ELEC0932-004 01/01/2024

COOS, CURRY, LINCOLN, DOUGLAS AND LANE COUNTIES (AREA LYING WEST OF A LINE NORTH AND SOUTH FROM THE N.E. CORNER OF COOS COUNTY TO THE S.E. CORNER OF LINCOLN COUNTY)

	Rates	Fringes
ELECTRICIAN.....	\$ 50.03	24.00

ENGI0701-005 01/01/2024		

ZONE 1:

POWER EQUIPMENT OPERATORS (See Footnote C)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 56.66	16.90
GROUP 1A.....	\$ 58.82	16.90
GROUP 1B.....	\$ 60.98	16.90
GROUP 2.....	\$ 54.75	16.90
GROUP 3.....	\$ 53.60	16.90
GROUP 4.....	\$ 50.27	16.90
GROUP 5.....	\$ 49.03	16.90
GROUP 6.....	\$ 45.81	16.90

Zone Differential (add to Zone 1 rates):

Zone 2 - \$3.00

Zone 3 - \$6.00

For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or projects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens ""Blast Zone"" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than

50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

Group 1

Concrete Batch Plant and or Wet mix three (3) units or more
 Crane, Floating one hundred and fifty (150) ton but less than two hundred and fifty (250) ton.
 Crane, two hundred (200) ton through two hundred ninety-nine (299) ton with two-hundred-foot (200?) boom or less (including jib, inserts and/or attachments)
 Crane, ninety (90) ton through one hundred ninety-nine (199) ton with over two hundred (200?) boom Including jib, inserts and/or attachments)
 Crane, Tower Crane with one hundred seventy-five-foot (175?) tower or less and with less than two-hundred-foot (200?) jib
 Crane, Whirley ninety (90) ton and over Helicopter when used in erecting work
 Tunnel Boring Machine
 Tunnel, Micro Boring Tunnel Machine

Group 1A

Crane, floating two hundred fifty (250) ton and over
 Crane, two hundred (200) ton through two hundred ninety-nine (299) ton, with over two-hundred-foot (200?) boom (including jib, inserts and/or attachments)
 Crane, three hundred (300) ton through three hundred ninety-nine (399) ton
 Crane, Tower Crane with over one hundred seventy-five-foot (175?) tower or over two hundred foot (200?) jib
 Crane, tower Crane on rail system or 2nd tower or more in work radius

Group 1B

Crane, three hundred (300) ton through three hundred ninety-nine (399) ton, with over two hundred- foot (200?) boom (including jib, inserts and/or attachments)
 Floating crane, three hundred fifty (350) ton and over
 Crane, four hundred (400) ton and over

Group 2

Asphalt Plant (any type)
 Asphalt Roto-Mill, pavement profiler eight foot (8?) lateral cut and over
 Auto Grader or ?Trimmer?
 Blade, Robotic
 Bulldozer, Robotic Equipment (any type)
 Bulldozer, over one hundred twenty thousand (120,000) lbs. and above
 Canal Trimmer
 Concrete Batch Plant and/or Wet Mix one (1) and two (2) drum
 Concrete Canal Liner Operator
 Concrete Diamond Head Profiler
 Concrete, Automatic Slip Form Paver
 Crane, Boom Truck fifty (50) ton and with over one hundred fifty-foot (150?) boom and over
 Crane, Floating (derrick barge) thirty (30) ton but less than one hundred fifty (150) ton

Crane, Cableway twenty-five (25) ton and over
 Crane, Floating Clamshell three (3) cu. Yds. And over
 Crane, ninety (90) ton through one hundred ninety-nine (199)
 ton up to and including two hundred- foot (200?) boom
 (including jib inserts and/or attachments)
 Crane, fifty (50) ton through eighty-nine (89) ton with over
 one hundred fifty-foot (150?) boom
 (including jib inserts and/or attachments)
 Crane, Whirley under ninety (90) ton
 Crusher Plant
 Drone
 Excavator over one hundred thirty thousand (130,000) lbs.
 Heavy Equipment Robotics Operator or Mechanic
 Loader one hundred twenty thousand (120,000) lbs. and above
 Master environmental Maintenance Mechanic
 Remote Controlled Earth Moving Equipment
 Shovel, Dragline, Clamshell, five (5) cu. Yds. And over
 Underwater Equipment remote or otherwise, when used in
 construction work
 Wheel Excavator any size

Group 3

Bulldozer, over seventy thousand (70,000) lbs. up to and
 including one hundred twenty thousand (120,000) lbs.
 Crane, Boom Truck fifty (50) ton and over with less than one
 hundred fifty-foot (150?) boom
 Crane, fifty (50) ton through eighty-nine (89) ton with one
 hundred fifty-foot (150?) boom or less
 (including jib inserts and/or attachments)
 Crane, Shovel, Dragline or Clamshell three (3) cu. yds. but
 less than five (5) cu. Yds.
 Excavator over eighty-five thousand (85,000) lbs. through one
 hundred thirty thousand
 (130,000) lbs.
 Loader sixty thousand (60,000) lbs. and less than one hundred
 twenty thousand (120,000) lbs.

Group 4

Asphalt, Screed
 Asphalt Paver
 Asphalt Roto-Mill, pavement profiler, under eight foot (8?)
 lateral cut
 Asphalt, Recycle Machine
 Asphalt, Material Transfer Vehicle Operator
 Back Filling Machine
 Backhoe, Robotic, track and wheel type up to and including
 twenty thousand (20,000) lbs. with
 any attachments
 Blade (any type)
 Boatman, Licensed
 Boring Machine
 Bulldozer over twenty thousand (20,000) lbs. and more than
 one hundred (100) horse up to
 seventy thousand (70,000) lbs.
 Cable-Plow (any type)
 Cableway up to twenty-five (25) ton
 Cat Drill (John Henry)
 Challenger
 Chippers
 Combination Heavy Duty Mechanic-Welder, when required to do
 both
 Compactor, multi-engine
 Compactor, Robotic
 Compactor with blade self-propelled
 Concrete, Breaker

Concrete, Grout Plant
Concrete, Mixer Mobile
Concrete, Paving Road Mixer
Concrete, Reinforced Tank Banding Machine
Crane, Boom Truck twenty (20) ton and under fifty (50) ton
Crane, Bridge Locomotive, Gantry and Overhead
Crane, Carry Deck, Spider Crane, and similar types
Crane, Chicago Boom and similar types
Crane, Derrick Operator, under one hundred (100) ton
 Crane, Floating Clamshell, Dragline, etc. under three (3) cu.
 yds. Or less than thirty (30) ton
Crane, under fifty (50) ton
 Crane, Quick Tower under one-hundred-foot (100?) in height
 and less than one hundred fifty foot
(150?) jib (on rail included)
Diesel-Electric Engineer (Plant or Floating)
Directional Drill over twenty thousand (20,000) lbs. pullback
Drill Cat Operator
Drill Doctor and/or Bit Grinder
Drill, Oscillator
 Driller, Percussion, Diamond, Core, Cable, Rotary and similar
 type
 Excavator Operator over twenty thousand (20,000) lbs. through
 eighty-five thousand (85,000)
lbs.
Generator Operator
Grade Setter/layout from plans
Grade-all
Guardrail Machines, i.e., punch, auger, etc.
Hammer Operator (Piledriver)
 Hoist, stiff leg, guy derrick or similar type, fifty (50) ton
 and over
Hoist, two (2) drums or more
Hydro Axe (loader mounted or similar type)
 Jack Operator, Elevating Barges, Barge Operator,
 self-unloading
 Loader Operator, front end and overhead, twenty-five thousand
 (25,000) lbs. and less than
sixty thousand (60,000) lbs.
Log Skidders
Mechanic, Heavy Duty
Piledriver Operator (not crane type)
Pipe, Bending, Cleaning, Doping and Wrapping Machines
Rail, Ballast Tamper Multi-Purpose
Rubber-tired Dozers and Pushers
Scraper, all types
Side-Boom
Skip Loader, Drag Box
Stump Grinder (loader mounted or similar type)
Surface Heater and Planer
Tractor, rubber-tired, over fifty (50) HP Flywheel
 Trenching Machine three-foot (3?) depth and deeper (Assistant
 to the Operator required)
Truck, Crane Oiler-Driver 250 tons and over
Tub Grinder (used for wood debris)
 Tunnel Boring Machine Mechanic ? hyperbaric pay: additional
 ten dollars (\$10.00) per hour, includes prep and decompress
Tunnel, Mucking Machine
Tunnel, Segment Plant
Tunnel, Separation Plant
Tunnel, Shaef Loader
Tunnel, Shield Operator
Ultra-High-Pressure Water Jet Cutting Tool System Operator
Vacuum Blasting Machine Operator
Water pulls, Water Wagons

Welder; Heavy Duty

Group 5

Asphalt, Extrusion Machine

Asphalt, Roller (any asphalt mix)

Asphalt, Roto-Mill pavement profiler ground man

Bulldozer, twenty thousand (20,000) lbs. or less, or one hundred (100) horse or less

Cement Pump

Chip Spreading Machine

Churn Drill and Earth Boring Machine

Compactor, self-propelled without blade

Compressor, (any power) one thousand two hundred fifty (1,250) cu. ft. and over, total capacity

Concrete, Batch Plant Quality control

Concrete, Combination Mixer and compressor operator, gunite work

Concrete, Curb Machine, Mechanical Berm, Curb and/or Curb and Gutter

Concrete, Finishing Machine

Concrete, Grouting Machine

Concrete, Internal Full Slab Vibrator Operator

Concrete, Joint Machine

Concrete, Mixer single drum, any capacity

Concrete, Paving Machine eight foot (8') or less (Assistance to the Operator required)

Concrete, Placing Boom

Concrete, Planer

Concrete, Pump

Concrete, Pump Truck

Concrete, Pumpcrete Operator (any type)

Concrete, Slip Form Pumps, power driven hydraulic lifting device for concrete forms

Concrete, Spreader

Concrete, Tele belt

Concrete, Treated Base Roller Operator, Oiling

Conveyored Material Hauler

Crane, Boom Truck under twenty (20) tons

Crane, Boom Type lifting device, five (5) ton capacity or less

Drill, Directional type less than twenty thousand (20,000) lbs. pullback

Drill, Mud Mixer

Elevating Grader Operator, Tractor towed requiring Operator or Grader

Elevating Loader Operator (any type)

Elevator to move personnel or materials

Forklift, over ten (10) ton or Robotic

Helicopter Hoist

Hoist Operator, single drum

Hydraulic Backhoe track type up to and including twenty thousand (20,000) lbs.

Hydraulic Backhoe wheel type (any make)

Laser Screed

Lime Spreader, construction job site

Loaders, rubber-tired type, less than twenty-five thousand (25,000) lbs.

Pavement Grinder and/or Grooving Machine (riding type)

Pipe, cast in place Pipe Laying Machine

Pulva-Mixer or similar types

Pump Operator, more than five (5) pumps (any size)

Rail, Ballast Compactor, Regulator, or Tamper machines

Rail, Car Mover

Rail, Clip Applicator

Rail, High Rail Self Loader Truck

Rail, Locomotive, forty (40) ton and over

Rail, Lo-Railer
 Rail, Shuttle Car Operator
 Rail, Speedswing
 Rail, Track Liner
 Service Oiler (Greaser)
 Sweeper Self-Propelled, Construction Job Site
 Tractor, Rubber-Tired, fifty (50) HP flywheel and under
 Trenching Machine Operator, maximum digging capacity
 three-foot (3?) depth
 Truck, All Terrain or Track type
 Truck, Barrel type
 Truck, Crane Oiler-Driver 100-249 tons
 Truck, Heavy Haul, specialized transporter, hydraulic,
 electric, or similar
 Truck, Off Road Trucks, Articulated and Non-articulated
 Trucks over forty (40) ton
 Truck, Vacuum
 Truck, Water
 Tunnel, Locomotive, Dinkey
 Tunnel, Power Jumbo setting slip forms, etc.

Group 6
 Air Filtration Equipment
 Asphalt, Pugmill (any type)
 Asphalt, Raker
 Asphalt, Truck Mounted Asphalt Spreader, with Screed
 Assistant to the Operator
 Auger Oiler
 Bell Man (any type of communication)
 Boatman
 Bobcat, skid steer (less than one (1) yard)
 Broom, self-propelled, construction job site
 Compressor Operator (any power) under 1,250 cu. ft. total
 capacity
 Concrete Curing Machine (riding type)
 Concrete Saw
 Conveyor Operator or Assistant
 Crane, Tugger
 Crusher Feederman
 Crusher Oiler
 Deckhand
 Drill Assistant
 Drill, Directional Locator
 Forklift
 Grade Checker
 Guardrail Punch Oiler
 Heavy Duty Repairman Assistant
 Helicopter Radioman (ground)
 Hydraulic Pipe Press
 Hydrographic Seeder Machine, straw, pulp or seed
 Hydrostatic Pump Operator
 Material Handler
 Mixer Box (CTB, dry batch, etc.)
 Oiler
 Parts Man (Tool Room)
 Plant Oiler
 Pump (any power)
 Rail, Brakeman, Switchman, Motorman
 Rail, Tamping Machine, mechanical, self-propelled
 Rigger
 Roller grading (not asphalt)
 Truck, Crane Oiler-Driver under 100 tons
 Truck, Off-Road Trucks, Articulated and Non-Articulated
 Trucks forty (40) ton and under
 Truck, over highway, examples: material and equipment

Welder's Assistant
Welding Machine
Wire Mat or Brooming Machine

IRON0029-004 07/03/2023

	Rates	Fringes
IRONWORKER.....	\$ 43.27	33.07

LAB00737-001 06/01/2023

	Rates	Fringes
Mason Tender/Hod Carrier Tenders to Bricklayers, Tile Setters, Marble Setters and Terrazzo Workers, Topping for Cement Finishers and Mortar Mixers.....	\$ 41.29	16.80

LAB00737-008 06/01/2023

ZONE 1:

LABORERS (SEE FOOTNOTE C)

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 36.11	16.80
GROUP 2.....	\$ 37.41	16.80
GROUP 3.....	\$ 31.39	16.80

Zone Differential (Add to Zone 1 rates):

- Zone 2 - \$0.85
- Zone 3 - 2.00
- Zone 4 - 3.00
- Zone 5 - 5.00

ZONE 1 - All jobs or projects located within 30 miles of the respective City Hall

ZONE 2 - More than 30 miles and less than 40 miles from the respective City Hall

ZONE 3 - More than 40 miles and less than 50 miles from the respective City Hall

ZONE 4 - More than 50 miles and less than 80 miles from the respective City Hall

ZONE 5 - More than 80 miles from the respective City Hall.

BASEPOINTS:

ALBANY	ASTORIA	BAKER CITY
BEND	BURNS	COOS BAY
EUGENE	GRANTS PASS	HERMISTON
KLAMATH FALLS	MEDFORD	PENDLETON
PORTLAND	ROSEBURG	SALEM
THE DALLES		

LABORER CLASSIFICATIONS

GROUP 1: Applicator (including Pot Tender for same) applying protective material by hand or nozzle on utility lines or storage tanks on project, Asphalt Plant; Asphalt Spreader; Batch Weighman; Broomers; Brush Burners and Cutters; Choker Setter; Choker Splicer; Clary Power Spreader; Clean-up Laborer; Clean up Nozzleman (concrete, rock, etc); Concrete Laborer; Crusher Feeder; Curing, Concrete; Demolition, wrecking, and moving; Dopping and Wrapping Pipe; Dumpman (for Grading Crew); Erosion Control Specialist; Fine Graders; Fence Builders; Form Strippers; Guard Rail, Median Rail, Barriers, Reference Post, Guide Post, Right of Way Marker; Remote Control (Dry Pack Machine, Jackhammer, Chipping Guns, Compaction, Paving Breakers, Hand Held Concrete Saw, Demo Saw, Core Drill); Precast Concrete Setter; Pressure Washer; Railroad Track Laborer; Ribbon Setter; Rip Rap Map; Sand Blasting (Wet); Scaffold Tender; Self Propelled Concrete Buggy; Sewer Laborer; Sign Erector; Signalman; Scissor and Manlift; Skipman; Slopers; Sprayman; Stake Chaser; Stake Setter; Tamper; Timber Faller and Bucker; Tool Operators (Hand Held, Walk Behind)

GROUP 2: Asbestos Removal; Asphalt Rakers, Bit Grinder, Concrete Core Drill, Concrete Pump Nozzleman, Concrete Saw Operator (Walk Behind, Walk Saw, Rail Mounted, Wire); Drill Operator; Grade Checker; Guniting Nozzleman; Hazardous Waste Laborer; High Scalars; Laser Beam (Pipe Laying); Loop Installation; Manhole Builder; Mold Remediation Laborer; Nippers and Timberman; Pipelayer; Powderman; Power Saw Operators (Bucking and Falling); Pumpcrete Nozzleman; Sand Blasting (Dry); Sewer Timberman; Tugger Operator; Vibrators; Water Blaster

GROUP 3: Final Clean-up(detailed clean-up, limited to cleaning up floors, ceilings, walls, windows-prior to acceptance by the owner); Fire Watch; Landscaper; Traffic Flagger

FOOTNOTE C:

HANDLING OF HAZARDOUS WAST MATERIALS - Personnel in all craft classifications subject to working inside a federally designated Hazardous Waste perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of Hazardous Waste as outline in the specific Hazardous Waste Project Site Safety Plan:

H-1 Base Wage Rate when on a hazardous waste site when not outfitted with protective clothing.

H-2 Class ""C"" Suit - Basic hourly wage rate plus \$1.00 per hour, fringes plus \$0.15.

H-3 Class ""B"" Suit - Basic hourly wage rate plus \$1.50 per hour, fringes plus \$0.15.

H-4 Class ""A"" Suit -Basic hourly wage rate plus \$2.00 per hour, fringes plus \$0.15.

PAIN0010-005 07/01/2022

	Rates	Fringes
PAINTER		
HIGHWAY & PARKING LOT		
STRIPER.....	\$ 38.18	15.08

PAIN0010-008 07/01/2022

	Rates	Fringes
PAINTER.....	\$ 38.18	15.08

PLAS0555-001 06/01/2023

ZONE 1:

	Rates	Fringes
Cement Masons: (ZONE 1)		
CEMENT MASONS DOING BOTH		
COMPOSITION/POWER		
MACHINERY AND		
SUSPENDED/HANGING SCAFFOLD..	\$ 43.06	19.95
CEMENT MASONS ON		
SUSPENDED, SWINGING AND/OR		
HANGING SCAFFOLD.....	\$ 42.19	19.95
CEMENT MASONS.....	\$ 41.33	19.95
COMPOSITION WORKERS AND		
POWER MACHINERY OPERATORS...	\$ 42.19	19.95

Zone Differential (Add To Zone 1 Rates):

- Zone 2 - \$0.65
- Zone 3 - 1.15
- Zone 4 - 1.70
- Zone 5 - 3.00

BASE POINTS: BEND, CORVALLIS, EUGENE, MEDFORD, PORTLAND, SALEM, THE DALLES, VANCOUVER

ZONE 1: Projects within 30 miles of the respective city hall

ZONE 2: More than 30 miles but less than 40 miles from the respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the respective city hall.

ZONE 5: More than 80 miles from the respective city hall

TEAM0037-004 06/01/2023

ZONE 1:

TRUCK DRIVERS (See Footnote C):

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 32.06	17.18

GROUP 2.....	\$ 32.21	17.18
GROUP 3.....	\$ 32.36	17.18
GROUP 4.....	\$ 32.67	17.18
GROUP 5.....	\$ 32.92	17.18
GROUP 6.....	\$ 33.12	17.18
GROUP 7.....	\$ 33.35	17.18

Zone Differential (add to Zone 1 rates):

Zone 2 - \$0.65
 Zone 3 - 1.15
 Zone 4 - 1.70
 Zone 5 - 2.75

Zone 1 - All jobs or projects located within 30 miles of the respective City Hall

Zone 2 - More than 30 miles and less than 40 miles from the respective City Hall

Zone 3 - More than 40 miles and less than 50 miles from the respective City Hall

Zone 4 - More than 50 miles and less than 80 miles from the respective City Hall

Zone 5 - More than 80 miles from the respective City Hall

BASEPOINTS:

ALBANY	ASTORIA	BAKER
BEND	BINGEN	BROOKINGS
BURNS	COOS BAY	CORVALLIS
EUGENE	GOLDENDALE	GRANTS PASS
HERMISTON	HOOD RIVER	KLAMATH FALLS
LAGRANDE	LAKEVIEW	LONGVIEW
MADRAS	MEDFORD	MCMINNVILLE
OREGON CITY	NEWPORT	ONTARIO
PENDLETON	PORTLAND	PORT ORFORD
REEDSPORT	ROSEBURG	SALEM
THE DALLES	TILLAMOOK	VANCOUVER

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: A-frame or hydra-lift truck w/load bearing surface; Articulated dump truck; Battery rebuilders; Bus or manhaul driver; Concrete buggies (power operated); Concrete pump truck; Dump trucks, side, end and bottom dumps, including semi-trucks and trains or combinations thereof: up to and including 10 cu. yds.; Lift jitneys, fork lifts (all sizes in loading, unloading and transporting material on job site); Loader and/or leverman on concrete dry batch plant (manually operated); Lubrication man, fuel truck driver, tireman, wash rack, steam cleaner or combination; Pilot car; Pickup truck; Slurry truck driver or leverman; Solo flat bed and misc. body truck, 0-10 tons; Team drivers; Tireman; Transit mix and wet or dry mix trucks: 5 cu yds. and under; Water wagons (rated capacity) up to 3,000 gallons

GROUP 2: Boom truck/hydra-lift or retracting crane; Challenger; Dumpsters or similar equipment-all sizes; Dump trucks/articulated dumps 6 cu to 10 cu.; Flaherty spreader driver or leverman; Low bed equipment, flat bed semi-truck and trailer or doubles transporting equipment or wet or dry materials; Lumber carrier, driver-straddle carrier (used in loading, unloading and transporting of materials on job site); Oil distributor driver or leverman; Transit mix and

wet or dry mix trucks: over 5 cu yds and including 7 cu. yds; Vacuum trucks; Water Wagons (rated capacity) over 3,000 to 5,000 gallons

GROUP 3: Ammonia nitrate distributor driver; Dump trucks, side, end and bottom dumps, including semi-trucks and trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds., includes articulated dump trucks; Self-Propelled street sweeper; Transit mix and wet or dry mix trucks, over 7 cu. yds. and including 11 cu. yds.; truck mechanic-Welder-Body repairman; Utility and clean-up truck; Water wagons (rated capacity) 5,000 to 10,000 gallons.

GROUP 4: Asphalt Bruner; Dump trucks, side, end and bottom dumps, including semi-trucks and trains or combinations thereof: over 30 cu. yds. and including 50 cu. yds. includes articulated dump trucks; Fire guard; Transit Mix and Wet or Dry Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water Wagon (rated capacity) over 10,000 gallons to 15,000 gallons

GROUP 5: Composite Crewman; Dump trucks, side, end and bottom dumps, including semi-trucks and trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds., includes articulated dump trucks

GROUP 6: Bulk cement spreader w/o auger; Dry Pre-Batch concrete mix trucks; Dump trucks, side, end and bottom dumps, including semi-trucks and trains of combinations thereof: over 60 cu. yds. and including 80 cu. yds. and includes articulated dump trucks; Skid truck

GROUP 7: Dump trucks, side, end and bottom dumps, including semi-trucks and trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds. includes articulated dump trucks; Industrial lift truck (mechanical tailgate)

FOOTNOTE C:

HANDLING OF HAZARDOUS WAST MATERIALS -(LABORERS, POWER EQUIPMENT OPERATORS, AND TRUCK DRIVERS): Personnel in all craft classifications subject to working inside a federally designated Hazardous Waste perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of Hazardous Waste as outline in the specific Hazardous Waste Project Site Safety Plan:

H-1 Base Wage Rate when on a hazardous waste site when not outfitted with protective clothing.

H-2 Class ""C"" Suit - Basic hourly wage rate plus \$1.00 per hour, fringes plus \$0.15.

H-3 Class ""B"" Suit - Basic hourly wage rate plus \$1.50 per hour, fringes plus \$0.15.

H-4 Class ""A"" Suit -Basic hourly wage rate plus \$2.00 per hour, fringes plus \$0.15.

* SUOR1991-003 04/01/1991

Rates

Fringes

Timber Sales Roads:

LABORERS.....	\$ 8.35 **	4.30
OPERATING ENGINEERS.....	\$ 10.37 **	4.15
POWER SAW, DRILLER, POWDERMAN.....	\$ 9.12 **	4.30
TEAMSTERS.....	\$ 9.74 **	3.74

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

SECTION 500 – STANDARD SPECIFICATIONS

- **500 – STANDARD SPECIFICATIONS**
- **501 – EDA SITE SIGN SPECIFICATIONS**

SECTION 500

CITY OF COTTAGE GROVE STANDARD SPECIFICATIONS

The Standard Specifications applicable to work on this project and the performance thereof, are those titled "Oregon Standard Specifications for Construction, 2024 edition", in addition to the "Oregon Standard Drawings, 2024 edition", hereinafter called "Standard Specifications" except as the same may be modified, supplemented, or superseded by the Special Provisions herein. The standard specifications are available at https://www.oregon.gov/odot/Business/Specs/2024_STANDARD_SPECIFICATIONS.pdf

The Standard Specifications applicable to work on this project and the performance thereof, are those included in section 700 of this document and all applicable Building Specialty Codes currently adopted by the State of Oregon.

For sanitary sewer work of the project construction, if any, DEQ requires that in addition to the above specification, current DEQ Rules and Specifications will apply, and if a conflict is noted, the more stringent specification will apply. DEQ specifications are the Oregon Standard Specifications for Construction, 2024 edition.

Such Standard Specifications by this reference shall be deemed incorporated herein and made a part hereof as those fully set forth. All number references in the Special Specifications shall be understood to refer to the Section of the Standard Specifications bearing like numbers.

END OF SECTION

SECTION 501

CITY OF COTTAGE GROVE EDA SITE SIGN SPECIFICATIONS

The Recipient is responsible for constructing, erecting, and maintaining in good condition throughout the construction period a sign (or signs) in a conspicuous place at the Project site indicating that the Federal Government is participating in the Project. EDA will provide specifications for the sign and may require more than one sign if site conditions so warrant. If the EDA-recommended sign specifications conflict with State or local law, the Recipient may modify such recommended specifications so as to comply with State or local law.

EDA PROJECT SIGN

The Contractor shall supply, erect, and maintain in good condition a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: 4' x 8' x ¾"

Materials: Exterior grade/MDO plywood (APA rating A-B)

Supports: 4" x 4" x 12' posts with 2" x 4" cross branching

Erection: Posts shall be set a minimum of three feet deep in concrete footings that are at least 12" in diameter.

Paint: Outdoor enamel

Colors: Jet Black, Blue (PMS300), and Gold (PMS7406). Specifically, on white background the following will be placed:

The U. S. Department of Commerce seal in blue, black, and gold;

“EDA” in blue;

“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT

ADMINISTRATION” in black;

“In partnership with” in blue;

(Actual name of the) “EDA Grant Recipient” in black;

Lettering: Specific fonts are named below; positioning will be as shown on the attached illustration.

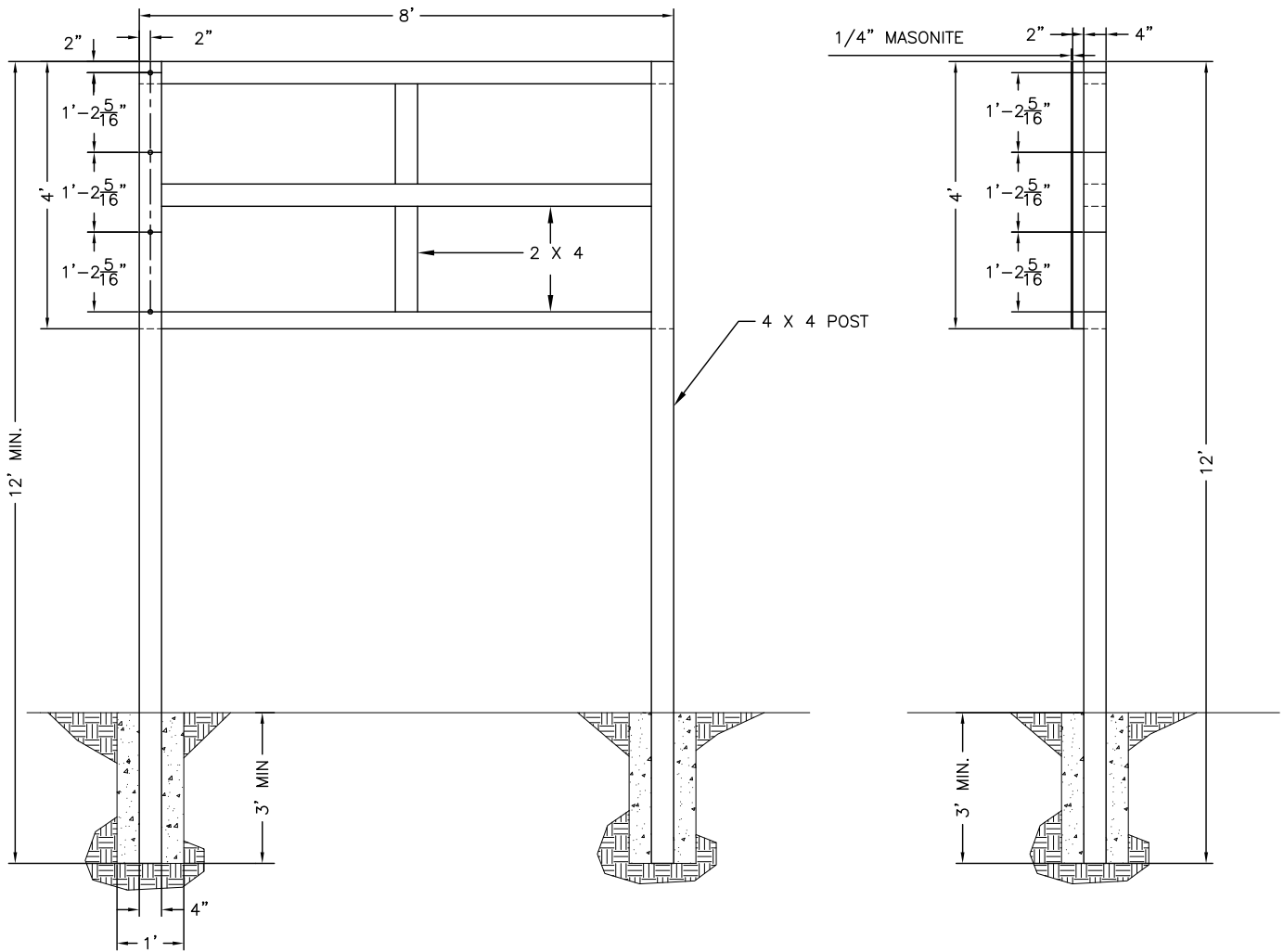
“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT
ADMINISTRATION” use Bank Gothic Medium - **BANK GOTHIC MED**

“In partnership with” use Univers™ 55 Oblique - **Univers 55**

(Name of) “EDA Grant Recipient” use Univers™ Extra Black 85 **Univers 85**

Project signs will not be erected on public highway rights-of-way. If any possibility exists for obstruction to traffic line of sight, the location and height of the sign will be coordinated with the agency responsible for highway or street safety in the area.

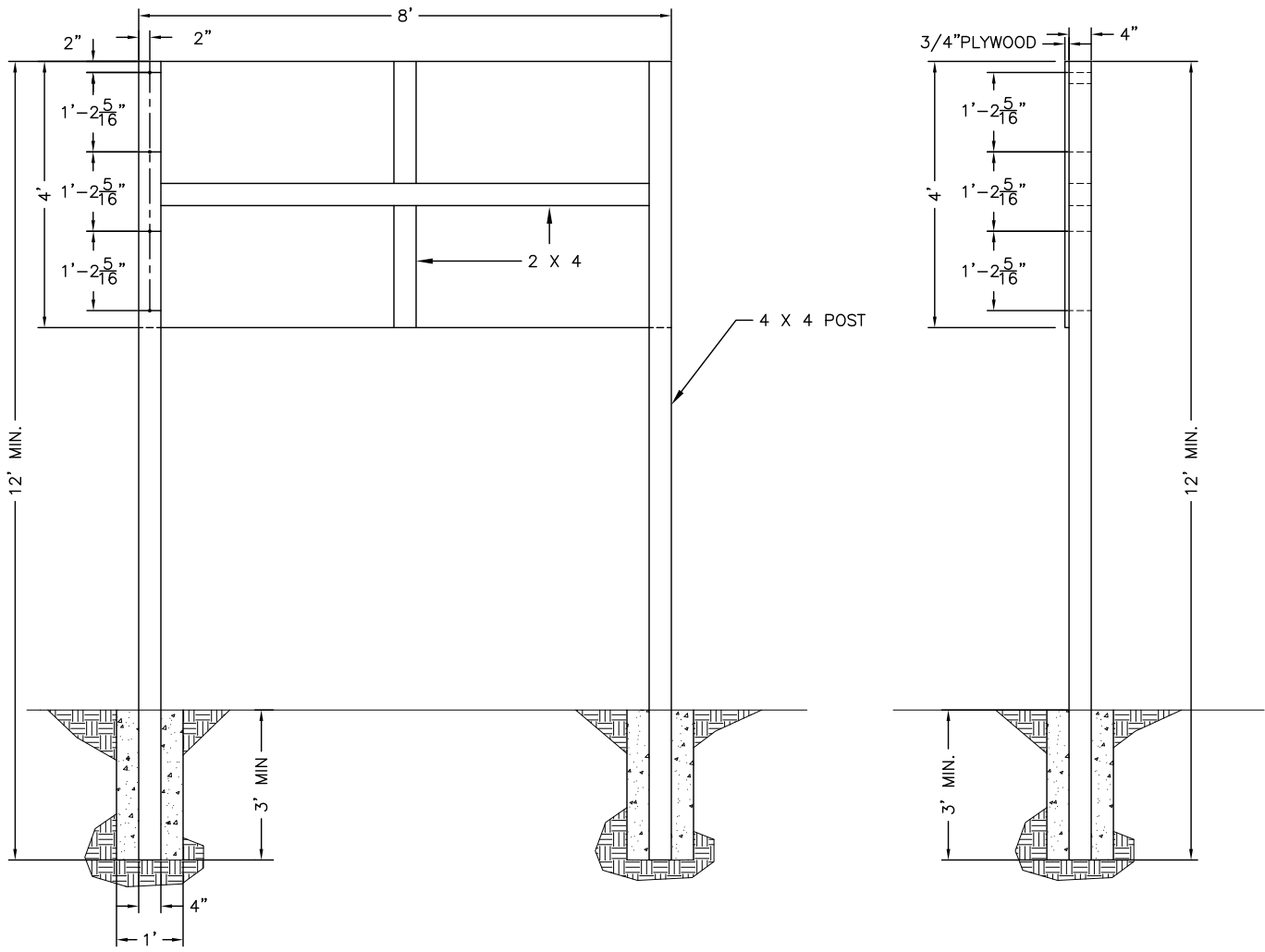
The EDA Regional Director may permit modifications to these specifications if they conflict with state law or local ordinances.



SIGN A
MASONITE SIGN
SCALE: 3/8" = 1'

PROJECT - SIGN A

ECONOMIC DEVELOPMENT ADMINISTRATION



SIGN B
PLYWOOD SIGN
SCALE: 3/8" = 1'

PROJECT - SIGN B

ECONOMIC DEVELOPMENT ADMINISTRATION



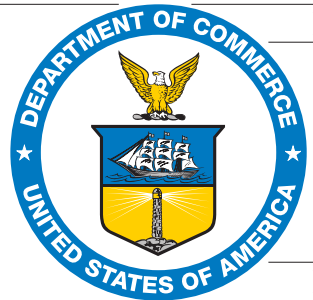
EDA

U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

<EDA Grant Recipient Name>

Black
Blue= PMS300
Gold= PMS7406



EDA

U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

<EDA Grant Recipient Name>

2.25"

13.5"

1.75"

1.75"

10"

2.0"

1.5"

4.0"

3.0"

3.0"

3.75"

15.0"

48"

SECTION 600 – SPECIAL SPECIFICATIONS

- **600 – SPECIAL PROVISIONS**
- **610 – DESCRIPTION, MEASUREMENT, AND PAYMENT OF BID ITEMS**

SECTION 600

SPECIAL PROVISIONS

Cottage Grove Bohemia Park Expansion

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

Class of Work

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

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

00220.02 Public Safety and Mobility - Add the following bullets to the end of the bullet list:

- Do not place work zone signs or supports that will block existing walkways or existing bikeways.

SECTION 00221 – COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

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

00221.06 Contractor Traffic Control Plan - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide a traffic control plan (TCP). Submit the following, for approval, five calendar days before the preconstruction conference:

- (a) Contractor TCP - Include the following:
 - Proposed TCP showing all Traffic Control Measures (TCM) and quantities of all Traffic Control Devices (TCD).
 - Proposed order and duration of the TCM.

Contractor shall erect and maintain barricades, warning signs, traffic cones per city and county requirements in accordance with the MUTCD (Including Oregon Amendments).

Access to driveways shall be maintained at all times. Contractor shall coordinate with property owners and/or residents regarding access during construction. All traffic control measures shall be approved and in place prior to any construction activity. Prior to any work in the existing public right-of-way, contractor shall submit final Traffic Control Plan to the City and County for review and issuance of a Lane Closure or Work in the Right-of-Way Permit.

SECTION 00280 – EROSION AND SEDIMENT CONTROL

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

00280.90 Payment – ADD the following:

Pay item (a) includes all erosion and sediment control materials necessary for the project or shown on the drawings. No additional payment will be made for any additional work, materials, etc. necessary to construct or maintain erosion control facilities specified or necessary to meet the conditions of permits, laws, or regulations. Erosion control lump sum pay item shall cover all necessary work to maintain adequate erosion control for the duration of the work.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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

00310.41(a) General - ADD the following:

Where an abutting structure or part of a structure is to be left in place, make clean, smooth, vertical cuts with a saw or other approved cutting device. Avoid operations that may damage any portion of the remaining structure.

Surfacing to be removed includes asphalt and gutter where shown on the plans. All existing AC or PCC pavement shall be sawcut prior to repaving.

SECTION 00490 – WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications modified as follows:

00490.00 Scope - ADD the following section:

This item includes manholes and covers for all utilities including power and communications. Coordinate any work with the affected utility and comply with utility’s request and standards.

0490.48 Adjusting Boxes, Cleanout Lids and Similar Structures - ADD the following section:

Raise or lower boxes, lids and similar structures including gas, water, wastewater, Pacific Power, EPUD, Century Link, and Charter, boxes and/or vaults.

00490.9 Payment - ADD the following:

Pay Item	Unit of Measurement
(d) Adjusting Meter and Valve Boxes and Sanitary Sewer Clean-Outs.....	Each
(j) Pothole.....	Each

In item (d) all work and materials necessary to install circular concrete collar per Standard Detail 3.04 – Typical Sanitary Sewer Isolation Valve Detail and City of Coburg Standard Drawing WA-002 and per the plans is incidental to Adjusting Valve Boxes bid item.

Item (i) includes excavation necessary for service connection verifications, evaluation of depth and alignment of existing utilities.

**SECTION 00759 – MISCELLANEOUS PORTLAND CEMENT CONCRETE
STRUCTURES**

Comply with Section 00759 of the Standard Specifications modified as follows:

00759.9 Payment - ADD the following:

Pay Item	Unit of Measurement
(a) Concrete Curb & Gutter, including incidental steel reinforcement at match lines	Lineal Feet
(b) Concrete Standard Curb, including incidental steel reinforcement at match lines	Lineal Feet
(c) Concrete "V" Type gutter (symmetrical), including incidental steel reinforcement at match lines	Lineal Feet

In item (a), (b), and (c) steel reinforcement at match lines is incidental to bid item. Bid item includes 3" curb reveal height curb and gutter.

SECTION 610

DESCRIPTION, MEASUREMENT AND PAYMENT OF BID ITEM

Cottage Grove Bohemia Park Expansion

All number references in these Special Provisions shall be understood to refer to the bid schedule item number as shown in Section 220 of this document.

1. MOBILIZATION, BONDS, AND INSURANCE

Payment for mobilization will be made at the Contract lump sum amount for Bid Item 1.

The amounts paid for mobilization in the Contract progress payment will be based on the percent of the original Contract Amount that is earned from other Contract items, not including advances on Materials, and as follows:

- When 5 percent is earned, either 50 percent of the amount for mobilization or 5 percent of the original Contract Amount, whichever is the least.
- When 10 percent is earned, either 100 percent of mobilization or 10 percent of the original Contract Amount, whichever is the least.
- When all Work is completed, amount of mobilization exceeding 10 percent of the original Contract Amount.

This schedule of mobilization progress payments will not limit or preclude progress payments otherwise provided by the Contract.

When the Contract Schedule of Items does not indicate payment for mobilization, no separate or additional payment will be made for mobilization. Payment will be included in payment made for the appropriate items under which this Work is required.

2. TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE

Payment for temporary work zone traffic control will be made at the Contract lump sum amount for Bid Item 2.

Payment will be payment in full for furnishing, installing, moving, operating, maintaining, inspecting, placing and removing all Materials and TCD, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified. Contractor to submit Quality Control Plan as required.

No separate or additional payment will be made for temporary work zone traffic control. Payment will be included in payment for the appropriate items which this work requires.

3. EROSION AND SEDIMENT CONTROL

Payment for erosion control will be made at the Contract lump sum amount for Bid Item 3.

Payment will be payment in full for furnishing, stockpiling, protecting, restocking, removing and placing all Materials; providing tree protection; restoring, mulching tacking, and seeding all disturbed ground; and

furnishing all Equipment, labor, inspection and incidentals necessary to complete the work as specified. Contractor to submit Quality Control Plan as required.

No separate or additional payment will be made for erosion and sediment control. Payment will be included in payment for the appropriate items which this work requires.

4. CONSTRUCTION SURVEY WORK

The measurement for this work is lump sum for Bid Item 4. All necessary work and materials required to provide construction survey work according to the current edition on the date of Advertisement, of the ODOT "Construction Surveying Manual for Contractors" found at https://www.oregon.gov/odot/ETA/Documents_Geometronics/Construction-Survey-Manual-Contractors.pdf is incidental to this item.

No separate or additional payment will be made for construction staking and surveying. Payment will be included in payment for the appropriate items which this work requires.

5. REMOVAL OF EXISTING TREE AND ROOT BALL, COMPLETE

Payment for removal of existing tree and root ball will be made at the Contract lump sum amount for Bid Item 5.

The lump sum bid price shall be full compensation for all labor, materials, and equipment used to complete the work as specified.

No separate or additional payment will be made for removal of existing tree and root ball. Payment will be included in payment for the appropriate items which this work requires.

6. SAW CUTTING (INCLUDES SECOND CUT)

The accepted quantities of saw cutting will be paid for at the Contract unit price, per unit of measurement lineal foot.

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 saw cutting and removal or disposal Work included in Section 00330 according to 00310.02 of the Oregon Standard Specifications 2024. Payment will be included in payment for the appropriate items under which this work is required.

7. CLEARING AND GRUBBING

The accepted quantities of Clearing, Grubbing, disposal, and cleanup Work will be paid for at the Contract lump sum amount for Bid Item 7.

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

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

Payment will be included in payment made for the appropriate items under which this Work is required.

8. GENERAL EXCAVATION

The quantities of general excavation will be measured on the volume basis in cubic yards of Subgrade excavated to the depth as directed by the Engineer. The volume will be determined by horizontal and vertical measurements.

The accepted quantities of general excavation will be paid for at the Contract unit price per cubic yard.

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. Contractor to submit Quality Control Plan as required.

No separate or additional payment will be made for excavation, geosynthetic, stone embankment or aggregate backfill material, or water.

9. SUBGRADE GEOTEXTILE

The accepted quantities of subgrade geotextile will be paid for at the Contract unit price, per unit of square yard.

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 subgrade geotextile. Payment will be included in payment for the appropriate items which this work is required.

10. 4-INCH SANITARY SEWER PIPE, CLASS B BACKFILL, DEPTH TBD

The accepted quantities of sanitary sewer pipe will be paid for at the Contract unit price, per unit of lineal foot.

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

No separate or additional payment will be made for trench excavation, bedding, pipe zone material, trench backfill, pipe plugs, stoppers, other required fittings, tracer wire, and other required testing.

Payment will be included in payment made for the appropriate items under which this work is required.

11. 4-INCH SANITARY SEWER CLEANOUT ASSEMBLY

The accepted quantities of sanitary sewer cleanout assembly will be paid for at the Contract unit price each.

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

No separate or additional payment will be made for trench excavation, bedding, pipe zone material, trench backfill, pipe plugs, stoppers, other required fittings, tracer wire, and other required testing.

Payment will be included in payment made for the appropriate items under which this work is required.

12. 4-INCH STORMWATER PIPE

The accepted quantities of stormwater pipe will be paid for at the Contract unit price, per unit of lineal foot.

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

No separate or additional payment will be made for trench excavation, bedding, pipe zone material, trench backfill, pipe plugs, stoppers, other required fittings, tracer wire, and other required testing.

Payment will be included in payment made for the appropriate items under which this work is required.

13. 4-INCH STORMWATER CLEANOUT ASSEMBLY

The accepted quantities of stormwater cleanout assembly will be paid for at the Contract unit price each.

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

No separate or additional payment will be made for trench excavation, bedding, pipe zone material, trench backfill, pipe plugs, stoppers, other required fittings, tracer wire, and other required testing.

Payment will be included in payment made for the appropriate items under which this work is required.

14. AREA DRAIN ASSEMBLY

The accepted quantities of area drain assembly will be paid for at the Contract unit price each.

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 trench excavation, bedding, pipe zone material, trench backfill, other required fittings, tracer wire, and other required testing.

Payment will be included in payment made for the appropriate items under which this work is required.

15. DOWNSPOUT CONNECTION ASSEMBLY

The accepted quantities of downspout connection assembly will be paid for at the Contract unit price each.

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

No separate or additional payment will be made for trench excavation, bedding, pipe zone material, trench backfill, pipe plugs, stoppers, other required fittings, tracer wire, and other required testing.

Payment will be included in payment made for the appropriate items under which this work is required.

16. ADJUST METER AND VALVE BOXES

The accepted quantities of adjust meter and valve boxes will be paid for at the Contract unit price each.

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 adjust meter and valve boxes. Payment will be included in payment for the appropriate items under which this work is required.

17. POTHOLE EXISTING UTILITY

The accepted quantities of pothole existing utility will be paid for at the Contract unit price each.

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 earthwork, backfill, protective coatings, and aggregate bases. Payment will be included in payment for the appropriate items under which this work is required.

18. AGGREGATE BASE - 3/4" MINUS QUARRY ROCK

The accepted quantities of aggregates will be paid for at the Contract unit price, per unit of measurement ton.

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 water used to obtain proper compaction and in the care of the work.

The total thickness of the Gravel Paving section detail in the Base Bid is incidental to this item.

19. LEVEL 2, 1/2" DENSE HMAC

The measurement for this work is on the weight basis in Tons. No deductions will be made for asphalt cement, mineral filler, lime, anti-strip, or any other additive used in the mixture.

The accepted quantities will be paid for at the Contract unit price, per ton, for this item. Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment and labor necessary to complete the work, including pavement repair areas, as specified.

No separate or additional payment will be made for: asphalt cement, mineral filler, lime, and anti-stripping or other additives; cleaning; filling joints; and necessary testing to obtain proper compaction and in the care of the work.

20. CONCRETE WALK, 4-INCH-THICK CONCRETE

The measurement unit for this work is square feet of the finished surface. Measurement of concrete walks will include the total area of concrete walk.

All necessary work and materials required to construct the aggregate base in accordance with the plans and specifications for concrete walkway areas shall be incidental to this item.

No separate or additional payment will be made for necessary testing to obtain proper compaction and in the care of the work.

21. CONCRETE WALK, COLORED 4-INCH-THICK CONCRETE

The measurement unit for this work is square feet of the finished surface. Measurement of colored concrete walks will include the total area of colored concrete walk.

All necessary work and materials required to construct the aggregate base in accordance with the plans and specifications for colored concrete walkway areas shall be incidental to this item.

No separate or additional payment will be made for necessary testing to obtain proper compaction and in the care of the work.

22. CONCRETE WALK, STAMPED 4-INCH-THICK CONCRETE

The measurement unit for this work is square feet of the finished surface. Measurement of stamped concrete walks will include the total area of stamped concrete walk.

All necessary work and materials required to construct the aggregate base in accordance with the plans and specifications for stamped concrete walkway areas shall be incidental to this item.

No separate or additional payment will be made for necessary testing to obtain proper compaction and in the care of the work.

23. CONCRETE WALK, 6-INCH-THICK CONCRETE

The measurement unit for this work is square feet of the finished surface. Measurement of concrete walks will include the total area of concrete walk.

All necessary work and materials required to construct the aggregate base in accordance with the plans and specifications for concrete walkway areas shall be incidental to this item.

No separate or additional payment will be made for necessary testing to obtain proper compaction and in the care of the work.

24. CONCRETE ADA PARKING STALL & ACCESS AISLE, 8-INCH-THICK PCC

The measurement unit for this work is square feet of the finished surface. Measurement of 8-inch concrete pad will include the total area of concrete pad.

All necessary work and materials required to construct the aggregate base in accordance with the plans and specifications shall be incidental to this item.

No separate or additional payment will be made for necessary testing to obtain proper compaction and in the care of the work.

25. CONCRETE CURB & GUTTER

The accepted quantities of concrete curb & gutter will be paid for at the Contract unit price, per unit of measurement lineal foot.

Payment will be payment in full for furnishing and placing all materials, including steel reinforcement at matchlines, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

No separate or additional payment will be made for curb & gutter. Payment will be included in payment for the appropriate items under which this work is required.

26. CONCRETE STANDARD CURB

The accepted quantities of standard curb will be paid for at the Contract unit price, per unit of measurement lineal foot.

Payment will be payment in full for furnishing and placing all materials, including steel reinforcement at matchlines, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

No separate or additional payment will be made for standard curb. Payment will be included in payment for the appropriate items under which this work is required.

27. CONCRETE "V" TYPE GUTTER

The accepted quantities of "V" type gutter will be paid for at the Contract unit price, per unit of measurement lineal foot.

Payment will be payment in full for furnishing and placing all materials, including steel reinforcement, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

No separate or additional payment will be made for "V" type gutter. Payment will be included in payment for the appropriate items under which this work is required.

28. TRUNCATED DOME TEXTURING

The measurement unit for this work is square feet of the finished surface. Measurement of truncated dome texturing will include the total area of this bid item.

All necessary work and materials required to install the truncated dome texturing in accordance with the plans and specifications shall be incidental to this item.

29. SIGNS AND STRIPING

The measure for this work is lump sum. All necessary work and materials, including the construction of sign foundation and installation of sign pole, required to provide signing and striping, removal and relocation of permanent and temporary signs as shown on the plans is incidental to this bid item.

30. LIGHT POST FOUNDATION

The accepted quantities of light post foundation will be paid for at the Contract unit price each.

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

No separate or additional payment will be made for the construction of light post foundation. Payment will be included in payment for the appropriate items which this work requires.

31. ILLUMINATION APPURTENANCES, CONDUIT, AND JUNCTION BOXES

The accepted quantities of illumination appurtenances, conduits, and junction boxes will be paid for at the Contract lump sum.

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

No separate or additional payment will be made for the illumination appurtenances, conduits, and junction boxes. Payment will be included in payment for the appropriate items which this work requires

32. INFILTRATION RAIN GARDEN, TWO FACILITIES

Payment for infiltration rain garden will be made at the Contract lump sum amount

The lump sum bid price shall be full compensation for all labor, materials, and equipment used to construct the following:

- Infiltration Rain Garden, two facilities, in accordance with the plans and specifications.

33. SOAKAGE TRENCH

Payment for soakage trench will be made at the Contract lump sum amount

The lump sum bid price shall be full compensation for all labor, materials, and equipment used to construct the following:

- Soakage Trench in accordance with the plans and specifications.

34. LANDSCAPE AND IRRIGATION

Payment for Landscape and Irrigation will be made at the Contract lump sum amount.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for Landscape and Irrigation. Payment will be included in payment for the appropriate items which this work requires.

35. CONCRETE CONTAINMENT EDGE

The measurement unit for this work is square feet of the finished surface. Measurement of the concrete containment edge will include the total area of this bid item.

All necessary work and materials required to install the concrete containment edge in accordance with the plans and specifications shall be incidental to this item.

36. CONCRETE MOW EDGE

The accepted quantities of concrete mow edge will be paid for at the Contract unit price, per unit of measurement lineal foot.

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 concrete mow edge. Payment will be included in payment for the appropriate items under which this work is required.

37. PLAYGROUND - SWING: INSTALLATION, SURFACING, SUB-BASE & DRAINAGE

Payment for the installation of the Playground and swing equipment, construction of playground surfacing, sub-base & drainage will be made at the Contract lump sum amount.

The lump sum bid price shall be full compensation for all labor, materials, and equipment used to construct the following:

- Playground and Swing equipment installation.
- Surfacing and sub-base of Playground and Swing area.
- Soakage Trench installation in accordance with the plans and specifications.

38. CONCRETE BASE FOR ART

The accepted quantities of concrete base for art will be paid for at the Contract unit price each.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for the construction of concrete base for art. Payment will be included in payment for the appropriate items which this work requires.

39. BASALT COLUMNS ON CONCRETE BASE

The accepted quantities of basalt columns on concrete base will be paid for at the Contract unit price each.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for the construction of basalt columns on concrete base. Payment will be included in payment for the appropriate items which this work requires.

40. SKATE DETERRENT

The accepted quantities of skate deterrent will be paid for at the Contract unit price each.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for the installation of skate deterrent. Payment will be included in payment for the appropriate items which this work requires.

41. INFORMATION PLAQUE

The accepted quantities of information plaque will be paid for at the Contract unit price each.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for the installation of information plaque. Payment will be included in payment for the appropriate items which this work requires.

42. CONCRETE SEATWALL

The accepted quantities of concrete seatwall will be paid for at the Contract unit price, per unit of measurement lineal foot.

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 in accordance with the plans and specifications.

No separate or additional payment will be made for concrete seatwall. Payment will be included in payment for the appropriate items under which this work is required.

43. BASALT BENCH

The accepted quantities of basalt bench will be paid for at the Contract unit price each.

Payment will be payment in full for the installation, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for the construction of basalt bench. Payment will be included in payment for the appropriate items which this work requires.

44. BENCH INSTALLATION

The accepted quantities of bench installation will be paid for at the Contract unit price each.

Payment will be payment in full for the installation of this bid item, compensation for all labor, materials, coordination with the city of Cottage Grove and incidentals necessary to complete the work in accordance with the plans and specifications. Coordination with the City of Cottage Grove to receive the bench is incidental to this bid item.

No separate or additional payment will be made for bench installation. Payment will be included in payment for the appropriate items which this work requires.

45. LITTER RECEPTACLES

The accepted quantities of litter receptacles will be paid for at the Contract unit price each.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for litter receptacles. Payment will be included in payment for the appropriate items which this work requires.

46. BIKE RACK EQUIPMENT AND INSTALLATION

The accepted quantities of bike rack equipment and installation will be paid for at the Contract unit price each.

Payment will be payment in full for furnishing and placing all materials, compensation for all labor, materials, furnishing all equipment, and incidentals necessary to complete the work in accordance with the plans and specifications.

No separate or additional payment will be made for bike rack equipment and installation. Payment will be included in payment for the appropriate items which this work requires.

SECTION 700 – CSI SPECIFICATIONS

Cottage Grove Bohemia Park Expansion

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**SECTION 116813
PLAYGROUND EQUIPMENT**

PART 1 - GENERAL

1.1 CONTRACT CONDITIONS

- A. Work of this section is bound by the Contract conditions in additions to these specifications and accompanying drawings.

1.2 WORK INCLUDED

- A. Purchase and install play area equipment

1.3 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 31 20 00 Earth Moving
- B. Section 32 93 00 for Play Surfacing

1.4 PROTECTION

- A. Refer to requirements in drawings and specifications. Follow all said requirements as necessary.

1.5 COORDINATION

- A. Coordinate with other trades affected by and affecting work of this Section.

1.6 FIELD MEASUREMENTS

- A. Play area equipment, structures, and area layout are critical as to specific dimensions, setbacks and clearances. Layout all areas and structures prior to installation. Contractor to verify that safety zones are positioned within edge parameters. If field measurements differ from drawing dimensions, notify Landscape Architect prior to installation.

1.7 SUBMITTALS

- A. Submit the following shop drawings:
 - 1. Scale Plans with dimensioned locations of all play equipment, fall zones and footings.
 - 2. Play equipment footing details designed and stamped by engineer
 - 3. Contractor to confirm w/ equipment manufacturer that play equipment fall zones, including overlap, comply with play area space requirements and USCPSC safety guidelines.

- B. Product Data: Submit manufacturer's printed data covering all play area materials, products, installation recommendations, and ADA and CPSC compliance.

1.8 REVIEWS AND OBSERVATIONS

- A. Request visitation by Landscape Architect 48 hours in advance as follows:
 - 1. Layout: Prior to installation, but following staking and layout, Landscape Architect, upon notification, will review work for layout, location, alignment, elevations and post footing depth and coordination with play area space.
 - 2. Installation: Following completion of all work of this Section, Landscape Architect, upon notification, will review work for installation, alignment and assembly.
- B. Make any corrections identified during these reviews at no additional cost to Owner.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Delivery and Storage: Contractor is responsible for delivery of the equipment from the PSC to the project site. Deliver all materials to the job site in their original containers with all labels intact and legible at time of use.
- B. Replacement: In the event of damage to the equipment by the contractor, immediately replace materials as directed at no additional cost to Owner.

1.10 ENVIRONMENTAL/SITE WORKING CONDITIONS

- A. Weather: Do no work when inclement weather may cause surfaces to be wet or cold beyond application parameters or where damage may occur.
- B. Air Temperature: Follow Section 02520 for concrete conditions.

PART 2 - PRODUCTS

2.1 PLAY SWING SET

- A. Manufacturer: Play Craft Systems. Available from AllPlay Systems. Contact Danny Shamberger (541)797-3063
- B. Model: PC2181 8ft Single Post Swing Bay (2 Bay) A2-2181-7, Playshare Seat A2-131510 (1) & Belt seat A2-313010 (2 required)
 - 1. Custom Swing Set with regular swing and play share seat.
 - 2. Color: Dark green and Beige
- C. Pole: Hot Dip Galvanized Steel

- D. Mounting: In-ground bury pole as per manufacturers instructions.

2.01 PLAY AREA SURFACING

- A. As defined in Section 32 9300 Play Surfacing

2.02 CONCRETE

- A. Use material according to approved engineering details and manufacturer specifications.

PART 3 - EXECUTION

3.01 GENERAL

- A. Inspection and Verification: Prior to commencing work of this Section, inspect site and ensure site and existing and surrounding conditions are as indicated in documents and are ready to receive work of this Section.
- B. Layout: Identify required lines, levels, grades, finish elevations, equipment heights, vertical and horizontal clearances, alignments, intersecting lines. Layout all work if this Section prior to commencing work.
- C. Discrepancies: Do not commence work until all unsatisfactory conditions have been corrected. Commencing work of this Section denotes acceptance of existing conditions.
- D. Tolerances: Perform work true to location and alignment. All vertical elements plumb and square with adjacent construction. All horizontal elements in alignment and parallel, 90 degrees, or specific shown angle to adjacent construction, and dead-level. Maximum vertical and horizontal deviation shall not exceed 1/4" in any direction when measured with 10-foot straight edge.
- E. Notice: Notify Landscape Architect 48 hours in advance prior to installing work.

3.02 ASSEMBLY AND INSTALLATION

- A. Play Equipment
 1. Layout, stake and flag all equipment and footing locations in advance of installation or assembly. **Do not begin installation until Landscape Architect review of layout and swing configuration.**
 2. Install according to manufacturer's specifications, recommendations, as detailed and according to drawings.
 3. All structural components and hardware to be completely assembled, connections tight, and moveable parts secure.

3.03 CLEANING

- A. Remove spills, splatters and stains from all surfaces, including other work. Clean, repair and touch-up or replace products or finished which have been soiled, discolored or damaged by work of this Section.

END OF SECTION 11 681

SECTION 12 93 00
SITE FURNISHINGS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Bicycle Racks.
 - 2. Litter Receptacles.
 - 3. Benches.
 - 4. Skate Deterrents

1.2 COORDINATION

- A. Coordinate with other trades affect by and affecting work of this section.

1.3 REVIEWS AND OBSERVATIONS

- A. Request visit by Owner's Representative 72 hours in advance of the following:
 - 1. Contractor to mark locations on paving for all furnishings in this section for approval prior to installation.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery and Storage: The contractor is responsible for delivery of materials to the project site at time of use. Store in a protected location and in a manner that protects them from damage.

1.5 ENVIRONMENTAL/SITE WORKING CONDITIONS

- A. Weather: Do no work when inclement weather may cause surfaces to be wet or cold beyond application parameters or where damage may occur.

PART 2 – PRODUCTS

2.1 BICYCLE RACKS

- A. Manufacturer: Radius Pipe Bending (800-630-7225)

- B. Model: RPB Hoop Style Round 36" height X 24" Width, flange mount
- C. Color: Black Powder Coat

2.2 LITTER RECEPTACLES

- A. Manufacturer: Radius Pipe Bending (800-630-7225)
- B. Model: Custom Garbage Receptacle - Side Opening.
- C. Color: Black Powder Coat

2.3 BENCHES

- A. Furnished by Owner, Installed by Contractor. Benches will be delivered to site. Contractor to coordinate work with Owner.

2.4 SKATE DETERRENTS

- A. Manufacturer: Brown Contracting Inc.
- B. Model: Skate Stoppers DR1-8

PART 3 – EXECUTION

3.1 INSTALLATION – GENERAL

- A. Layout: Identify required lines, levels, grades, finish elevations, equipment heights, vertical and horizontal clearances, alignments, intersecting lines. Layout all work if this Section includes required layout inspections prior to commencing work.
- B. Inspection and Verification: Prior to commencing work of this Section, inspect site and ensure site and existing and surrounding conditions are as indicated in documents and are ready to receive work of this Section.
- C. Discrepancies: Do not commence work until all unsatisfactory conditions have been corrected. Commencing work of this Section denotes acceptance of existing conditions.
- D. Tolerances: Perform work true to location and alignment. All vertical elements plumb and square with adjacent construction. All horizontal elements in alignment and parallel, 90 degrees, or specific shown angle to adjacent construction.

- E. Notice: Notify Owner's Representative 72 hours in advance prior to installing work.

3.2 ASSEMBLY AND INSTALLATION

- A. Bicycle Racks: Permanently affix to the concrete paving by surface mount installation according to manufacturer's instructions, local codes and regulations. Contractor is to provide all required hardware needed for installation.
- B. Litter Receptacles: Permanently affix to the concrete paving by surface mount installation according to manufacturer's instructions, local codes and regulations. Contractor is to provide all required hardware needed for installation.
- C. Benches: Permanently affix to the concrete paving by surface mount installation according to Owner instructions, local codes and regulations. Contractor is to provide all required hardware needed for installation.
- D. Skate Deterrents: Install according to manufacturer's specifications.
- E. Layout all site furnishings for owner's review prior to installation.

3.3 CLEANING

- A. Remove debris and clean all surfaces, including other work. Clean, repair and touch-up or replace products or finishes which have been soiled, discolored or damaged by work of this section.

END OF SECTION

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Removing existing vegetation.
2. Clearing and grubbing.
3. Stripping and stockpiling topsoil.
4. Stripping and stockpiling rock.
5. Removing above- and below-grade site improvements.
6. Disconnecting, capping, or sealing site utilities.
7. Temporary erosion and sedimentation control.

1.2 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow.
- D. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.4 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated by Owner's direction.
- C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- D. Do not commence site clearing operations until temporary erosion and sedimentation control and tree-protection measures are in place.
- E. The following practices are prohibited within protection zones:
1. Storage of construction materials, debris, or excavated material.
 2. Parking of vehicles or equipment.
 3. Foot traffic.
 4. Erection of sheds or structures.
 5. Impoundment of water.
 6. Excavation or other digging unless otherwise indicated.
 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

1.5 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
1. Use sufficiently detailed photographs or video recordings.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.6 FIELD CONDITIONS

- A. Utility Locator Service: Notify utility locator service where Project is located before site clearing.

- B. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.
- C. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS (NOT USED)
PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control best practices and as shown on the plans.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until project completion.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. General: Protect trees and plants remaining on-site as indicated.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Owner or Engineer.

3.4 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
 - 1. Arrange with utility companies to shut off indicated utilities.
- B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Engineer's written permission.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of **12 inches**, and compact each layer to a density equal to adjacent original ground.

3.6 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, grass and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain.
 - 2. Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
 - 3. Completely remove stumps, roots, obstructions and debris extending to a depth of 18 inches below exposed subgrade.
 - 4. Use only hand methods for grubbing within protection zones.
 - 5. Backfill around tree roots immediately after completion of construction within vicinity of trees.

- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

3.7 SITE IMPROVEMENTS

- A. Remove existing above and below grade improvements as indicated and necessary to facilitate new construction.
- B. Existing signs and sign poles to be salvaged shall be removed and stored on the project site in a secure area.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 311000

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Preparing subgrades for slabs-on-grade, walks, pavements.
2. Excavating and backfilling for buildings and structures.
3. Drainage course for concrete slabs-on-grade.
4. Subbase course for concrete walks, pavements.
5. Subbase course and base course for asphalt paving.
6. Excavating and backfilling trenches for utilities and pits for buried utility structures.
7. Excavating and filling for rough grading of the Site.

B. Related Requirements:

1. Section 311000 "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.

1.2 DEFINITIONS

A. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Aggregate layer placed between the subbase course and pavement.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations

and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for **unit prices**.
 2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, will be without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other fabricated stationary features constructed above or below the ground surface.
- I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- K. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct pre-excavation conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
1. Geotextiles.
 2. Subbase and Base Material.

1.5 FIELD CONDITIONS

- A. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth-moving operations.
- B. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures specified in Section 311000 "Site Clearing" are in place.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a **1-1/2-inch** sieve and not more than 12 percent passing a **No. 200** sieve free of foreign material and meeting the requirements of the current edition of the Oregon Standard Specifications for Construction, APWA and ODOT .
- B. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a **3/4-inch** sieve and not more than 5 percent passing a **No. 200** sieve free of foreign material and meeting the requirements of the current edition of the Oregon Standard Specifications for Construction, APWA and ODOT.

2.2 GEOTEXTILES

- A. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; complying with the following and measured per test methods referenced:
 - a. Minimum Grab Tensile Strength: 180 lb; ASTM D4632.
 - b. Minimum puncture strength (CBR): 371lb; ASTM D6241
 - c. Elongation: 15%; ASTM D4632
 - d. Maximum Apparent Opening Size: **No. 40** sieve; ASTM D4751.
 - e. Permittivity: 0.05 per second, minimum; ASTM D4491.
 - f. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.
- B. Drainage Geotextile: Woven fabric conforming to the following physical properties:
 - a. Minimum Grab Tensile Strength: 110 lb; ASTM D4632.

- b. Minimum puncture strength (CBR): 220lb; ASTM D6241
- c. Elongation: 50%; ASTM D4632
- d. Maximum Apparent Opening Size: **No. 40** sieve; ASTM D4751.
- e. Permittivity: 0.05 per second, minimum; ASTM D4491.
- f. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

3.3 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Engineer. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation.
 - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavation.

3.4 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus **1 inch**. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
 - 2. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus **1 inch**. Do not disturb bottom of excavations intended as bearing surfaces.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
 - 1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to **6 inches** higher than top of pipe or conduit unless otherwise indicated.
 - 1. Clearance: As indicated.
- C. Trench Bottoms:
 - 1. Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 - a. For pipes and conduit less than **6 inches** in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
 - b. For pipes and conduit **6 inches** or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
 - c. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
 - d. Excavate trenches **3 inches** deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
 - 2. Excavate trenches **3 inches** deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.
 - a. Excavate trenches **6 inches** deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

3.7 SUBGRADE INSPECTION

- A. Notify Engineer when excavations have reached required subgrade.

- B. If Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to **3 mph**.
 - 2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.
- D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices for Authorized Additional Excavation as directed by Engineer.
- E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.8 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of **2500 psi**, may be used when approved by Engineer.
 - 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Engineer.

3.9 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.10 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing concrete formwork.
 - 5. Removing trash and debris.
 - 6. Removing temporary shoring, bracing, and sheeting.
 - 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.11 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Backfill voids with satisfactory soil while removing shoring and bracing.
- D. Initial Backfill:
 - 1. Soil Backfill: Place and compact initial backfill of subbase material, free of particles larger than 1 inch in any dimension, to a height of **6 inches** over the pipe or conduit.
 - a. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- E. Final Backfill:
 - 1. Sub-base Backfill: Place and compact final backfill of subbase material to final subgrade elevation, as indicated in plans.
- F. Tracer Wire: Install electrically conductive tracer wire, 12-gauge, insulated copper or heavier, meeting the requirements of ODOT Standard Specifications (current edition), or other approved material. To be placed full length of each trench with non-metallic pipe.

3.12 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry density.

3.13 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than **3 inches** in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than 95 percent of maximum dry density as determined by AASHTO T-180.

3.14 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 - 1. Turf or Unpaved Areas: Plus or minus 1 inch.
 - 2. Walks: Plus or minus 1 inch.
 - 3. Pavements: Plus or minus 1/2 inch.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch

when tested with a **10-foot** straightedge.

3.15 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place base course under pavements and walks as follows:
 - 1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends for pavement sections only.
 - 2. Place base course material over subbase course under hot-mix asphalt pavement.
 - 3. Shape subbase course and base course to required crown elevations and cross-slope grades.
 - 4. Place subbase course and base course **6 inches** or less in compacted thickness in a single layer.
 - 5. Place subbase course and base course that exceeds **6 inches** in compacted thickness in layers of equal thickness, with no compacted layer more than **6 inches** thick or less than **3 inches** thick.
 - 6. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of relative maximum density as determined by AASHTO T-180.

3.16 FIELD QUALITY CONTROL

- A. Special Inspections: Contractor will engage a qualified special inspector to perform the following special inspections to be reviewed by Engineer and Owner:
 - 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 - 2. Determine that fill material classification and maximum lift thickness comply with requirements.
 - 3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.
- B. Testing Agency: Contractor will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.

- D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Engineer.
- E. Testing agency will test compaction of soils in place according to ASTM D1556, ASTM D2167, ASTM D2937, and ASTM D6938, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab but in no case fewer than three tests.
- F. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.17 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes concrete paving including the following:
 - 1. Curbs and gutters.
 - 2. Walks.
 - 3. Cast-in Place concrete seat walls, art, and basalt bases.

1.2 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified ready-mix concrete manufacturer, and, testing agency.
- B. Material Certificates: For the following, from manufacturer:
 - 1. Cementitious materials.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Admixtures.
 - 4. Curing compounds.
 - 5. Applied finish materials.
 - 6. Bonding agent or epoxy adhesive.
- C. Material Test Reports: For each of the following:
 - 1. Aggregates:

- D. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").
- B. Testing Agency Qualifications: Qualified according to ASTM C1077 and ASTM E329 for testing indicated.
 - 1. Personnel conducting field tests must be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

1.6 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
 - 1. When air temperature has fallen to or is expected to fall below **35 deg F**, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than **50 deg F** and not more than **80 deg F** at point of placement.
 - 2. Do not use frozen materials or materials containing ice or snow.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
- C. Hot-Weather Concrete Placement: Comply with **ACI 301** and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below **90 deg F** at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Cover steel reinforcement with water-soaked burlap, so steel

temperature will not exceed ambient air temperature immediately before embedding in concrete.

3. Fog-spray forms and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with **ACI 301** unless otherwise indicated.

2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
 1. Use flexible or uniformly curved forms for curves with a radius of **100 feet** or less. Do not use notched and bent forms.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 STEEL REINFORCEMENT

- A. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of pre-consumer recycled content not less than 25 percent.
- B. Plain-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, fabricated from as-drawn steel wire into flat sheets.
- C. Deformed-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, flat sheet.
- D. Epoxy-Coated Welded-Wire Reinforcement: ASTM A884/A884M, Class A, plain steel.
- E. Reinforcing Bars: ASTM A615/A615M, **Grade 60**; deformed.
- F. Galvanized Reinforcing Bars: ASTM A767/A767M, Class II zinc coated, hot-dip galvanized after fabrication and bending; with ASTM A615/A615M, **Grade 60** deformed bars.

- G. Epoxy-Coated Reinforcing Bars: ASTM A775/A775M or ASTM A934/A934M; with ASTM A615/A615M, **Grade 60** deformed bars.
- H. Steel Bar Mats: ASTM A184/A184M; with ASTM A615/A615M, **Grade 60** deformed bars; assembled with clips.
- I. Plain-Steel Wire: ASTM A1064/A1064M, as drawn.
- J. Deformed-Steel Wire: ASTM A1064/A1064M.
- K. Epoxy-Coated-Steel Wire: ASTM A884/A884M, Class A; coated, plain.
- L. Joint Dowel Bars: ASTM A615/A615M, **Grade 60** plain-steel bars; zinc coated (galvanized) after fabrication according to ASTM A767/A767M, Class I coating. Cut bars true to length with ends square and free of burrs.
- M. Epoxy-Coated, Joint Dowel Bars: ASTM A775/A775M; with ASTM A615/A615M, **Grade 60** plain-steel bars.

2.4 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:
 - 1. Portland Cement: ASTM C150/C150M, gray portland cement Type I.
 - 2. Fly Ash: ASTM C618, Class C or Class F.
 - 3. Slag Cement: ASTM C989/C989M, Grade 100 or 120.
- B. Normal-Weight Aggregates: ASTM C33/C33M, Class 4S, uniformly graded. Provide aggregates from a single source.
 - 1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Air-Entraining Admixture: ASTM C260/C260M.
- D. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

2.5 STEEL REINFORCEMENT MATERIALS FOR CAST-IN-PLACE SEAT WALLS AND PLINTHS

- A. Bars: ASTM A615, Grade 60.
- B. Epoxy-Coated Steel Wire: ASTM A884, Class A Coated.

- C. Plain-Steel Wire: ASTM A82.
- D. Deformed Steel Wire: ASTM A96.
- E. Bar Supports: Conform to CRSI's 'Manual of Standard Practice'. Include all devices necessary for proper reinforcement placement, spacing, supporting and fastening.

2.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry, or, cotton mats.
- B. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
- F. White Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B, dissipating.

2.7 RELATED MATERIALS

- A. Joint Fillers: ASTM D1751, asphalt-saturated cellulosic fiber in preformed strips.

2.8 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to **ACI 301**, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
- B. Cementitious Materials: Use fly ash, pozzolan, slag cement, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.

1. Fly Ash or Pozzolan: 30 percent.
 2. Slag Cement: 50 percent.
 3. Combined Fly Ash or Pozzolan, and Slag Cement: 50 percent, with fly ash or pozzolan not exceeding 25 percent.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
1. Air Content: 4-1/2 percent plus or minus 1.5 percent.
- D. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
1. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- E. Concrete Mixtures: Normal-weight concrete.
1. Compressive Strength (28 Days): 3300 psi.
 2. Maximum W/C Ratio at Point of Placement: 0.45.
 3. Slump Limit: 4 inches, plus or minus **1 inch**.
 4. Air Content: 4-1/2 percent plus or minus 1.5 percent
- F. Concrete Mixtures for Cast-In-Place Seat Walls and Plinths
1. Compressive Strength (28 days): 3500 psi.

2.9 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C94/C94M and ASTM C1116/C1116M. Furnish batch certificates for each batch discharged and used in the Work.
1. When air temperature is between **85 and 90 deg F**, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above **90 deg F**, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

- B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.
 - 1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to **3 mph**.
 - 2. Proof-roll with a pneumatic-tired and loaded, 10-wheel, tandem-axle dump truck weighing not less than **15 tons**.
 - 3. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2 inch according to requirements in Section 312000 "Earth Moving."
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 INSTALLATION OF STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded-wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
 - 1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
 - 1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
 - 2. Provide tie bars at sides of paving strips where indicated.
 - 3. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.
 - a. Tolerance: Ensure that grooved joints are within 3 inches either way from centers of dowels.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut **1/8-inch-**wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.
 - a. Tolerance: Ensure that sawed joints are within 3 inches either way from centers of dowels.
 - 3. Doweled Contraction Joints: Install dowel bars and support

assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in. Coordinate with Engineer for inspection of formwork prior to placing concrete.
- B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- D. Comply with **ACI 301** requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- G. Consolidate concrete according to **ACI 301** by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement and joint devices.
- H. Screed paving surface with a straightedge and strike off.
- I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

- J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.
- K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.
 - 1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
 - 2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.
 - 3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface **1/16 to 1/8 inch** deep with a stiff-bristled broom, perpendicular to line of traffic.

3.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching **0.2 lb/sq. ft. x h** before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has

disappeared from concrete surface.

- E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or, a combination of these:

3.9 WALL FINISH AT CAST-IN-PLACE CONCRETE SEAT WALLS AND PLINTHS

- A. Provide acid etch finish at all exposed concrete seat wall and plinth faces, tops and ends.

3.10 PAVING TOLERANCES

- A. Comply with tolerances in **ACI 117** and as follows:
 1. Elevation: **1/2 inch**.
 2. Thickness: Plus **3/8 inch**, minus **1/4 inch**.
 3. Surface: Gap below **10-feet-** long; unlevelled straightedge not to exceed **1/2 inch**.
 4. Joint Spacing: **3 inches**.
 5. Contraction Joint Depth: Plus **1/4 inch**, no minus.
 6. Joint Width: Plus **1/8 inch**, no minus.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Testing Services: Testing and inspecting of composite samples of fresh concrete obtained according to ASTM C172/C172M will be performed according to the following requirements:
 1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing to be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 2. Slump: ASTM C143/C143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.

3. Air Content: ASTM C231/C231M, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 4. Concrete Temperature: ASTM C1064/C1064M; one test hourly when air temperature is **40 deg F** and below and when it is **80 deg F** and above, and one test for each composite sample.
 5. Compression Test Specimens: ASTM C31/C31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 6. Compressive-Strength Tests: ASTM C39/C39M; test one specimen at seven days and two specimens at 28 days.
 - a. A compressive-strength test to be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than **500 psi**.
- D. Test results to be reported in writing to Engineer, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests to contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Additional Tests: Testing and inspecting agency will make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Engineer.
- F. Concrete paving will be considered defective if it does not pass tests and inspections.
- G. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- H. Prepare test and inspection reports.

3.12 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section.

Remove work in complete sections from joint to joint unless otherwise approved by Engineer.

- B. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- C. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

**SECTION 32 13 16
DECORATIVE CONCRETE PAVING**

PART 1 - GENERAL

1.1 SUMMARY

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to Work of this Section.
- B. Section Includes:
 - 1. Colored Concrete, where indicated on Drawings.
 - 2. Stamped Concrete, where indicated on Drawings.
- C. Related Sections:
 - 1. Division 02 Section "Earthwork" for preparation of subgrade and base course.
 - 2. Division 07 Section "Joint Sealants" for colored sealants for joints.
 - 3. Division 32 Section "Concrete Paving" for general applications of concrete, including concrete seat wall, concrete base for art and basalt columns.

1.2 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. ACI 301 "Specification for Structural Concrete for Buildings."
 - 2. ACI 302 IR "Recommended Practice for Concrete Floor and Slab Construction."
 - 3. ACI 303.1 "Standard Specification for Cast-In-Place Architectural Concrete."
 - 4. ACI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing of Concrete."
 - 5. ACI 305R "Recommended Practice for Hot Weather Concreting."
 - 6. ACI 306R "Recommended Practice for Cold Weather Concreting."
- B. American Society of Testing and Materials (ASTM):
 - 1. ASTM C309 "Standard Specifications for Liquid Membrane-Forming Compounds for Curing Concrete."
 - 2. ASTM C494 "Standard Specification for Chemical Admixtures for Concrete."

1.3 ACTION SUBMITTALS

- A. Product Data: Submit manufacturer's complete technical data sheet for each product indicated.
- B. Design Mixes: For each type of concrete.

- C. Concrete samples with specified colors for colored concrete and stain. Also submit the Manufacturer's color charts showing full range of colors available.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For firms indicated in "Quality Assurance" Article, including list of completed projects.
- B. Material Test Reports: From testing agency indicating compliance of concrete materials, reinforcing materials, admixtures, and similar items with requirements.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer with 10-year's experience in manufacture of specified products.
- B. Installer Qualifications: An installer with 2-year's experience with work of similar scope and quality.
- C. Comply with the requirements of ACI 301.
- D. Obtain each specified material from same source and maintain high degree of consistency in workmanship throughout Project.
- E. Notification of manufacturer's authorized representative shall be given at least 1 week before start of Work.
- F. Field Sample:
 - 1. Provide under provisions of Division 01 Section "Quality Control."
 - 2. For colored concrete: At location on Project selected by design professional, place and finish 5' square section.
 - 3. For stamped concrete: At location on Project selected by design professional, place and finish 73 1/8" wide x 96" long (as per module size).
 - 4. Construct mockup using processes and techniques intended for use on permanent work. Include samples of control, construction, and expansion joints in sample panels. Mockup shall be produced by the individual workers who will perform the work for the Project.
 - 5. Accepted mockup provides visual standard for work of Section.
 - 6. Mockup shall remain through completion of the work for use as a quality standard for finished work.
 - 7. Remove mockup when directed or Approved field samples may become part of the completed Work if undisturbed at completion of Project?

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in original factory unopened, undamaged packaging bearing identification of product, manufacturer, batch number, and expiration data, as applicable.
- B. Store the product in a location protected from damage, construction activity, and

precipitation in strict accordance with the manufacturer's recommendations.

1.7 FIELD CONDITIONS

- A. Environmental Requirements: Comply with stain manufacturer's instructions.
 - 1. Do not apply stain if concrete substrate temperature is not between 50 to 85 deg F before and during installation.
 - 2. Do not apply stain if air temperature is not between 50 and 85 deg F during installation, and for at least 48 hours after installation.
 - 3. In hot weather, install stain in early morning or when surfaces are shaded.
 - 4. Do not install stain if rain is predicted within 24 hours after installation.
 - 5. Substrates shall be uniformly dry, and free of standing water.
- B. Avoid placing concrete if rain, snow, or if frost is forecast within 24 hours. Protect fresh concrete from moisture and freezing.
- C. Comply with professional practices described in ACI 305R and ACI 306R.

1.8 PRE-JOB CONFERENCE

- A. It is suggested that the Design Professional, General Contractor, Construction Manager, Subcontractor, Ready-Mix Concrete Representative, and Manufacturer's Representative be present.
- B. One week prior to placement of concrete, a meeting shall be held to discuss the Project and application methods.

PART 2 - PRODUCTS

2.1 COLORED CONCRETE

- A. ACCEPTABLE MANUFACTURER
 - 1. Sika Corporation (800) 800-9900, 625 West Illinois Avenue · Aurora · IL · 60506 · United States. Formerly BUTTERFIELD COLOR, local contact: Harlan Baldrige– District Representative (541) 531-3056.
- B. COLOR MATERIALS
 - 1. Concrete Paving: Comply with requirements of Section 32 1313 "Concrete Paving."
 - 2. Integral Concrete Colorant: Uni-Mix; BUTTTERFIELD COLOR; factory proportioned, mixed, and packaged, ready-to-use concrete colorant.
 - a. Color for pedestrian sidewalks: Uni-Mix Integral Color U25 Santa Fe Buff. Sample to be approved by Landscape Architect.
 - 1) Albedo: Minimum SRI of 29 or greater.
 - b. Color for concrete bases for art and basalt columns: Uni-Mix Integral

Color U49 Deep Charcoal. Sample to be approved by Landscape Architect.

1) Albedo: Minimum SRI of 29 or greater.

C. SUBSTITUTIONS: The use of products other than those specified will be considered providing that the Contractor requests its use in writing within 14 days prior to bid date. This request shall be accompanied by the following:

1. Certificate of compliance from material manufacturer stating that proposed products meet or exceed the requirements of this Section.
2. Documented proof that proposed materials have a 10 year proven record of performance confirmed by at least 5 local projects that design professional can examine.

D. COLORED CONCRETE MIX DESIGN

1. Comply with requirements Concrete Paving plans and specifications (including Section 32 1600) and the following:
 - a. Minimum Cement Content: Six sacks per cubic yard of concrete.
 - b. Slump of concrete shall be consistent throughout Project at 4 inches or less. At no time shall slump exceed 5 inches. If super plasticizers or mid-range water reducers are allowed, slump shall not exceed 8 inches.
2. Do not add calcium chloride to mix as it causes mottling and surface discoloration.
3. Supplemental admixtures shall not be used unless approved by manufacturer.
4. Do not add water to the mix in the field.
5. Maximum air content shall not exceed 5 percent.

E. TOP SURFACE RETARDER AND FINISHES:

- a. Pedestrian sidewalks and splash pad: SurfEtch 03 Top Surface Retarder; Medium Sand Finish; BUTTTERFIELD COLOR; factory proportioned, mixed, and packaged, ready-to-use.
- b. Concrete bases for art and basalt columns: Acid etch for exposed aggregate finish and seal.

F. SEALING MATERIALS

1. Clear, Solvent-Borne, Membrane-Forming Sealing Compound: ASTM C 309, non-yellowing, VOC-compliant, high-gloss, clear liquid to be used on all surfaces EXCEPT FOR SPLASH PAD AREA.
 - a. Product: CLEAR GUARD® PRO 350® CURE AND SEAL, Sika Corporation.

2.2 STAMPED CONCRETE

A. ACCEPTABLE MANUFACTURER

1. Sika Corporation (800) 800-9900, 625 West Illinois Avenue · Aurora · IL · 60506 · United States. Formerly BUTTERFIELD COLOR, local contact: Harlan Baldrige– District Representative (541) 531-3056.

B. COLOR MATERIALS

1. Concrete Paving: Comply with requirements of Section 32 1313 "Concrete Paving."
2. Dry-shake Colored Hardener: SikaColor® Color Hardener, Sika Corporation; factory proportioned, mixed, and packaged, ready-to-use surface hardener.
 - a. Color: Stone Gray (A78)
3. Sealing Compound: Comply with ASTM C309 and be of same manufacturer as colored admixture, for use with colored concrete. A second coat (seal coat) should be applied after acid stain applied and 28 days after placement of concrete.
 - a. CLEAR GUARD® PRO 350® CURE AND SEAL, Sika Corporation.
4. SUBSTITUTIONS: The use of products other than those specified will be considered providing that the Contractor requests its use in writing within 14 days prior to bid date. This request shall be accompanied by the following:
 - a. Certificate of compliance from material manufacturer stating that proposed products meet or exceed requirements of this Section.
 - b. Documented proof that proposed materials have a 10 year proven record of performance confirmed by at least 5 local projects that design professional can examine.

C. CONCRETE MIX DESIGN

1. Comply with requirements of Division 03 Section "Cast-in-Place Concrete" and the following:
 - a. Minimum Cement Content: Six sacks per cubic yard of concrete.
 - b. Slump of concrete shall be consistent throughout Project at 4 inches or less. At no time shall slump exceed 5 inches. If super plasticizers or mid-range water reducers are allowed, slump shall not exceed 8 inches.
2. Do not add calcium chloride to mix as it causes mottling and surface discoloration.
3. Supplemental admixtures shall not be used unless approved by

- manufacturer.
- 4. Do not add water to the mix in the field.
- 5. Maximum air content shall not exceed 5 percent.

D. IMPRINTING TOOLS (STAMP)

- 1. Stamp Mats: Semi-rigid polyurethane mats with projected texture and ridged underside capable of imprinting texture and joint patterns to plastic concrete.
 - a. Manufacturer: Butterfield Color®.
 - b. Pattern: As selected by Landscape Architect -Nickel Plater Rail Spur.
 - c. Touch up Texture Skins: 6" Wood Plank – BST7372TS, Pebblestone – BST8318

E. STAIN MATERIALS

- 1. Stain: Chemically reactive penetrating stain designed for permanently color concrete [floors] [pavements].
 - a. Product: Sierra Stain® Reactive Acid Stain.
 - b. Colors: As selected by Landscape Architect from manufacturer's full range.
 - c. Colors: Provide the following color[s]:
 - 1) Color 1: Cordovan Leather: BAS-[14].
 - 2) Color 2: Stygian: BAS-[15].

- 2. Water: Potable.

F. SEALING MATERIALS

- 1. Clear, Solvent-Borne, Membrane-Forming Sealing Compound: ASTM C 309, non-yellowing, VOC-compliant, high-gloss, clear liquid.
 - a. Product: CLEAR GUARD® PRO 350® CURE AND SEAL, Sika Corporation.

PART 3 - EXECUTION

3.1 COLORED CONCRETE

A. CONCRETE PLACEMENT

- 1. Move concrete into place with square-tipped shovels or concrete rakes.
- 2. Vibrators, when used, shall be inserted and withdrawn vertically.
- 3. Concrete shall be struck to specified level with wood or magnesium straight edge or mechanical vibrating screed.
- 4. Concrete surface shall be further leveled and consolidated with highway magnesium straight edge and/or magnesium bull float.
- 5. Mechanically float concrete surfaces as soon as concrete surface has

taken its initial set and will support weight of a power float machine equipped with float shoes or combination blades and operator.

B. INSTALLATION

1. Integral Concrete Colorant: Install per manufacturer's technical data sheet U-9911 for Uni-Mix Integral Concrete Colorant.
2. Top Surface Retarder: Install per manufacturer's technical data sheet SO5TSR-01 for SurfEtch 03 Top Surface Retarder.

C. SEALING

1. Prepare dry concrete surfaces according to manufacturer's instructions.
 - a. The seal coat should not be applied until 28 days after placement of concrete, and assumes that a cure coat has been applied.
2. Verify adequacy of slip resistance.

3.2 STAMPED CONCRETE

A. CONCRETE PLACEMENT

1. Move concrete into place with square-tipped shovels or concrete rakes.
2. Vibrators, when used, shall be inserted and withdrawn vertically.
3. Concrete shall be struck to specified level with wood or magnesium straight edge or mechanical vibrating screed.
4. Concrete surface shall be further leveled and consolidated with highway magnesium straight edge and/or magnesium bull float.
5. Mechanically float concrete surfaces as soon as concrete surface has taken its initial set and will support weight of a power float machine equipped with float shoes or combination blades and operator.

B. INSTALLATION - DRY-SHAKE COLORED HARDENER

1. After initial floating, apply dry-shake floor hardener to surfaces in accordance with manufacturer's written instructions and as follows:
 - a. Apply 2/3 of specified application rate to freshly floated concrete surface. Bleed water shall not be present during or following application of first and second shake.
 - b. Distribute by hand or by mechanical spreader designed to apply sidewalk hardeners. Consult Sika for recommended manufacturers of mechanical spreaders.
 - c. As soon as dry-shake material has absorbed moisture, indicated by uniform darkening of surface, mechanically float concrete surface a second time, just enough to bring moisture from base slab through dry-shake color hardener.
 - d. Immediately following second floating, apply remaining 1/3 of specified application rate. If applied by hand, broadcast in opposite direction of first application for a more uniform coverage. If a

mechanical spreader is used, apply the same manner as previously described.

- e. As soon as dry-shake material has absorbed moisture, mechanically float concrete surface a third time.
- f. Do not add water to the surface.
- g. As surface further stiffens, remove float blades to expose the power finishing blades or raise combination blades slightly. Flat trowel surface to remove marks and pinholes.
- h. Further troweling operations can be done, each time raising blades, until desired texture or finish is obtained.
- i. DO NOT BURNISH TROWEL COLORED SURFACE HARDENERS.

2. SEALING OF DRY-SHAKE COLORED HARDENER

- a. The seal coat should be applied 28 days after placement of concrete.
- b. There shall be no free water on surface at time of application.

C. STAMPING

- 1. Stamp concrete surfaces according to manufacturer's instructions.
- 2. Mat Stamping: While concrete is plastic, accurately align stamp mats in sequence and uniformly press into concrete to produce imprint pattern, texture, and depth of imprint, according to manufacturer's instructions. Remove stamps from concrete immediately.

- 1) Stamp edges and surfaces unable to be imprinted with stamp mat with flexible stamping mats.

- 3. Remove unembedded pigmented powder release agent after interval recommended by manufacturer and according to manufacturer's instructions. Pressure wash surfaces according to manufacturer's instructions without damaging decorative concrete.

D. JOINTS

- 1. Score concrete surfaces after stamping with diamond blades to a depth of 1/8-inch (3.2 mm). Rinse until rinse water is clean.

E. STAINING

- 1. Apply stain to concrete surfaces by acid-resistant sprayer or acid-resistant natural fiber brush, immediately scrubbing into surface in a random circular motion, according to manufacturer's instructions.
- 2. Maintain a wet edge, working newly applied stain into edges of adjacent wet edges of previously treated surfaces. Maintain consistent saturation throughout application. Do not splash, drip, or puddle stain on substrates to prevent darker effects.
- 3. After initial application of stain has reacted 4 hours minimum, test surface to determine if sufficient color has been applied to match field samples.
 - a. Remove residue from small section by wet scrubbing and rinsing.

- b. If test indicates color is not sufficient, apply additional stain, allow to dry, and retest.
- 4. When color is sufficient, neutralize stain by mopping with a solution of one pound of baking soda mixed in 5 gallons of water. Remove stain residue by wet scrubbing with water and a stiff, acid-resistant brush. Do not use soap. Rinse until rinse water is clean.
 - a. Collect rinse water by vacuuming or absorbing with inert material. Dispose of stain residue, rinse water, and absorbent materials legally.

F. SEALING

- 1. Sealer Application: After stained and rinsed concrete has thoroughly dried, uniformly apply sealer in continuous operation by sprayer or short nap roller according to manufacturer's instructions. After initial application is dry and tack free, apply a second coat.
 - a. Do not over apply or apply a single heavy coat.
 - b. Thoroughly mix slip-resistant additive in sealer according to manufacturer's instructions. Stir occasionally to maintain uniform distribution of additive.
 - c. Verify adequacy of slip resistance before opening up surfaces to traffic.

3.3 PROTECTION OF FINISHED WORK

- A. The General Contractor is responsible for using Temporary Sidewalk Protection throughout the project to safeguard the surface quality of concrete slabs before and after application of decorative finishes or installations of other materials.
- B. All sidewalks that will be not be covered by other materials will be protected throughout the project. The concrete slab must be treated as a finished sidewalk at all times during construction.
- C. Temporary Sidewalk Protection will be removed only while finish work to the concrete is being performed and will be replaced after the final finish has cured sufficiently.
- D. DO NOT APPLY THE HEAVY DUTY SEAMING TAPE TO BARE OR FINISHED SIDEWALK OR WALL SURFACES AT ANY TIME. IT WILL PERMANENTLY DAMAGE THE FLOOR
- E. No substitutions will be allowed.

3.4 APPLICATOR

- A. For a list of qualified contractors, contact your local SIKA representative.

END OF SECTION

**SECTION 32 84 00
IRRIGATION**

PART 1 - GENERAL

1.1 SUMMARY

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

- B. Section Includes:
 - 1. Piping.
 - 2. Encasement for piping.
 - 3. Manual valves.
 - 4. Pressure-reducing valves.
 - 5. Automatic control valves.
 - 6. Transition fittings.
 - 7. Dielectric fittings.
 - 8. Miscellaneous piping specialties.
 - 9. Sprinklers.
 - 10. Drip irrigation specialties.
 - 11. Controllers.
 - 12. Boxes for automatic control valves.

1.2 DEFINITIONS

- A. Circuit Piping: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.

- B. Drain Piping: Downstream from circuit-piping drain valves. Piping is not under pressure.

- C. Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.

- D. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.

1.3 PERFORMANCE REQUIREMENTS

- A. Irrigation zone control shall be automatic operation with controller and automatic control valves.

- B. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards. Maintain head-to-head irrigation coverage of areas indicated.
- C. Minimum Working Pressures: The following are minimum pressure requirements for piping, valves, and specialties unless otherwise indicated:
 - 1. Irrigation Main Piping: 60 psig
 - 2. Circuit Piping: 45 psig

1.4 REGULATORY AGENCY REQUIREMENTS

- A. Obtain and pay for any permits and inspections required by Governing Agencies and Utility Companies.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
- B. Record Drawings
 - 1. Contractor shall maintain a current legible set of irrigation plans in a safe and accessible location on site at all times for review by Landscape Architect or inspector. Design and actual locations of pipe and valves shall be noted on the plans daily as the irrigation system is constructed.
 - 2. Record actual locations of all concealed components, piping system, sleeves and drain valves. Indicate two dimensions for all valves (including hose bibb and drain valves), stub-outs, and main line T's, L's, and ends. Dimension mainline pipes and wire runs at the beginning, mid-point, and end of each curve, or at each change of direction, or at 25' intervals along the curve if longer than 50'. Submit to Landscape Architect for approval.
 - 3. Record orientation of drip line tubing runs, changes in direction and dimension location of drip zone drain valves.
 - 4. Record Drawings to be updated daily prior to backfilling.
 - 5. Final Record Drawings to be submitted at project closeout.
- C. Zoning Chart: Provide 11x17 color-coded, laminated reduction of overall irrigation plan. Show each irrigation zone and its control valve.
- D. Controller Timing Schedule: Provide schedule indicating length of time each valve is required to be open to provide a determined amount of water for 3 seasons. Schedule is to account for differing water requirements of lawns, shrubs and different solar orientations.

- E. Operation and Maintenance Data: Provide instructions for operation and maintenance of system and controls, seasonal activation and shutdown, and manufacturer's parts catalog.

1.6 QUALITY ASSURANCE

A. Installer Qualifications:

1. For irrigation work: Valid Oregon Landscape Contractors License for irrigation, and a valid Oregon Landscape Business License.
2. For plumbing work: Valid Oregon Plumbing License. This includes all potable water lines. For backflow preventer installations, a valid Oregon Landscape Contractors License for irrigation and backflow or a valid Oregon Plumbing License.

- ### **B. Electrical Components, Devices, and Accessories:** Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.7 REGULATORY REQUIREMENTS

- ### **A.** Conform to applicable code for piping and component requirements.

- ### **B.** Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

1.8 PRE-INSTALLATION MEETING

- ### **A.** Convene on site meeting with general contractor, irrigation contractor, and landscape architect two weeks before starting work of this section.

1.9 NOTICES

- ### **A.** Notify Landscape Architect at least 48 hours before time for inspections. Request inspections at the following times:
1. Upon completion of the main line, with all valves installed, prior to backfilling.
 2. At start and end of pressure test.
 3. Upon completion of drip tubing layout, prior to backfilling
 4. System performance inspection upon completion of the entire system and after plant installation.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
- B. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

1.11 SPECIAL WARRANTY

- A. Warranty all material for one year after date of completion or longer if manufacturer furnishes a longer guarantee.
- B. Correct immediately any failure caused by poor material or workmanship during warranty period. "Immediately" shall mean within 72 hours, as determined by the Owner depending upon the immediacy of the needed repair.
- C. Owner shall proceed with repairs and bill Contractor for costs and any damages when Contractor fails to comply.

1.12 TREE PROTECTION

- A. Protect trees and roots over 2" in diameter from damage. Route pipes under roots over 2" in diameter. All trenching within critical root zones (drip lines) of trees to be performed by hand.

1.13 PROJECT CONDITIONS

- A. Environmental Conditions:
 - 1. In freezing weather: Do no P.V.C. solvent welding.
 - 2. In Rainy Weather: Don no P.V.C. solvent welding, except under cover.
 - 3. Maximum temperature of mating surfaces of Plastic Pipe and Fittings: 110 ° F.
- B. Interruption of Existing Water Service: Do not interrupt water service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water service according to requirements indicated:
 - 1. Notify Architect no fewer than two days in advance of proposed interruption of water service.
 - 2. Do not proceed with interruption of water service without Architect's written permission.

1.14 EXISTING UTILITIES

- A. Locate existing utilities prior to work. Protect active Pipes encountered; notify Pipe Owners. Repair or replace Utility lines damaged by Work of this Section. Remove inactive or abandoned Utilities.

1.15 CLEANING AND PROTECTION

- A. Maintain Public Streets and Driveways clean and Drains open at all times.
- B. Protect Persons and Property from damage and discomfort caused by dust; water as necessary and when directed.
- C. Protect other work against damage and discoloration caused by work of this Section.

1.16 MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. (6) Sprinkler heads of each type and size.
 - 2. (4) Nozzles of each type and size.
 - 3. (2) Valve keys for manual valves.
 - 4. (2) Valve Box Keys.
 - 5. (2) Wrenches for each type of head core and for removing and installing each type of head.
 - 6. Drip-Tube System Tubing: Equal to five percent of total length installed for each type and size indicated, but not less than 40 feet.
 - 7. (5) Fittings of each drip tubing fitting type.
 - 8. (10) Stakes for securing drip tubing to ground.

PART 2 - PRODUCTS

2.1 PIPES, TUBES, AND FITTINGS

- A. Main Lines: Polyvinyl Chloride (PVC) 1120, Schedule 40, ASTM D-2466
- B. Lateral Lines: Polyvinyl Chloride (PVC) 1120, Class 200, ASTM D-2241
- C. Swing Joints at Spray Head and MP Rotator Sprinklers: Triple elbow assembly using Rain Bird SPX or other approved flexible tubing. 15" minimum length, 30" maximum.

- D. Headers and Manifolds at Drip Tubing: Polyvinyl Chloride (PVC) 1120, Class 200, ASTM D-2241. Exhaust headers: 1". Supply headers: 1" at zones 14 gpm and smaller, 1-1/4" at zones larger than 14 gpm.
- E. Socket Type Fittings: ASTM D-2466, Schedule 40 P.V.C.
- F. Threaded Fittings: ASTM D-2464 Schedule 80 P.V.C.
- G. Sleeve Piping: ASTM D-2466, PVC 1120, Schedule 40 P.V.C.

2.2 PIPING JOINING MATERIALS

- A. Pipe-Flange Gasket Materials: AWWA C110, rubber, flat face, 1/8 inch thick unless otherwise indicated; full-face or ring type unless otherwise indicated.
- B. Metal, Pipe-Flange Bolts and Nuts: ASME B18.2.1, carbon steel unless otherwise indicated.
- C. PVC Cleaner and Primer: R. G. Sloan "Weld-on P-70" or equal.
- D. Solvent Cements for Joining PVC Piping: R. G. Sloan "Weld-on 711" or equal. Ensure that manufacturer's expiration date is not exceeded.
- E. Pipe Joint Tape: Teflon tape or virgin Teflon paste on all threaded joints. Minimum of 4 wraps. No pipe dope.
- F. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.

2.3 MANUAL VALVES

- A. Gate Valves:
 - 1. Nibco T-113.
- B. Manual Drain Valves: Bronze construction, angle type, 150 lb. class, threaded end connections, with cross type Operating Handle designed to receive Operating Key. All valves to have non-floating seat disk that allows positive drainage.
 - 1. Aqualine, Champion or approved.
 - 2. Provide at Main Line low points.
- C. Master Control Valve: Confirm operation of existing to remain.

2.4 AUTOMATIC CONTROL VALVES

- A. Plastic, Automatic Control Valves:
 - 1. Pop-up Spray and Rotary Sprinkler Zones: Rain Bird PESB-R.
 - 2. Drip Irrigation Zones: Hunter ICZ. Maximum drip zone size: 25 GPM.
- B. Automatic Control Valve Tags: Christy's ID-STD-Y1 or other permanent hang tag indicating zone number.
- C. Valve Sump: Provide minimum 12" depth of ¾" – 1" round rock below each automatic control valve. Line side and bottom of sump with approved filter fabric.

2.5 SPRINKLERS

- A. Plastic, Pop-up Spray Sprinklers: Makes and models indicated on drawings.
- B. Plastic, Pop-up, Gear-Drive Rotary Sprinklers: Makes and models indicated on drawings.

2.6 DRIP IRRIGATION SPECIALTIES

- A. Landscape Dripline Tubing: Netafim TLCV6-1210
- B. Landscape Dripline Fittings: Netafim Techline Series.
- C. Manual Flush Cap: Netafim Techline CV manual line flush valve #TLSOV.
- D. Drip System Maintenance Placard: Laminated card provided to owner with the following text in 18 pt. text:
 - 1. Check all system filters every (2) months during operation season.
 - 2. Flush system twice per year.
 - 3. Walk landscape at time of filter cleaning to look for signs of plant stress indicating potential problems.
- E. Drip Zone Operation Indicator: Rain Bird OPERIND.

2.7 CONTROLS

- A. Automatic Controllers: TBOS-BT Bluetooth Battery operated controller with DC potted latching solenoids.
- B. Wire Connectors: DBY by 3M, Scotch Lok 3570 or approved.

C. Conduit and Fittings:

1. Under ground: Plastic, Class III, Federal Specification W-C-1094.
2. Above ground: Aluminum, Federal Specification WW-G-540.

2.8 TRACER WIRE AND TRACER WIRE BOX

- A. Contractor shall place a UF #18 minimum blue tracer wire to allow for location and marking of all otherwise unlocatable buried pipe containing pressurized water. Tracer wire shall be continuous without splices unless approved prior to the work. If approved, splices shall be made using a high-pressure type solderless connector. All splice kits shall be approved.
- B. Splices shall be insulated and waterproofed. Tape wrapped around splices will not be accepted as waterproofing.

2.9 VALVE BOXES

- A. Automatic and Manual Control Valves: MacLean Highline 12" standard w/ locking lid.
- B. Manual Drain, Isolation Valves and Hose Bibb: MacLean Highline 10" round w/ "irrigation main" labeled on inside of lid.
- C. Drip Zone Manual Flush Valves: MacLean Highline 6" round w/ double valve box assembly.
- D. Valve Box Lid Colors: Brown at plant beds, Green at lawns.
- E. Drainage Backfill at Manual Drain Valves: (1) cu. foot cleaned $\frac{3}{4}$ "-1" round rock with filter fabric surround.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Division 31 Section "Earthwork."
- B. Provide minimum cover over top of underground piping according to the following:
 1. Irrigation Main Piping: Minimum depth of 24" below finished grade to top of pipe.
 2. Circuit Piping: Minimum depth of 18" below finished grade to top of pipe.

3. Sleeves: Minimum depth of 24" below finished grade to center of pipe.
4. Dripline Tubing: 4" below finished grade to top of pipe.

3.2 PREPARATION

- A. Set stakes to identify locations of proposed irrigation system. Obtain Architect's approval before excavation.

3.3 PIPING INSTALLATION

- A. Location and Arrangement:
 1. Piping layout indicated is diagrammatic.
 2. Route piping and valve boxes to avoid trees, shrubs, ground cover, and structures.
 3. If conditions differ significantly from those shown on plan, contact Landscape Architect immediately.
 4. Review layout requirements with plantings and other affected work. Contractor is responsible for insuring irrigation equipment locations do not conflict with proposed plant locations.
- B. Install pipe, valves, controls, and outlets in accordance with manufacturer's instructions and details on drawings.
- C. Provide 3" sand bedding below all main line piping. Provide clean fill under lateral piping.
- D. Provide 3" minimum debris free cover over all main and lateral line piping.
- E. Install piping at minimum uniform slope of 0.5 percent down toward drain valves.
- F. Install piping free of sags and bends.
- G. Provide for thermal movement of components in system.
- H. Install groups of pipes parallel to each other, spaced to permit valve servicing.
- I. Install fittings for changes in direction and branch connections.
- K. Lay piping on even bed, uniformly sloped without humps or depressions.
- L. Install PVC piping in dry weather when temperature is above 40 deg F. Allow joints to cure at least 24 hours at temperatures above 40 deg F before testing.
- N. Install piping in sleeves under parking lots, roadways, and sidewalks.

3.4 JOINT CONSTRUCTION

- A. Ream ends of pipes and tubes and remove burrs.
- B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
 - 1. Use Teflon tape or virgin Teflon paste on all threaded joints unless dry seal threading is specified. Minimum of 4 wraps. No pipe dope.
 - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- D. Flanged Joints: Select rubber gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
- E. PVC Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
 - 1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
 - 2. PVC Pressure Piping: Join schedule number, ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
 - 3. PVC Nonpressure Piping: Join according to ASTM D 2855.

3.5 VALVE INSTALLATION

- A. Automatic Control Valves: Coil 30" length of control wires around $\frac{3}{4}$ " pipe in box.
- B. Main Line Manual Drain Valves:
 - 1. Install at main line low points.
 - 2. Install in 10" round valve box.
 - 3. Provide specified gravel sump.
 - 4. Provide 4" corrugated pipe from valve box elevation to drain valve.
- C. Isolation Valves:
 - 1. Install in 10" round valve box.

2. Provide 4" corrugated pipe from valve box elevation to drain valve.

3.6 SPRINKLER INSTALLATION

- A. Install sprinkler nozzles after system flushing is completed.
- B. Install sprinklers at manufacturer's recommended heights.
- C. Locate part-circle sprinklers to maintain a minimum distance of 18 inches from walls and 2 inches from other boundaries unless otherwise indicated.

3.7 DRIP IRRIGATION SPECIALTY INSTALLATION

- A. Install drip tubing 4" below finished grade prior to mulching.
- B. Install flush valves in 6" round valve box with inverted valve box sump at end of all drip tubing sections and where shown on drawings.
- C. Stake drip tubing at 5' maximum intervals, immediately before and after each turn or plant root ball and (2) stakes in every plant root ball tubing crosses.
- D. Install Drip Zone Activation Monitor at manifold farthest from valve in each direction.

3.8 AUTOMATIC IRRIGATION-CONTROL SYSTEM INSTALLATION

- A. Install TBOS controllers per manufacturer's specifications.
- B. Install control cable in same trench as irrigation piping and at least 2 inches below or beside piping. Provide conductors of size not smaller than recommended by controller manufacturer. Install cable in separate sleeve under paved areas.

3.9 CONNECTIONS

- A. Install piping adjacent to equipment, valves, and devices to allow service and maintenance.
- B. Connect wiring between controllers and automatic control valves.
- C. Install wire beneath main line pipe and coil 18" extra wire at 100' intervals and each turn to allow for contraction of wire.
- D. Bundle wire together at 5-foot intervals with plastic tape or similar.

- E. Install wire in continuous runs with no splices unless approved.
- F. Make all splices in a valve box and note these on record drawing when approved.
- G. Label wires on both sides of splice with permanent, water-proof tag.
- H. Install waterproof connections at the end of extra wires.
- I. Provide spare control wires as indicated on drawings.

3.10 IDENTIFICATION

- A. Provide permanent hang tags at automatic control valves indicating zone number and correlating to controller chart.
- B. Provide reduced, laminated copy of irrigation plan with valve schedule on each automatic controller.

3.11 FIELD QUALITY CONTROL

- A. Tests and Inspections:
 - 1. Leak Test: After installation, charge system to 100 PSI and test for leaks. Pressure piping to lose no more than 4 PSI in 24 hours. Repair leaks and retest until no leaks exist.
 - 2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.
 - 3. Test and adjust controls. Replace damaged and malfunctioning controls and equipment.
 - 4. Perform coverage test of plant bed areas after plant material has been installed.
- B. Any irrigation product will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

3.12 STARTUP SERVICE

- A. Perform startup service.
 - 1. Complete installation and startup checks according to manufacturer's written instructions.

2. Verify that controllers are installed and connected according to the Contract Documents.
3. Verify that electrical wiring installation complies with manufacturer's submittal.

3.13 ADJUSTING

- A. Adjust settings of controllers.
- B. Adjust automatic control valves to provide flow rate at rated operating pressure required for each sprinkler circuit.
- C. Adjust sprinklers and devices, except those intended to be mounted aboveground, so they will be flush with finish grade.
- D. Adjust radii and arcs of sprinklers to provide head-to-head coverage and prevent overspray onto buildings and paving.

3.14 CLEANING

- A. Flush dirt and debris from piping before installing sprinklers and other devices.
- B. Drip System Cleaning: Contractor to clean all drip system filters and flush system one month after installation.

3.15 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain valves and controllers.

END OF SECTION

**SECTION 32 93 00
LANDSCAPE**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Plants.
2. Seeding.
3. Topsoil and Soil Preparation.
4. Tree Protection Fencing.
5. Play Area Surfacing

B. Related Sections:

1. Section 31 20 00 "Earth Moving".
2. Section 32 84 00 "Irrigation".

1.3 DEFINITIONS

- A. Balled and Burlapped Stock: Plants dug with firm, natural balls of earth in which they were grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSI Z60.1.
- B. Backfill: The earth used to replace or the act of replacing earth in an excavation.
- C. Balled and Potted Stock: Plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required.
- D. Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.
- E. Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.
- F. Finish Grade: Elevation of finished surface of planting soil.

- G. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- H. Planting Area: Areas to be planted.
- I. Topsoil: As defined in PART 2 - PRODUCTS.
- J. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- K. Subsoil: All soil beneath the topsoil layer of the soil profile and typified by the lack of organic matter and soil organisms.
- L. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

1.4 SUBMITTALS

- A. Samples for Verification: For each of the following:
 - 1. Organic Material and Mulch: 1-quart volume of each material required; in sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch. Each Sample shall be typical of the lot of material to be furnished; provide an accurate representation of color, texture, and organic makeup.
 - 2. Imported Topsoil - Provide a 1 gal. min. sample.
- B. Product Data: For each type of product indicated, including soils.
- C. Seed Mix Data: Indicate percentages by volume of all seed components.
- D. Qualification Data: For qualified landscape Installer. Include list of similar projects completed by Installer demonstrating Installer's capabilities and experience if requested. Include project names, addresses, and year completed, and include names and addresses of owners' contact persons.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape Installer whose work has resulted in successful establishment of similar landscape installations.
 - 1. Experience: Five years' experience in landscape installation in addition to requirements in Division 01 Section "Quality Requirements."
 - 2. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

- B. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.
- C. Plant Material Observation: Architect may observe plant material either at place of growth or at site before planting for compliance with requirements for genus, species, variety, cultivar, size, and quality. Landscape Architect retains right to observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site. See also: Required Inspections for Approval.
- D. Preinstallation Conference: Convene on site meeting with General Contractor, Landscape Contractor, and Landscape Architect one week before starting work of this section, see also Irrigation Specifications. Combine and coordinate with irrigation conference per section 32 84 00.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.
- B. Deliver grass seed in sealed containers that are labeled with manufacturer's guaranteed analysis of seed mixture, percentage of purity and year of production.
- C. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
- D. Deliver plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
 1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
 2. Do not remove container-grown stock from containers before time of planting.
 3. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly wet condition.
- E. Completely remove all weeds from root balls and plant pots prior to arrival on project site.

1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

1.8 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner, or incidents that are beyond Contractor's control.
 - b. Structural failures including plantings falling or blowing over.
 - c. Faulty performance of tree stabilization.
 - 2. Warranty Period: 1 year from Date of approved Substantial Completion.
 - 3. Include the following remedial actions as a minimum:
 - a. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
 - b. Replace plants that are more in an unhealthy condition at end of warranty period.
 - c. Provide extended warranty for period equal to original warranty period, for replaced plant material.
 - 4. Lawn Area Warranty: Include until end of specified maintenance period. Re-seed areas larger than 12 sq. inches not uniformly covered by specified grass over entire area.

1.9 MAINTENANCE SERVICE

- A. Initial Maintenance Service for all plant materials: Provide maintenance by skilled employees of landscape installer. Maintain as required in Part 3. Begin maintenance immediately after plants and lawn are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.
 - 1. Maintenance Period at Landscape Areas: Through approved Final Completion.

1.10 REQUIRED INSPECTIONS FOR APPROVAL

- A. Request visitation by the Landscape Architect 3 days minimum in advance of the following:
1. Tree Selection Inspection: The contractor shall request of the Landscape Architect an inspection of the specified trees to be tagged by the Landscape Architect in the ground at the nursery. The contractor shall furnish complete information as to the location of all trees. No trees shall be dug or delivered to the site until the required inspections, approvals and tagging have been made by the Landscape Architect.
 2. Subgrade Inspection: After excavation and scarification of subgrade, prior to placement of topsoil. Subgrade to be approved by Landscape Architect.
 3. Finished Grading Inspection: Immediately after placement and final grading of fills, Landscape Architect will review work for compliance with specified tolerance of grades, slopes and surface drainage and will determine if additional work is required.
 4. Plant Material and Layout Inspection: Immediately prior to installation, place (but do not install) plant material for approval by the Landscape Architect. All materials shall be reviewed by Landscape Architect for compliance with specifications and submittals. Layout will be approved by Landscape Architect prior to continued work.
 5. Installation Inspection: At time of Substantial Completion Inspection, Landscape Architect will review installation of all work of this Section. Installation Review will not occur until completion of all planting. A punchlist will be prepared by Landscape Architect. All punchlist items must be satisfactorily completed to obtain Final Completion.
 6. Warranty Inspection: Immediately prior to the expiration of the Project Warranty, review all work of this Section for compliance with requirements. Make any corrections required by these reviews. Remove stakes and tree attachments.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
1. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots will be rejected.
 2. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless approved by Landscape Architect.

- B. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Plants of a larger size may be used if acceptable to Landscape Architect, with a proportionate increase in size of roots or balls.
- C. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.
- D. Labeling: Label at least one plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant as shown on Drawings.

2.2 ORGANIC SOIL AMENDMENTS

- A. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1/2-inch sieve; free of substances toxic to plantings; and as follows:
 - 1. Available as "Garden Compost" from Rexus Forest Bi-Products.

2.3 FERTILIZERS

- A. Organic Slow-Release Fertilizer at plant beds:
 - 1. Composition: 16 percent nitrogen, 16 percent phosphorous, and 16 percent potassium, by weight as indicated.
- B. Lawn Fertilizer: "Fairway 150 SGN 8-4-5" by Perfect Blend, Inc. or approved. SiteOne Landscape Supply 541-342-1203, Ewing Irrigation 541-736-9531 or approved.
- C. Planting Tablets: Tightly compressed chip type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.
 - 1. Size: 21-gram tablets.
 - 2. Nutrient Composition: 12 percent nitrogen, 8 percent phosphorous, and 8 percent potassium, by weight plus micronutrients.
 - 3. Available as "Healthy Start Macro Tabs 12-8-8" by Perfect Blend, LLC. www.perfect-blend.com.

2.4 TOPSOIL

- A. Imported Topsoil: Imported, natural, fertile, silt-free loam with high sand content as approved by Architect. Available as Bank Loam as manufactured by RiverBend Materials or Processed Loam manufactured by Delta Sand and Gravel. Topsoil must be free from subsoils, stones, lumps, horsetail and other weed seed or contaminants.
- B. Acceptable PH Range: 5.3 to 6.0

2.5 MULCHES

- A. Mulch at Plant Beds: Shredded Fir bark free of growth or germination inhibiting ingredients. Size range: ½ inch to 1 inch (max.) diameter. Mulch must be free of weed seed.
- B. At Lawns Areas: Biodegradable, fine screened, aged sawdust, not toxic and free of plant growth.
- C. At Rain Gardens: 1" depth of 3/8" pea gravel at facility bottom to overflow elevation for rain gardens and over entire facility bottom at rain gardens. Mulch side slopes above overflow elevation at rain gardens with shredded fir bark mulch.

2.6 TREE PROTECTION AND STABILIZATION MATERIALS

- A. Stakes and Guys:
 - 1. Upright and Guy Stakes: Rough-sawn, sound, new softwood, free of knots, holes, cross grain, and other defects, 2-by-2-inch nominal by length indicated, pointed at one end. Painted black.
 - 2. Flexible Ties: Wide rubber or elastic bands or straps of length required to reach stakes or turnbuckles.
 - 3. Guys and Tie Wires: ASTM A 641/A 641M, Class 1, galvanized-steel wire, two-strand, twisted, 0.106 inch in diameter.
 - 4. Tree-Tie Webbing: UV-resistant polypropylene or nylon webbing with brass grommets.
 - 5. See also details in drawing set.
 - 6. Tree protection construction fence: 4 ft. high orange poly safety fencing or approved.

2.7 SEED MIX FOR NEW LAWN AREAS

- A. PT 301 Water Smarter Seed Mix from PT Lawn Seed (503-239-7518): Tall Fescue

2.8 PLAY AREA SURFACING

- A. Engineered wood fibers that meet ADA and ASTM for accessibility standards. Available as "Fiberex" manufactured by Rexus Forest By-Products, Inc.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive landscaping for compliance with requirements and conditions affecting installation and performance.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.

2. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
 3. Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 4. Uniformly moisten excessively dry soil that is not workable, and which is too dusty.
 5. Verify that previous subgrade grading operations satisfactorily meet specifications and have been approved by Landscape Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.
- B. Existing Tree Protection: Provide tree protection construction fence around all existing trees to remain adjacent to construction where shown on drawings. Provide 6' long metal T stakes at 6' maximum intervals.
- C. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- D. Lay out individual tree and shrub locations according to required layout. Obtain Landscape Architect's acceptance before excavating or planting.

3.3 SOIL PLACEMENT SCHEDULE

- A. At Plant Beds:
1. Confirm sub-grade is acceptable to Landscape Architect before placing any fill.
 2. Confirm sub-grade elevation is 18" below finished grades.
 3. Scarify subgrade of planting areas to a minimum depth of 6 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 4. Fill with 18" min. imported topsoil at typical plant beds. Place in 6" lifts. Till each lift prior to placement of next lift. Compact each lift to 85%. Contractor is responsible for additional soil as needed from settling or disturbance. Slope or crown all plant bed surfaces as needed for proper drainage. Crown plant bed surfaces as detailed.

5. Gravel backfill, rocks and foreign material are not permitted within 24" of finished grade in any condition. Contractor is to ensure that soil is free of rocks or foreign materials.
- B. At Rain Gardens: Construct according to civil specifications, plans and details. Place a minimum 18" depth growing medium at rain gardens. Place 24" depth growing medium at tree locations. Do not place fertilizer or compost in rain gardens.
- C. At New Lawns Areas :
1. Confirm subgrade is 6" below finished grade.
 2. Scarify subgrade to a depth of six inches. Confirm subgrade is acceptable to Landscape Architect before topsoil placement.
 3. Fill with 6" minimum imported topsoil to flush with adjacent finished grade or adjacent paved surfaces. Compact to 85% and add soil as needed for finished grade.
 4. Gravel backfill and foreign material are not permitted within 18" of finished grade. Contractor is to ensure that soil is free of gravel or foreign materials.

3.4 PLANT BED PREPARATION

- A. At Plant Beds: Upon approved placement of imported topsoil, apply the following soil amendments and fertilizer on surface, and thoroughly blend into top 8" min. of topsoil throughout the entire plant bed.
- a. 3 inches Compost
 - b. Fertilizer at the rate of 20 lbs. per 1000 sf.
- B. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades. Confirm that finished grade is "puddle free". Slope or crown all plant bed surfaces as needed for proper drainage. Crown plant bed surfaces as detailed.
- C. Before planting, obtain Landscape Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading. See required "Finished Grading Inspection".
- D. At tree pits add the following amendments to the topsoil and mix thoroughly to achieve the proper mix:
- 1 One-part organic material to 5 parts soil backfill.
 2. 6 lbs. commercial fertilizer per cu. yard of planting mix.
 3. Add planting tablets as specified.
- E. At Seeded Areas: Upon approved placement of topsoil, apply the following soil amendments and fertilizer on surface, and thoroughly blend into top 6 inches min. of planting soil throughout the entire area.
1. 1 inch Compost
 2. Fertilizer at the rate of 15 lbs. per 1000 sf.
- Grade all seeded areas to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades. Confirm that finished grade is "puddle free".

3.5 EXCAVATION FOR TREES AND SHRUBS

- A. Planting Pits and Trenches: Excavate circular planting pits with sides sloping inward at a 45-degree angle or as shown on drawings. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
 - 1. Excavate two times as wide as ball diameter for rootball or container minimum or as shown in details.
 - 2. Excavate at least 12 inches wider than root spread.
 - 3. Prepare tree pit and plant as shown in tree planting details. Score the edge of the tree pit to leave the edges rough and not smooth. This will encourage rooting into the adjacent soil.
- B. Drainage: Notify Architect if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.
- C. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.6 TREE AND SHRUB PLANTING

- A. Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1.
- B. Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
- C. Balled and Burlapped Stock: Set plumb and in center of planting pit or trench with root flare 2 inches above adjacent finish grades.
 - 1. Use planting soil with amendments for backfill.
 - 2. After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls.
 - 3. Do not use planting stock if root ball is cracked or broken before or during planting operation.
- D. Container Grown Stock: Carefully remove root ball from container without damaging root plant.
- E. Fabric Grown Stock: Carefully remove root ball from fabric bag without damaging root ball or plant.
- F. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.

1. Place planting tablets in each planting pit when pit is approximately one-half filled; at high rates recommended by manufacturer. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 2. At tree and shrub pits, add micorrhizal tablets in each planting pit when pit is approximately one-half filled, at specified rates. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 3. Continue backfilling process. Water again after placing and tamping final layer of soil.
- G. When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

3.7 TREE AND SHRUB PRUNING

- A. Remove only dead, dying, or broken branches. Do not prune for shape without approval of Landscape Architect.
- B. Prune, thin, and shape trees, shrubs, and vines as directed by Landscape Architect. Existing trees to remain will be pruned on site in presence of Landscape Architect.
- C. Do not apply pruning paint to wounds.

3.8 TREE STABILIZATION

- A. Install trunk stabilization with plant protector wrapped guy wires and stakes as needed or shown in details.

3.9 SEED INSTALLATION AT LAWN AREAS

- A. Sow seed at manufacturers suggested rates.
- B. Lightly rake to cover seed, roll and water with a fine spray.
- C. Seed may be applied through hydro-seeding process. Mix specified seed, fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
 1. Mix slurry with manufacturer's recommended tackifier.
 2. Apply slurry uniformly to all areas to be seeded.
- D. Contractor is responsible for temporary watering of non-irrigated seeded areas to provide lawn establishment and as needed to maintain healthy lawn through maintenance service period.

3.10 GROUND COVER AND PERENNIAL PLANTING

- A. Set out and space ground cover and plants other than trees, shrubs, and vines at indicated spacing in even rows with triangular spacing and as shown in detail. Conduct layout inspection as specified.
- B. Use planting soil with amendments for backfill.
- C. Dig holes large enough to allow spreading of roots.
- D. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
- E. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
- F. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.11 PLANT BED AND RAIN GARDENS MULCHING

- A. At Plant Beds: Mulch all plant beds to a depth of 3 inches minimum thickness within 24 hours after planting.
- B. Where plant beds meet lawns, seeded areas or natural areas to remain, sidewalks or mowing edges, provide a vertical spaded edge 2 inches deep along edge to lock mulch in place.
- C. Immediately restore eroded mulch material to prevent possible soil erosion.
- D. At Rain Gardens, install 1" depth of 3/8" pea gravel at bottom of facility and side slopes to overflow drain elevation in accordance to manufacturer's specifications. The remaining side slopes to be plant bed mulch.

3.12 PLAY AREA SURFACING

- A. Install play area surfacing and drainage in accordance with drawings, details and manufacturer specifications.

3.13 LANDSCAPE MAINTENANCE

- A. During specified maintenance period, maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.
- B. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.

- C. Maintain plant materials, planted areas, and soils free of pests and pathogens or disease.
- D. At Lawns Areas: During specified maintenance period, water, weed, fertilize, and re-seed as necessary to establish healthy, thick, even grass stand, 2 inches high.
- E. Grass Mowing: Mow existing lawns to remain as shown on plans for specified maintenance period. Do not attempt first mowing until grass is firmly rooted and secure in place. When grass reaches 3 inches in height, mow to 2 inches in height. Maintain grass until end of Maintenance Period or until final completion, whichever is later. Do not remove more than 1/3 of grass leaf in any mowing operation. Remove clippings from project. Provide (3) mowings minimum.

3.14 CLEANUP AND PROTECTION

- A. During planting, keep adjacent paving and construction clean and work area in an orderly condition.
- B. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- C. After installation and before Final Completion remove nursery stakes, tie tape, wire, burlap, and other debris from plant material, planting areas, and Project site.

END OF SECTION

SECTION 331415 - SITE WATER DISTRIBUTION PIPING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Water-distribution piping and related components outside the building for domestic water service, and terminated 5 ft. from building. Terminate water-service piping with appropriate fitting for extension by Division 22.

1.2 DEFINITIONS

- A. CDA: Copper Development Association.
- B. EPDM: Ethylene-propylene-diene terpolymer rubber.
- C. PA: Polyamide (nylon) plastic.
- D. PE: Polyethylene plastic.
- E. PP: Polypropylene plastic.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings:
1. Detail precast concrete vault assemblies and indicate dimensions, method of field assembly, and components.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Preparation for Transport: Prepare piping, valves, meters, backflow prevention devices, and fire hydrants according to the following:
1. Ensure that piping, valves, meters, backflow prevention devices, and fire hydrants are dry and internally protected against rust and corrosion.
 2. Protect threaded ends and flange faces against damage.

3. Set piping, valves, meters, backflow prevention devices, and fire hydrants in best position for handling and to prevent rattling.
- B. During Storage: Use precautions for piping, valves, meters, backflow prevention devices, and fire hydrants according to the following:
 1. Do not remove end protectors unless necessary for inspection; then reinstall for storage.
 2. Protect from weather. Store indoors and maintain temperature higher than ambient dew point temperature. Support off the ground or pavement in watertight enclosures when outdoor storage is necessary.
 - C. Handling: Use sling to handle products if size requires handling by crane or lift. Rig products to avoid damage to exposed parts. Do not use handwheels or stems as lifting or rigging points.
 - D. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
 - E. Protect stored piping from moisture and dirt. Elevate above grade. Do not exceed structural capacity of floor when storing inside.
 - F. Protect flanges, fittings, and specialties from moisture and dirt.
 - G. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

1.5 PROJECT CONDITIONS

- A. Interruption of Existing Water-Distribution Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water-distribution service in accordance with requirements indicated:
 1. Notify Engineer and Owner no fewer than two days in advance of proposed interruption of service.
 2. Do not proceed with interruption of water-distribution service without Engineer/Owner's written permission.

1.6 COORDINATION

- A. Coordinate connection to water main with utility company.
- B. Content includes water-distribution piping and related components outside

the building for domestic water service and fire-suppression water service terminated 5ft. from building. Terminate water-service piping with appropriate fitting for extension by Divisions 21 and 22.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Comply with requirements of utility company supplying water. Include tapping of water mains and backflow prevention.
- B. Comply with standards of authorities having jurisdiction for domestic water-service piping, including materials, installation, testing, and disinfection.
- C. Comply with standards of authorities having jurisdiction for fire-suppression water-service piping, including materials, hose threads, installation, and testing.
- D. Piping materials to bear label, stamp, or other markings of specified testing agency.
- E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
- F. Comply with ASTM F645 for selection, design, and installation of thermoplastic water piping.
- G. Comply with FM Approvals' "Approval Guide" and/or UL's "Fire Protection Equipment Directory" for fire-suppression water-service piping.
- H. All piping and appurtenances intended to convey or dispense water for human consumption are to comply with the U.S. Safe Drinking Water Act (SDWA), with requirements of the Authority Having Jurisdiction (AHJ), and with NSF 61/NSF 372 or are certified in compliance with NSF 61/NSF 372 by an ANSI-accredited third-party certification body, that the weighted average lead content at wetted surfaces is less than or equal to 0.25 percent.

2.2 PIPING MATERIALS

- A. Comply with requirements in "Piping Applications" Article for applications of pipe, tube, fitting materials, and joining methods for specific services, service locations, and service sizes.

- B. Potable-water piping and components comply with NSF 14, NSF 61, and NSF 372. Include marking “NSF-pw” on piping.

2.3 HDPE PIPE AND FITTINGS

- A. HDPE pipe conforming to ASTM D2239, SIDR No. 5.3, 7, or 9; with PE compound number required to give pressure rating not less than 200psi.
 - 1. Molded HDPE Fittings: ASTM D3350, PE resin, socket- or butt-fusion type, made to match HDPE pipe dimensions and class.

2.4 PVC PIPE AND FITTINGS

- A. PVC, Schedule 40 Pipe; ASTM D1785.
 - 1. PVC Schedule 40 Socket Fittings: ASTM D2466.

2.5 PIPING JOINING MATERIALS

- A. Plastic Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.
- B. Other Pipe materials: As indicated on plans.

2.6 DETECTOR CHECK VALVES

- A. Source Limitations: Obtain detector check valves from single manufacturer.
- B. Description: Products shall be as detailed on plans.

2.7 CORPORATION VALVES, CURB VALVES AND METER VALVES

- A. As indicated on plans and in accordance with Utility Providers’ standards.

2.8 WATER METERS

- A. Water Meter - Utility Company Furnished:

2.9 WATER METER BOXES

- A. As indicated on plans and in accordance with Utility Providers’ standards.

2.10 CONCRETE VAULTS

- A. Concrete Vault - Precast, Reinforced Concrete: Products shall be as detailed on plans.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Comply with excavating, trenching, and backfilling requirements in Section 312000 "Earth Moving."

3.2 PIPING APPLICATIONS

- A. Transition couplings and special fittings with pressure ratings at least equal to piping pressure rating may be used unless otherwise indicated.
- B. Do not use flanges or unions for underground piping.
- C. Flanges, unions, grooved-end-pipe couplings, and special fittings may be used, instead of joints indicated, on aboveground piping and piping in vaults.
- D. Underground water-service piping 3" and smaller to be the following:
 - 1. PVC, Schedule 40 pipe; PVC, Schedule 40 socket fittings; and solvent-cemented joints.
- E. Water Meter Box Water-Service Piping: 3/4" to 2" to be same as underground water-service piping.
- F. Aboveground and vault water-service piping 3" and smaller to be the following:
 - 1. PVC, Schedule 80 pipe; PVC, Schedule 80 socket fittings; and solvent-cemented joints.

3.3 VALVE APPLICATIONS

- A. Drawings indicate valve types to be used. Where not specified, the following standards apply:
 - 1. AWWA Standards (current edition)
 - 2. NFPA Standards (current edition)
 - 3. Oregon Standard Specifications for Construction, APWA & ODOT

3.4 INSTALLATION OF PIPING

- A. Install PVC, AWWA pipe in accordance with ASTM F645 and AWWA M23.
- B. Bury piping with depth of cover over top at least 30 inches, with top at least 12 inches below level of maximum frost penetration, and according to the following:
 - 1. Under Driveways: With at least 36 inches of cover over top.
- C. Extend water-service piping and connect to water-supply source and building water-piping systems at outside face of building wall in locations and pipe sizes indicated.
 - 1. Terminate water-service piping at building wall until building water-piping systems are installed. Terminate piping with caps, plugs, or flanges as required for piping material. Make connections to building water-piping systems when those systems are installed.

3.5 JOINT CONSTRUCTION

- A. Make pipe joints according to the following:
 - 1. PVC Piping Gasketed Joints: Use joining materials in accordance with AWWA C900. Construct joints with elastomeric seals and lubricant in accordance with ASTM D2774 or ASTM D3139 and pipe manufacturer's written instructions.

3.6 INSTALLATION OF WATER METER BOXES

- A. Install water meter boxes in paved areas flush with surface.

3.7 INSTALLATION OF CONCRETE VAULTS

- A. Install precast concrete vaults in accordance with ASTM C891.

3.8 FIELD QUALITY CONTROL

- A. Field Tests:
 - 1. Disinfection Tests.
- B. Field Inspections: Notify Engineer prior to work of this section.

- C. Special Inspections for Code Compliance:
 - 1. Test Hydrostatically. All testing, acceptance, and documentation shall comply with the current Oregon State Plumbing Specialty Code and NFPA and AWWA specifications as applicable.
 - 2. Prior to testing partially backfill or provide other means of restraint to prevent any movement during the test.
 - 3. Observance: Engineer to observe domestic testing. Contractor shall notify Engineer at least 48 hours prior to testing.

3.9 IDENTIFICATION

- A. Install continuous underground detectable warning tape during backfilling of trench for underground water-distribution piping. Locate below finished grade, directly over piping. Underground warning tapes are specified in Section 312000 "Earth Moving."

3.10 CLEANING

- A. Clean and disinfect water-distribution piping as follows:
 - 1. Flushing: Contractor shall flush and clean all parts of completed system. All pipe and structures shall be clean and free of all construction debris, rocks, gravel, mud, sand, silt, and other foreign material, and as directed by the Engineer.
 - 2. Disinfection: Disinfect all domestic water supply piping and appurtenances per the Oregon State Health Department requirements.
- B. Prepare reports of purging and disinfecting activities.

END OF SECTION 331415

SECTION 333000 – SANITARY SEWER UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Private sanitary sewer system improvements, including connection to existing system.

B. Related Requirements:

1. Section 312000 “Earth Moving”

1.2 SUBMITTALS

A. Product Data: Manufacturer’s specifications and technical data including performance, construction, fabrication, and installation information.

1. Submit for pipe and fittings, cleanout covers, and manholes.

B. Field Quality Control submittals as specified in Part 3 of this section:

1. Field Tests
2. Special Inspections for Code Compliance

1.3 QUALITY ASSURANCE

A. Manufacturer’s Qualifications: Not less than 5 years experience in the actual production of specified products.

B. Installer’s Qualifications: Firm with not less than 5 years experience in installation of systems similar in complexity to those required for this project.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Do not store plastic manholes, pipe, and fittings in direct sunlight.

B. Protect pipe, pipe fittings, and seals from dirt and damage.

C. Handle manholes in accordance with manufacturer’s written rigging

instructions.

- D. Packing and Shipping: Deliver products in original, unopened packaging with legible manufacturer's identification.

1.5 ADVANCE NOTICE

- A. Notify Engineer at least 48 hours before starting work of this section.

1.6 COORDINATION

- A. Coordinate with other trades affecting or affected by work of this section.

1.7 REFERENCE SPECIFICATIONS

- A. Comply with the current version of Oregon Plumbing Specialty Code.

PART 2 - PRODUCTS

2.1 SANITARY SEWER PIPE AND FITTINGS (UNLESS OTHERWISE NOTED)

- A. Shall be polyvinyl chloride plastic pipe with rubber gasket joints. Manufacturing Standard: ASTM D-3034 SDR 35 for pipe sizes 4"-15". If the pipe is within 5 feet of the building foundation, it shall be schedule 40 PVC.

2.2 CLEANOUTS

- A. Shall be constructed from solid wall pipe and fittings specified above with traffic grade frame and cover. Frame and cover shall be H20 rated cast iron valve box as detailed on drawings with "sewer" marking. Olympic Foundry VB910 or similar.

2.3 MANHOLES

- A. Shall be Precast Concrete Manholes conforming to ASTM C478 precast, reinforced concrete, of depth indicated, with provision for rubber gasket joints.
- B. Grade Rings shall include 2 or 3 reinforced-concrete rings, of 6- to 9-inch total thickness, that match a 24-inch diameter frame and cover.

PART 3 - EXECUTION

3.1 EXISTING CONDITIONS

- A. Prior to starting work of this section, carefully inspect trench, excavations, and pipe bedding to verify that all such work is complete to the point where this installation may properly commence.
- B. Do not install work of this section until unsatisfactory conditions have been corrected. Commencing work implies acceptance of existing conditions.
- C. If field measurements differ slightly from drawing dimensions, modify work as required for accurate fit. If measurements differ substantially, notify Engineer prior to starting work of this section.

3.2 EARTHWORK

- A. Comply with excavating, trenching, and backfilling requirements in Section 312000 "Earth Moving."

3.3 INSTALLATION – PIPE

- A. Installation shall be in accordance with the manufacturer's recommendation. All pipe ends and interiors shall be thoroughly cleaned of all foreign matter and shall be kept clean during installation. When work is not in progress, all open ends of pipe and fittings shall be securely closed so that no water, earth, animal life, or other substances may enter.
- B. Cutting pipe shall be done in a neat and workmanlike manner by method that will not damage pipe and as recommended by manufacturer.
- C. Install piping within 0.02 feet of indicated grade and location.

3.4 INSTALLATION – CLEANOUTS

- A. Construct on compacted 2" minimum depth 3/4"-0 crushed rock base, level, plumb, and square with adjacent surfaces. Set rim flush with adjacent finished surfaces, unless otherwise noted.

3.5 FIELD QUALITY CONTROL

- A. Field Tests:

1. Hydrostatic or air test, as described below.
- B. Field Inspections: Notify Plumbing Inspector prior to work of this section.
- C. Special Inspections for Code Compliance:
 1. Provide hydrostatic test or air test per State of Oregon Plumbing Specialty Code,
 2. Obtain plumbing inspector approvals.
 3. Provide manhole testing documentation.

3.6 CLEANING

- A. Prior to final acceptance, Contractor shall flush and clean all elements of the completed system. All pipe and structures shall be clean and free of all construction debris, rocks, gravel, mud, sand, silt, and other foreign material, and as directed by the Engineer.
- B. Upon completion of work of this section promptly remove from the working area all scraps, debris, and surplus material.

3.7 PROTECTION

- A. Protect all work installed under this section.
- B. Replace at no additional cost to Owner, any damaged work of this section.

END OF SECTION 333000

SECTION 334200 - STORMWATER CONVEYANCE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. PVC pipe and fittings.
 2. Channel drainage systems.
 3. Manholes.
 4. Cleanouts.
 5. Nonpressure transition couplings.
 6. Catch basins
 7. Stormwater inlets.
 8. Pipe outlets.
 9. Stormwater disposal systems.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
1. Manholes: Include plans, elevations, sections, details, frames, and covers.
 2. Catch basins and stormwater inlets. Include plans, elevations, sections, details, frames, covers, and grates.
 3. Stormwater Detention Structures: Include plans, elevations, sections, details, frames, covers, design calculations, and concrete design-mix reports.

1.3 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Show pipe sizes, locations, and elevations. Show other piping in same trench and clearances from storm drainage system piping. Indicate interface and spatial relationship between manholes, piping, and proximate structures.
- B. Profile Drawings: Show system piping in elevation. Draw profiles at horizontal scale of not less than **1 inch equals 50 feet** and vertical scale of not less than **1 inch equals 5 feet**. Indicate manholes and piping. Show types, sizes, materials, and elevations of other utilities crossing system piping.

- C. Product Certificates: For each type of cast-iron soil pipe and fitting, from manufacturer.
- D. Field quality-control reports.

1.4 QUALITY ASSURANCE

- A. Piping materials shall bear label, stamp, or other markings of specified testing agency.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not store plastic manholes, pipe, and fittings in direct sunlight.
- B. Protect pipe, pipe fittings, and seals from dirt and damage.
- C. Handle manholes in accordance with manufacturer's written rigging instructions.
- D. Handle **catch basins and stormwater inlets** in accordance with manufacturer's written rigging instructions.

1.6 FIELD CONDITIONS

- A. Interruption of Existing Storm Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service in accordance with requirements indicated:
 - 1. Notify **Engineer and Owner** no fewer than **two** days in advance of proposed interruption of service.
 - 2. Do not proceed with interruption of service without **Owner's** written permission.

PART 2 - PRODUCTS

2.1 PVC PIPE AND FITTINGS

- A. PVC Solid Wall Piping:
 - 1. Pipe: ASTM D 3034, PVC, solid pipe with bell-and-spigot ends for gasketed joints or ASTM D1785 and D2665, PVC Schedule 40, solid pipe with bell-and-spigot ends for gasketed joints.
 - 2. Fittings: ASTM D 3034, PVC molded or fabricated, socket type.

3. Gaskets: ASTM F 477, elastomeric seals.
- B. Source Limitations: Obtain PVC pipe and fittings from single manufacturer.
- C. NSF Marking: Comply with NSF 14, "Plastics Piping Systems Components and Related Materials," for plastic piping components. Include marking with "NSF-drain" for plastic storm drain and "NSF-sewer" for plastic storm sewer piping.

2.2 CORRUGATED POLYETHYLENE PIPE

- A. Corrugated polyethylene storm sewer pipe:
 1. Pipe and fittings: ASTM F 667, polyethylene pipe with bell-and-spigot coupling.
 2. Gaskets: ASTM F 477, elastomeric seals.

2.3 NONPRESSURE TRANSITION COUPLINGS

- A. Comply with ASTM C1173, elastomeric, sleeve-type, reducing or transition coupling, for joining underground nonpressure piping. Include ends of same sizes as piping to be joined, and corrosion-resistant-metal tension band and tightening mechanism on each end.
- B. Sleeve Materials:
 1. For Concrete Pipes: ASTM C443, rubber.
 2. For Plastic Pipes: ASTM F477, elastomeric seal
 3. For Dissimilar Pipes: ASTM D5926, PVC or other material compatible with pipe materials being joined.

2.4 MANHOLES

- A. Standard Precast Concrete Manholes:
 1. Description: ASTM C478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.
 2. Diameter: 48 inches minimum unless otherwise indicated.
 3. Ballast: Increase thickness of precast concrete sections or add concrete to base section as required to prevent floatation.
 4. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
 5. Riser Sections: 4-inch minimum thickness, and lengths to provide

depth indicated.

6. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated, and top of cone of size that matches grade rings.
7. Joint Sealant: ASTM C990, bitumen or butyl rubber.
8. Resilient Pipe Connectors: ASTM C923, cast or fitted into manhole walls, for each pipe connection.
9. Steps: Individual FRP steps or FRP ladder, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of manhole to finished grade is less than 60 inches.
10. Adjusting Rings: Interlocking HDPE rings with level or sloped edge in thickness and diameter matching manhole frame and cover, and of height required to adjust manhole frame and cover to indicated elevation and slope. Include sealant recommended by ring manufacturer.
11. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover, and height as required to adjust manhole frame and cover to indicated elevation and slope.

B. Manhole Frames and Covers:

1. Description: Ferrous; 24-inch ID by 7- to 9-inch riser with 4-inch minimum width flange and 26-inch diameter cover. Include indented top design with lettering cast into cover, using wording equivalent to "STORM SEWER."
2. Material: ASTM A536, Grade 60-40-18 ductile iron unless otherwise indicated.

2.5 CONCRETE

- A. General: Cast-in-place concrete according to ACI 318, ACI 350/350R, and the following:
1. Cement: ASTM C 150, Type II.
 2. Fine Aggregate: ASTM C 33, sand.
 3. Coarse Aggregate: ASTM C 33, crushed gravel.
 4. Water: Potable.
- B. Portland Cement Design Mix: 4000 psi minimum, with 0.45 maximum water/cementitious materials ratio.
1. Reinforcing Fabric: ASTM A 185/A 185M, steel, welded wire fabric, plain.

2. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (420 MPa) deformed steel.
- C. Manhole Channels and Benches: Factory or field formed with concrete. Portland cement design mix, 4000 psi minimum, with 0.45 maximum water/cementitious materials ratio. Include channels and benches in manholes.
1. Channels: Concrete invert, formed to same width as connected piping, with height of vertical sides to three-fourths of pipe diameter. Form curved channels with smooth, uniform radius and slope.
 - a. Invert Slope: 1 percent through manhole.
 2. Benches: Concrete, sloped to drain into channel.
 - a. Slope: 4 percent.
- D. Ballast and Pipe Supports: Portland cement design mix, 3000 psi minimum, with 0.58 maximum water/cementitious materials ratio.
1. Reinforcing Fabric: ASTM A 185/A 185M, steel, welded wire fabric, plain.
 2. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (420 MPa) deformed steel.

2.6 CATCH BASINS

- A. Standard Precast Concrete Catch Basins:
1. Description: ASTM C478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.
 2. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
 3. Riser Sections: 4-inch minimum thickness, 48-inch diameter, and lengths to provide depth indicated.
 4. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.
 5. Joint Sealant: ASTM C990, bitumen or butyl rubber.
 6. Adjusting Rings: Interlocking rings with level or sloped edge in thickness and shape matching catch basin frame and grate. Include sealant recommended by ring manufacturer.
 7. Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match frame and grate.
 8. Steps: Individual FRP steps or FRP ladder, wide enough to allow

worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of manhole to finished grade is less than 60 inches.

9. Pipe Connectors: ASTM C923, resilient, of size required, for each pipe connecting to base section.

- B. Round Frames and Grates: Provide products as indicated on plans, or approved alternate. Submit products for approval.

2.7 AREA DRAINS

- A. As indicated on plans.

2.8 PIPE OUTLETS

- A. Head Walls: Cast-in-place reinforced concrete, with apron and tapered sides.
- B. Riprap Basins: Class 50 Rip Rap.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavation, trenching, and backfilling are specified in Section 312000 "Earth Moving."

3.2 PIPING INSTALLATION

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's written instructions for use of lubricants, cements, and other installation requirements.
- C. Install proper size increasers, reducers, and couplings where different

sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.

- D. Install gravity-flow, non-pressure drainage piping in accordance with the following:
 - 1. Install piping pitched down in direction of flow.
 - 2. Install piping 6" and larger with restrained joints at tee fittings and at changes in direction. Use corrosion-resistant rods, pipe or fitting manufacturer's proprietary restraint system, or cast-in-place concrete supports or anchors.
 - 3. Install PVC sewer piping in accordance with ASTM D2321 and ASTM F1668.
 - 4. Install PVC profile gravity sewer piping in accordance with ASTM D2321 and ASTM F1668.

3.3 PIPE JOINT CONSTRUCTION

- A. Join gravity-flow, nonpressure drainage piping in accordance with the following:
 - 1. Join PVC sewer piping in accordance with ASTM D2321 and ASTM D3034 for elastomeric-seal joints or ASTM D3034 for elastomeric-gasketed joints.
 - 2. Join PVC profile gravity sewer piping in accordance with ASTM D2321 for elastomeric-seal joints or ASTM F794 for gasketed joints.
 - 3. Join reinforced-concrete sewer piping according to ACPA's "Concrete Pipe Installation Manual" for rubber-gasketed joints.
 - 4. Join dissimilar pipe materials with nonpressure-type flexible couplings.

3.4 STORMWATER INLET AND OUTLET INSTALLATION

- A. Construct riprap of broken stone, as indicated.
- B. Install outlets that spill onto grade where indicated.

3.5 CLEANOUT INSTALLATION

- A. Install cleanouts and riser extensions from pipes to cleanouts at grade. Use cast-iron soil pipe fittings in pipes at branches for cleanouts and cast-iron soil pipe for riser extensions to cleanouts. Install piping so cleanouts open in direction of flow in pipe.
 - 1. Use Light-Duty, top-loading classification cleanouts in earth or

- unpaved foot-traffic areas.
 - 2. Use Medium-Duty, top-loading classification cleanouts in paved foot-traffic areas.
 - 3. Use Heavy-Duty, top-loading classification cleanouts in vehicle-traffic service areas.
 - 4. Use Extra-Heavy-Duty, top-loading classification cleanouts in roads.
- B. Set cleanout frames and covers in earth in cast-in-place concrete block 18 by 18 by 12 inches deep. Set with tops 1 inch above surrounding earth grade.
- C. Set cleanout frames and covers in concrete pavement and roads with tops flush with pavement surface.

3.6 DRAIN INSTALLATION

- A. Install type of drains in locations indicated.
- 1. Use Light-Duty, top-loading classification cleanouts in earth or unpaved foot-traffic areas.
 - 2. Use Medium-Duty, top-loading classification cleanouts in paved foot-traffic areas.
 - 3. Use Heavy-Duty, top-loading classification cleanouts in vehicle-traffic service areas.
 - 4. Use Extra-Heavy-Duty, top-loading classification cleanouts in roads.
- B. Embed drains in 4-inch minimum concrete around bottom and sides.
- C. Fasten grates to drains if indicated.
- D. Set drain frames and covers with tops flush with pavement surface.
- E. Assemble trench sections with flanged joints.
- F. Embed trench sections in 4-inch minimum concrete around bottom and sides.

3.7 CATCH BASIN INSTALLATION

- A. Construct catch basins to sizes and shaped indicated.
- B. Set frames and grates to elevations indicated.

3.8 CONCRETE PLACEMENT

- A. Place cast-in-place concrete in accordance with ACI 318.

3.9 STORMWATER DISPOSAL SYSTEM INSTALLATION

- A. Chamber Systems: Excavate trenches of width and depth, and install system and backfill in accordance with chamber manufacturer's written instructions. Include storage and leaching chambers, filtering material, and filter mat.
- B. Piping Systems: Excavate trenches of width and depth, and install piping system, filter fabric, and backfill, in accordance with piping manufacturer's written instructions.

3.10 CONNECTIONS

- A. Make connections to existing piping and underground manholes as indicated on plans.
 - 1. Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye fitting, plus 6-inch overlap, with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.
 - 2. Make branch connections from side into existing piping, NPS 4 to NPS 16. Remove section of existing pipe, install wye fitting into existing piping, and encase entire wye with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.
 - 3. Protect existing piping, manholes, and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.

3.11 CLOSING ABANDONED STORM DRAINAGE SYSTEMS

- A. Abandoned Piping: Close open ends of abandoned underground piping indicated to remain in place. Include closures strong enough to withstand hydrostatic and earth pressures that may result after ends of abandoned piping have been closed. Use either procedure below.
 - 1. Close open ends of piping with at least 8-inch thick, brick masonry bulkheads.
 - 2. Close open ends of piping with threaded metal caps, plastic plugs, or other acceptable methods suitable for size and type of material being closed. Do not use wood plugs.
- B. Abandoned Manholes and Structures: Excavate around manholes and structures as required and use one procedure below:
 - 1. Remove manhole or structure and close open ends of remaining

- 2. piping.
Remove top of manhole or structure down to at least 36 inches below final grade. Fill to within 12 inches of top with stone, rubble, gravel, or compacted dirt. Fill to top with concrete.
- C. Backfill to grade in accordance with the section 312000 "Earth Moving".

3.12 IDENTIFICATION

- A. Materials and their installation are specified in Section 312000 "Earth Moving." Arrange for installation of green warning tape directly over piping and at outside edge of underground structures.
 - 1. Use detectable warning tape over piping and over edges of underground structures.

3.13 FIELD QUALITY CONTROL

- A. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect during installation , and again at completion of Project.
 - 1. Defects requiring correction include the following:
 - a. Alignment: Less than full diameter of inside of pipe is visible between structures.
 - b. Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.
 - c. Damage: Crushed, broken, cracked, or otherwise damaged piping.
 - d. Infiltration: Water leakage into piping.
 - e. Exfiltration: Water leakage from or around piping.
 - 2. Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.
 - 3. Reinspect and repeat procedure until results are satisfactory.

3.14 CLEANING

- A. Clean interior of piping of dirt and superfluous materials. Flush with potable water.

END OF SECTION 334200

SECTION 800 – PERMIT INFORMATION

- **800 – BUILDING PERMIT REQUIREMENTS**

- A. Building Permit Application: Owner or Owner's Representative shall complete the required building permit application(s) and file with authorities having jurisdiction within ten days of the date of execution of the Contract. Owner shall also pay all fees associated with obtaining such building permits.**
- B. Specialty Permit Applications: Contractor shall complete all specialty permit applications and file with authorities having jurisdiction. Owner shall pay all fees associated with specialty permits either directly to the authorities having jurisdiction or reimburse the Contractor for actual fees incurred for the specialty permit applications. Specialty Permits shall include but may not be limited to Mechanical, Plumbing, and Electrical permits.**
- C. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.**

Section 900

CONSTRUCTION DRAWINGS

DRAWINGS DATED: April 10th, 2024

G001 – Cover
C001 – General Notes
C100 – Existing Conditions and Demo Plan
C200 – Utility Plan
C201 – Grading and Paving Plan
C202 – Lighting Plan
C300 – Public Improvements Plan
C301 – ADA Curb Ramp and On-Street Parking Construction Plan
C302 – Striping Plan
C400 – Details
C401 – Details
C402 – Details
C403 – Details
C404 – Details
EC000 – ESC Cover
EC100 – ESC Plan
EC200 – ESC Details
A101 – Floor Plan
A201 – Floor Plan
A301 – Sections & Interior Elevations
A501 – Architectural Details
A601 – Door Schedule & Hardware
S001 – Structural Notes
S101 – Foundation Plan
S501 – Structural Details
WT101 – Plans, Elevations, & Sections
WT501 – Detail Sheet
L.100 – Site Plan
L.200 – Layout & Materials Plan
L.300 – Hardscape Details
L.400 – Planting Plan
L.500 – Irrigation Plan
L.600 – Landscape & Irrigation Details
SP1.1 – Splash Pad Feature Layout
SP1.2 – Splash Pad Plumbing Layout
SP2.1 – Details & Specs
SP2.2 – Details & Specs
SP2.3 – Details & Specs