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# City of Florence

Lane County, Oregon

## CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

### Siuslaw Estuary Trail

June 2024

Project No. 1503-022



*Prepared By:*

Civil West Engineering Services, Inc.

486 E Street • Coos Bay, Oregon 97420 • Ph. 541.266.8601, Fax 541.266.8681 • [www.civilwest.com](http://www.civilwest.com)

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830 O-Hare Parkway, Ste. 102 • Medford, OR 97504 • Ph. 541-326-4828

200 Ferry Street SW, Suite 100 • Albany, OR 97321 • Ph. 541-223-5130

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# City of Florence

Lane County, Oregon

## CONTRACT DOCUMENTS

**VOLUME 1** – Bidding Forms, Contract Forms, Etc.

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## INVITATION FOR BIDS

### City of Florence

Sealed Bids for the **Siuslaw Estuary Trail** project for the City of Florence, Lane County, Oregon (Owner) will be received at the City of Florence Public Works, 2675 Kingwood Street, Florence, Oregon 97439, until 2 p.m. (PDT) July 2<sup>nd</sup>, 2024. Bids will be accepted at the above location via hand deliver. Alternatively, bids may be mailed via UPS, FedEx, or hand delivered to City Hall located at 250 Hwy 101 North, Florence, Oregon 97439. USPS deliver will not be accepted. Bids received after this time will not be accepted.

Bids will be opened publicly and read aloud immediately following the specified closing time. All interested parties are invited to attend. Subcontractor declarations must be submitted to the above mentioned City representative no later than 4:00 p.m. (PDT) July 2<sup>nd</sup>, 2024.

The work on this project is for public work. A brief description of the scope of work is provided below:

#### **Siuslaw Estuary Trail – Base Bid:**

Furnish all labor, equipment and materials as required for the Siuslaw Estuary Trail project as shown in the Project Plans, consisting of complete path and parking lot construction consisting of grading, aggregate base, level 3 HMAC, standard curbs, pedestrian ramps, sidewalks, catch basin with infiltration basin, and associated items required for a complete installation.

Bidding Documents may be examined at the following locations:

Civil West Engineering Services, Inc.  
486 E Street; Coos Bay, OR 97420  
Ph: 541-266-8601; fax: 541-266-8681

City of Florence  
250 Hwy 101 North  
Florence, OR 97439

Bidding Documents can also be examined on line at the following location:

To be eligible to Bid and be listed on plan holders' list, bidders must download Bidding Documents and/or purchase them from Engineer. Complete digital project bidding documents are available for **Project #9165303** [www.civilwest.com](http://www.civilwest.com) under Current Bidding. You may download the digital plan documents for \$20.00. Please contact QuestCDN at 952-233-1632 or [info@questcdn.com](mailto:info@questcdn.com) for assistance in free-membership registration, downloading, and working with this digital project information. An optional paper set of project documents is available for a nonrefundable price of **\$140** per set which includes applicable sales tax and shipping. Please make your check payable to Civil West Engineering Services and send it 486 E Street, Coos Bay, OR 97420. Please contact us at 541-266-8601 if you have any questions.

Contractors are encouraged to perform a walk-through of the project prior to bid to familiarize themselves with the project.

Bidders must be qualified to perform the work properly and to comply with applicable laws and bonding requirements.

This contract is for public work and is subject to ORS 279C.800 to 279C.870. Prevailing wage rates for public works' contracts in Oregon are required for this project. No bid will be received or considered by the Owner unless the bid contains: 1) a statement that bidder will comply with the provisions of ORS 279C.840 2) a statement as to whether the bidder is a resident bidder as defined in ORS 279A.120.

Dated this 6<sup>th</sup> day of June, 2024.

By order of: Mike Miller

Title: Public Works Director

Published:

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# INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACTS

Prepared by



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# INSTRUCTIONS TO BIDDERS

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## ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. *Issuing Office* – The office from which the Bidding Documents are to be issued: **Civil West Engineering Services, Inc.; 486 ‘E’ Street; Coos Bay, OR 97420, phone 541-266-8601.**
  - B. *Owner* – City of Florence, Lane County, Oregon. Bidding procedures are to be administered from City Hall located at **250 Hwy 101 North, Florence, Oregon 97439.**
  - C. *Engineer*- Civil West Engineering Services, Inc.

## ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents in the number and for the price, if any, stated in the Advertisement or Invitation to Bid may be obtained from the Issuing Office. The price is intended to cover the cost of labor, shipping, and materials of production and is non-refundable.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use

## ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 Bidders must be qualified to perform the work properly and comply with applicable laws and bonding requirements. To demonstrate Bidder’s qualifications to perform the Work, Bidder shall submit with its bid the following:
- A. Form C-451: Qualifications Statement, Contractor may also submit the ODOT standard prequalification form or letter in its place. If a bidder is already prequalified with the Owner or the Engineer based on previous projects or otherwise, additional prequalification will not be required.
  - B. Form C-460: Contractor Responsibility Certification per ORS 279C.375,
  - C. All Bidders must have a valid license from the Construction Contractors Board (CCB) and shall be capable of obtaining all required bonds and insurance.
  - D. ORS 279C.836 requires that all independent contractors working on qualifying public works projects, with a contract price that exceeds \$100,000 must obtain and file with the Construction Contractors Board (CCB) a public works bond with a corporate surety authorized to do business in Oregon for the amount of \$30,000 before starting work on a contract or subcontract for a public works project.
- A Bidder’s failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract
- No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder’s qualifications.
- 3.02 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder’s representations and certifications.
- 3.05 To qualify for an award, Bidder must be deemed responsible per ORS 279C.375



**ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER’S SAFETY PROGRAM; OTHER WORK AT THE SITE**

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
  - 1. The Supplementary Conditions identify:
    - a. Those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
    - b. Those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
    - c. Reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
    - d. Technical Data contained in such reports and drawings.
  - 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
  - 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will

not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.

- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

#### 4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

#### 4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

#### 4.06 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor

### **ARTICLE 5 – BIDDER'S REPRESENTATIONS**

#### 5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. Examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. Visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. Become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. Carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. Consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
- F. Agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data

- are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
  - H. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
  - I. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
  - J. Agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

#### **ARTICLE 6 – PRE-BID CONFERENCE**

- 6.01 No pre-bid conference will be held. All prospective Bidders are encouraged to visit the site and to familiarize themselves with the project.

#### **ARTICLE 7 – INTERPRETATIONS AND ADDENDA**

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

#### **ARTICLE 8 – BID SECURITY**

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **ten** percent [ 10% ] percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

#### **ARTICLE 9 – CONTRACT TIMES**

- 9.01 The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

## ARTICLE 10 – LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

## ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

- 11.01 The Contract for the Work, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those “or-equal” or substitute materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an “or-equal” or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids in the case of a proposed substitute and 5 days prior in the case of a proposed “or-equal.” Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner. Substitutes and “or-equal” materials and equipment may be proposed by Contractor in accordance with Paragraphs 7.04 and 7.05 of the General Conditions after the Effective Date of the Contract.
- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.
- 11.03 If an award is made, Contractor shall be allowed to submit proposed substitutes and “or-equals” in accordance with the General Conditions.

## ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 In accordance with ORS 279C.370, when the contract value as estimated by the public contracting agency is more than \$100,000, the Bidder must disclose first-tier subcontractors. Proposed first-tier subcontractors shall be listed on the form contained in these Contract Documents (Section 00440).
- A. Form must be submitted to the location specified in the Invitation to Bid, on the advertised bid closing date, and within **two (2)** working hours after the bid closing time.
  - B. Bidder shall list on the Form; subcontractors that will be furnishing labor or will be furnishing labor and materials in connection with the public improvement contract; and will have a contract value equal to or greater than 5% of the total project bid or \$15,000, whichever is greater, or \$350,000 regardless of the percentage of the total project bid.
  - C. Failure to provide the First-Tier Subcontractor Disclosure Form will result in the bid being deemed nonresponsive and a contract will not be awarded to that bidder.

## ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents. Additional copies may be obtained from Engineer. Bidder must have purchased the Contract Documents from the Engineer as directed in the Advertisement or Invitation to Bid and, thus, be listed on the plan holders’ list. **Bids from Bidders who have not purchased the Documents and, thus, are not known as plan holders, will not be accepted.**
- 13.02 All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
- 13.03 If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”

- 13.04 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.08 All names shall be printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid.

#### **ARTICLE 14 – BASIS OF BID**

##### **14.01 *Unit Price***

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

##### **14.02 Allowances**

- D. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

#### **ARTICLE 15 – SUBMITTAL OF BID**

- 15.01 The Bidding Documents found herein include all Bid Forms, Bid Security Forms, and Supplements to Bid Forms that are required. These Bidding Documents shall be submitted together.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "**BID ENCLOSED.**" When using the mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system of delivering the Bid at the place and prior to the time as indicated in the Advertisement for Bid. A mailed Bid shall be addressed to Owner at address in Article 1 of the Bid Form.
- 15.03 Fax or e-mailed Bids will not be considered.
- 15.04 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

## **ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID**

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work. This provision to withdraw a Bid without forfeiting the Bid security does not apply to Bidder's errors in judgment in preparing the Bid.

## **ARTICLE 17 – OPENING OF BIDS**

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

## **ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE**

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

## **ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT**

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible under ORS 279C.375. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder. Owner may reject all bids for good cause if found to be in the public interest to do so.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest. When Bid Form has multiple schedules of Work, Bidder may Bid on one or more schedules.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 The Basis of Award for the *Siuslaw Estuary Trail* Contract will be awarded to the lowest responsive and responsible Bidder for the Base Bid total.
- 19.05 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project. Award will be identified by a Notice of Award within 60 calendar days of the Bid opening.
- 19.06 Any protests of award must be filed with the Owner within seven (7) calendar days from the issuance of the Notice of Intent to Award.

## **ARTICLE 20 – BONDS AND INSURANCE**

- 20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the

Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

#### **ARTICLE 21 – SIGNING OF AGREEMENT**

- 21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification as stated in Paragraph 2.02 of the General Conditions.
- 21.02 Dates on the Agreement (Effective Date of Agreement) shall be filled in by the Owner so that required bonds may be properly dated.

#### **ARTICLE 22 – SALES AND USE TAXES**

- 22.01 The State of Oregon has no sales tax and said taxes shall not be included in Bid. Refer to paragraph 6.10 of the Supplementary Conditions for additional information.

#### **ARTICLE 23 – CONTRACTS TO BE ASSIGNED- [RETAINAGE]**

- 23.01 In accordance with ORS 279C.550 through 279C.570, retainage will be withheld from progress payments at a rate of 5% of the value of work completed.

#### **ARTICLE 24 – WAGE RATE REQUIREMENTS**

- 24.01 The prevailing wage rates of the State of Oregon (ORS 279C.800 to 279C.870) apply to this contract as do any requirements of the State of Oregon associated with the use of these State Prevailing wages.

# BID FORM FOR CONSTRUCTION CONTRACTS

Prepared by



Issued and Published Jointly by





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BID FORM

City of Florence

Siuslaw Estuary Trail

Project No. 1503-022

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**ARTICLE 1 – BID RECIPIENT**

1.01 This Bid is submitted to:

**City of Florence**  
**Attn: Mike Miller, Public Works Director**  
**Or City Recorder and/ or Recorder’s Designee**  
**250 Hwy 101 North**  
**Florence, Oregon 97439**

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

**ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS**

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

**ARTICLE 3 – BIDDER’S REPRESENTATIONS**

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Federal, State and Local Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs.

- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.
- K. Bidder will submit written evidence of its authority to do business in the State or other jurisdiction where the project is located not later than the date of execution of the Agreement.

#### **ARTICLE 4 – BIDDER’S CERTIFICATION**

##### **4.01 Bidder certifies that:**

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
  - 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  - 4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
- E. Bidder certifies that Bidder will comply with ORS 279C.838 or 279C.840 regarding prevailing wage rates.
- F. Bidder  is  is not a resident bidder as defined in ORS 279A.120.

**ARTICLE 5 – BASIS OF BID**

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

- A. See Invitation for Bids for delineation of project Additive Alternates.

**Base Bid – Siuslaw Estuary Trail – Unit Price Bid**

#	Description	Unit	Quantity	Unit Price	Total
1	Mobilization - Bonds & Insurance	ls	1		
2	Construction Facilities & Temporary Controls	ls	1		
3	Demolition & Site Preparation	ls	1		
4	Foundation Stabilization	cy	50		
5	Path Grading	ls	1		
6	Gravel Pathway w/ Aggregate & Geotextile	sf	12870		
7	Standard Curb & Gutter	lf	229		
8	Standard Concrete Sidewalk w/ 4" AB	sf	1221		
9	Standard Concrete Driveway w/ 6" AB	sf	266		
10	Valley Gutter	sf	316		
11	Pedestrian Ramp w/ 4" AB	sf	435		
12	Standard Vertical Curb	lf	516		
13	HMAC - Level 3	ton	310		
14	Aggregate Base	cy	440		
15	Geotextile Fabric	sy	1320		
16	Painted Roadway Striping & Thermoplastic Markings	ls	1		
17	G1 Catch Basin	ea	1		
18	Infiltration Basin w/ Overflow Structure, Complete	ls	1		
19	12" PVC SD, Complete Installation	lf	46		
20	8" PVC SD, Complete Installation	lf	50		
21	6" D50 Rip-Rap	cy	20		
22	Concrete Bollard	ea	3		

23	Tree Removal	ea	18		
24	Landscape Restoration & Cleanup	ls	1		

Total of Unit Item Prices (Base Bid): \$ \_\_\_\_\_  
 (Numbers)

Total of Unit Prices (Base Bid): \_\_\_\_\_  
 (In words)

The basis of award of the Contract will be to the lowest & responsive bidder for the Base Bid for the City of Florence – Siuslaw Estuary Trail project.

Unit Prices have been computed in accordance with the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the contract Documents.

The identity of the successful Bidder for each individual schedule may not specifically be determined at the time of the opening of the Bids.

5.02 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

5.03 Bidder accepts the provisions of the Agreement as to liquidated damages.

**ARTICLE 6 – ATTACHMENTS TO THIS BID**

6.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security; in the form of Bid Bond EJCDC No. C-430
- B. List of Proposed Subcontractors;(First-Tier Subcontractors Disclosure Form submitted within 2 working hours after Bid closing time) No. C-440
- C. Required Bidder Qualification Statement with Supporting Data – EJCDC No. C-451 (Unless prequalified per section 3.01 of the Instruction to Bidders)
- D. Bidders Responsibility Certification No. C-460
- E. Residency Statement No. C-461
- F. Employee Drug Certification No. C-462
- G. Non-Discrimination Certification No. C-463
- H. Certificate of Compliance with Oregon Tax Laws No. C-464
- I. Certificate of Licensing by the Construction Contractors Board No. C-465

**ARTICLE 7 – DEFINED TERMS**

7.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

**ARTICLE 8 – BID SUBMITTAL**

8.01 This Bid is submitted by:  
If Bidder is:

An Individual

Name (typed or printed): \_\_\_\_\_

By: \_\_\_\_\_  
*(Individual's signature)*

Doing business as: \_\_\_\_\_

A Partnership

Partnership Name: \_\_\_\_\_

By: \_\_\_\_\_  
*(Signature of general partner -- attach evidence of authority to sign)*

Name (typed or printed): \_\_\_\_\_

A Corporation

Corporation Name: \_\_\_\_\_ (SEAL)

State of Incorporation: \_\_\_\_\_

Type *(General Business, Professional, Service, Limited Liability)*: \_\_\_\_\_

By: \_\_\_\_\_  
*(Signature -- attach evidence of authority to sign)*

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_

Attest \_\_\_\_\_

Date of Qualification to do business in Oregon is \_\_\_\_/\_\_\_\_/\_\_\_\_.

A Joint Venture



Name of Joint Venture: \_\_\_\_\_

First Joint Venturers Name: \_\_\_\_\_ (SEAL)

By: \_\_\_\_\_  
*(Signature of first joint venture partner -- attach evidence of authority to sign)*

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_

Second Joint Venturers Name: \_\_\_\_\_ (SEAL)

By: \_\_\_\_\_  
*(Signature of second joint venture partner -- attach evidence of authority to sign)*

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_

*(Each joint venturers must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)*

Bidder's Business Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

E-mail \_\_\_\_\_

SUBMITTED on \_\_\_\_\_, 20\_\_\_\_

State Contractor License No. \_\_\_\_\_.

**BID BOND**

**DATE** \_\_\_\_\_

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

**City of Florence  
250 Hwy 101 North  
Florence, Oregon 97439**

BID

Bid Due Date: -----, 2024

Description (*Project Name— Include Location*): City of Florence – Siuslaw Estuary Trail

BOND

Bond Number:

Date:

Penal sum \_\_\_\_\_ \$ \_\_\_\_\_  
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

**BIDDER**

**SURETY**

\_\_\_\_\_  
Bidder's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature (Attach Power of Attorney)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

*Note: Addresses are to be used for giving any required notice.*

*Provide execution by any additional parties, such as joint venturers, if necessary.*

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to

pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2 All Bids are rejected by Owner, or
  - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

**SECTION 00440 – FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM**

Project Name: **City of Florence – Siuslaw Estuary Trail**

Bid Closing Date: July 2nd, 2024 Time: 2:00pm

A. Subcontractor List

1. Bidder shall list below the name, address, Construction Contractor’s Board (CCB) number, description of work and dollar value of the subcontract for each subcontractor performing work in excess of the amount specified in the Instructions to Bidders, Section 00200, Article 12. If no subcontractor will be performing work on this project in excess of the amount specified in the Instructions to Bidders, Section 00200, Article 12, Bidders shall enter “NONE” in the first line below.

<u>Name</u>	<u>Address</u>	<u>CCB #</u>	<u>Description of Work</u>	<u>\$ Value of Subcontract</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

2. Total value of work provided by all subcontractors including those listed above is \$ \_\_\_\_\_.

\_\_\_\_\_  
Signature of Bidder                      Printed Name of Bidder                      Title                      Company Submitting

*This form must be submitted at the location specified in the Advertisement for Bids or Invitation to Bid on the bid closing date and within **Two (2)** working hours after bid closing time.*

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# QUALIFICATIONS STATEMENT

Prepared by



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# QUALIFICATIONS STATEMENT

THE INFORMATION SUPPLIED IN THIS DOCUMENT IS CONFIDENTIAL TO THE EXTENT PERMITTED BY LAWS AND REGULATIONS

## 1. SUBMITTED BY:

Official Name of Firm:

\_\_\_\_\_

Address:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 2. SUBMITTED TO:

\_\_\_\_\_

## 3. SUBMITTED FOR:

\_\_\_\_\_

Owner:

\_\_\_\_\_

Project Name:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TYPE OF WORK:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 4. CONTRACTOR'S CONTACT INFORMATION

Contact Person:

\_\_\_\_\_

Title:

\_\_\_\_\_

Phone:

\_\_\_\_\_

Email:

\_\_\_\_\_



**5. AFFILIATED COMPANIES:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**6. TYPE OF ORGANIZATION:**

SOLE PROPRIETORSHIP

Name of Owner: \_\_\_\_\_

Doing Business As: \_\_\_\_\_

Date of Organization: \_\_\_\_\_

PARTNERSHIP

Date of Organization: \_\_\_\_\_

Type of Partnership: \_\_\_\_\_

Name of General Partner(s): \_\_\_\_\_

CORPORATION

State of Organization: \_\_\_\_\_

Date of Organization: \_\_\_\_\_

Executive Officers:

- President: \_\_\_\_\_

- Vice President(s): \_\_\_\_\_

- Treasurer: \_\_\_\_\_

- Secretary: \_\_\_\_\_

LIMITED LIABILITY COMPANY

State of Organization:

---

Date of Organization:

---

Members:

---

---

---

---

JOINT VENTURE

Sate of Organization:

---

Date of Organization:

---

Form of Organization:

---

Joint Venture Managing Partner

- Name:

---

- Address:

---

---

---

Joint Venture Managing Partner

- Name:

---

- Address:

---

---

Joint Venture Managing Partner

- Name:

---

- Address:

---

---

**7. LICENSING**

Jurisdiction: \_\_\_\_\_

Type of License: \_\_\_\_\_

License Number: \_\_\_\_\_

Jurisdiction: \_\_\_\_\_

Type of License: \_\_\_\_\_

License Number: \_\_\_\_\_

**8. CERTIFICATIONS**

CERTIFIED BY:

Disadvantage Business Enterprise: \_\_\_\_\_

Minority Business Enterprise: \_\_\_\_\_

Woman Owned Enterprise: \_\_\_\_\_

Small Business Enterprise: \_\_\_\_\_

Other ( \_\_\_\_\_ ): \_\_\_\_\_

**9. BONDING INFORMATION**

Bonding Company: \_\_\_\_\_

Address: \_\_\_\_\_

Bonding Agent: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Phone: \_\_\_\_\_

**10. CONSTRUCTION EXPERIENCE:**

Current Experience:

List on **Schedule A** all uncompleted projects currently under contract (If Joint Venture list each participant's projects separately).

Previous Experience:

List on **Schedule B** all projects completed within the last 5 Years (If Joint Venture list each participant's projects separately).

Has firm listed in Section 1 ever failed to complete a construction contract awarded to it?

YES  NO

If YES, attach as an Attachment details including Project Owner's contact information.

Has any Corporate Officer, Partner, Joint Venture participant or Proprietor ever failed to complete a construction contract awarded to them in their name or when acting as a principal of another entity?

YES  NO

If YES, attach as an Attachment details including Project Owner's contact information.

Are there any judgments, claims, disputes or litigation pending or outstanding involving the firm listed in Section 1 or any of its officers (or any of its partners if a partnership or any of the individual entities if a joint venture)?

YES  NO

If YES, attach as an Attachment details including Project Owner's contact information.

**11. SAFETY PROGRAM:**

Name of Contractor's Safety Officer: \_\_\_\_\_

**12. EQUIPMENT:**

MAJOR EQUIPMENT:

List on **Schedule C** all pieces of major equipment available for use on Owner's Project.

I HEREBY CERTIFY THAT THE INFORMATION SUBMITTED HEREWITH, INCLUDING ANY ATTACHMENTS, IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NAME OF ORGANIZATION: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATED: \_\_\_\_\_

NOTARY ATTEST:

SUBSCRIBED AND SWORN TO BEFORE ME

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_

NOTARY PUBLIC - STATE OF \_\_\_\_\_

MY COMMISSION EXPIRES: \_\_\_\_\_

REQUIRED ATTACHMENTS

1. Schedule A (Current Experience).
2. Schedule B (Previous Experience).
3. Schedule C (Major Equipment).
4. Evidence of authority for individuals listed in Section 7 to bind organization to an agreement.
5. Additional items as pertinent.

## SCHEDULE A

### CURRENT EXPERIENCE

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				

## SCHEDULE B

PREVIOUS EXPERIENCE (Include ALL Similar Projects Completed within last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				

## SCHEDULE B

PREVIOUS EXPERIENCE (Include ALL Projects Completed within last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				





**SECTION 00460 – Bidder Responsibility Certification**

**BIDDER RESPONSIBILITY CERTIFICATION**

**This page must be completed, signed, and returned with the Bid Schedule.  
Failure to do so will result in bid rejection.**

This certifies that the below named Bidder meets the standards of responsibility as provided by ORS 279C.375. The below named Bidder certifies that:

1. It has the appropriate financial, material, equipment, facility and personnel resources and expertise necessary to meet all contractual responsibilities as required by this contract.
2. It has a satisfactory record of performance for other public contracts.
3. It has a satisfactory record of integrity for other public contracts.
4. It is qualified legally to contract with the City of Florence (Owner) for this project.
5. It will supply all required information requested by the Owner in connection with its bid for this project, including, but not limited to, satisfactory responses to all information and certifications requested by the City in Section C-200 (Instructions to Bidders) of Volume 1 of the Contract Documents concerning the Bidder's responsibility.

**CERTIFICATION:**

Contractor certifies that it meets the Standards of Responsibility as provided by ORS 279C.375.

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ (Print or Type)

Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

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**SECTION 00461 – Oregon Bidder Residency Statement**

**OREGON BIDDER RESIDENCY STATEMENT**

**This page must be completed, signed, and returned with the Bid Proposal.  
Failure to do so will result in bid rejection.**

**279A.120 Preference for Oregon goods and services; non-resident bidders.**

(1) As used in this section:

- (a) "Non-resident bidder" means a bidder who is not a resident bidder.
- (b) "Resident bidder" means a bidder that has paid unemployment taxes or income taxes in this state during the 12 calendar months immediately preceding submission of the bid, has a business address in this state and has stated in the bid whether the bidder is a "resident bidder" under this paragraph.

(2) For the purposes of awarding a public contract, a contracting agency shall:

- (a) Give preference to goods or services that have been manufactured or produced in this state if price, fitness, availability and quality are otherwise equal; and
- (b) Add a percent increase to the bid of a nonresident bidder equal to the percent, if any, of the preference given to the bidder in the state in which the bidder resides.

"Resident Bidder" means a Bidder that has paid unemployment taxes or income taxes in this state during the 12 calendar months immediately preceding submission of the Bid, has a business address in this state and has stated in the Bid whether the Bidder is a "resident Bidder".

"Non-resident Bidder" means a Bidder who is not a "resident Bidder" as defined in ORD 279A.120.

a. Check one: Bidder is a ( ) resident Bidder ( ) non-resident Bidder

b. If a resident Bidder, enter your Oregon business address:

---

---

c. If a non-resident Bidder, enter state of residency: \_\_\_\_\_

d. If a non-resident Bidder, do you or your firm receive, or are you or your firm eligible for, any preference in award of contracts with your state's government or with governmental bodies in your state?

Check one: ( ) Yes ( ) No

If yes: state the preference percentage: \_\_\_\_\_ %

If yes, but not a percentage of Bid price, describe the preference:

\_\_\_\_\_

If yes, state the law or regulation that allows the preference described (legal citation):

\_\_\_\_\_

Bidder certifies that the information provided herein is true and accurate.

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ (Print or Type)

Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

**SECTION 00462 – Drug Testing Program Certification**

**BIDDER DRUG TESTING PROGRAM CERTIFICATION**

**This page must be completed, signed, and returned with the Bid Schedule.  
Failure to do so will result in bid rejection.**

This certifies that the below named Bidder has an employee drug testing program in place as required by ORS 279C.505 (2).

**CERTIFICATION:**

Bidder certifies that it has an employee drug testing program in place as required by ORS 279C.505 (2).

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ (Print or Type)

Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

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**SECTION 00463 – Non-Discrimination Certification**

**NON-DISCRIMINATION CERTIFICATION**

**This page must be completed, signed, and returned with the Bid Schedule.  
Failure to do so will result in bid rejection.**

***279A.110 Discrimination in subcontracting prohibited; remedies.***

- (1) A bidder or proposer who competes for or is awarded a public contract may not discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a minority, women or emerging small business enterprise certified under ORS 200.055.*
- (2) A contracting agency may debar or disqualify, under ORS 279B.130 or 279C.440, as appropriate, a bidder or proposer if the contracting agency finds that the bidder or proposer has violated subsection (1) of this section in the awarding of a subcontract in connection with a contract advertised by the contracting agency or a contract between the contracting agency and the bidder or proposer. A debarred or disqualified bidder or proposer may appeal the debarment or disqualification under ORS 279B.425 or ORS 279C.445 and 279C.450, as appropriate.*
- (3) A contracting agency may not allege an occurrence of discrimination in subcontracting as a basis for debarring or disqualifying a bidder or proposer under subsection (2) of this section more than three years after the alleged discriminatory conduct occurred or more than three years after the contracting agency, in the exercise of reasonable diligence, should have discovered the conduct, whichever is later.*
- (4) A bidder or proposer shall certify in the documents accompanying the bidder's or proposer's offer to enter into a public contract that the bidder or proposer has not discriminated and will not discriminate, in violation of subsection (1) of this section, against any minority, women or emerging small business enterprise in obtaining any required subcontract.*
- (5) After a contractor is awarded a public contract, if the contractor violates the certification made under subsection (4) of this section, the contracting agency may regard the violation as a breach of contract that permits:
  - (a) Termination of the contract; or*
  - (b) The contracting agency to exercise any remedies for breach of contract that are reserved in the contract.**

**CERTIFICATION:**

Contractor certifies that it has not discriminated and will not discriminate, in violation of ORS 279A.110 (1), against any minority, women or emerging small business enterprise in obtaining any required subcontract

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ (Print or Type)

Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_



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**SECTION 00464 – State Tax Law Compliance Certification**

**CERTIFICATE OF COMPLIANCE WITH OREGON TAX LAWS**

**This page must be completed, signed, and returned with the Bid Schedule.  
Failure to do so will result in bid rejection.**

I, the undersigned, hereby swear or affirm under penalty of perjury that:

I am authorized to act in behalf of bidder that I have authority and knowledge regarding the payment of taxes, and that bidder is, to the best of my knowledge, not in violation of any Oregon tax laws.

For purposes of this certificate, 'Oregon tax laws' means those programs listed in ORS305.380 (4). Examples include the state inheritance tax, personal income tax, withholding tax, corporation income and excise taxes, amusement device tax, timber taxes, cigarette tax, other tobacco tax, 9-1-1 emergency communications tax, the elderly rental assistance program and local taxes administered by the Department of Revenue.

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ (Print or Type)

Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

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**SECTION 00465 – CCB License Certification**

**CERTIFICATION OF LICENSING BY OREGON CONSTRUCTION  
CONTRACTORS BOARD**

**This page must be completed, signed, and returned with the Bid Schedule.  
Failure to do so will result in bid rejection.**

This certifies that the below named Bidder is licensed by the State of Oregon Construction Contractor's Board required by ORS 279C.365 (1) (k).

**CERTIFICATION:**

Bidder hereby certifies that it is licensed by the State of Oregon Construction Contractor's Board and is not disqualified by the Board from performing a public improvement contract, as required by ORS 279C.365 (1) (k).

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ (Print or Type)

Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

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## NOTICE OF AWARD

---

**Date of Issuance:**

**Owner:** City of Florence

**Owner's Contract No.:**

**Engineer:** Civil West Engineering Services

**Engineer's Project No.:** 1503-022

**Project:** Siuslaw Estuary Trail

**Contract Name:**

**Bidder:**

**Bidder's Address:**

**TO BIDDER:**

You are notified that Owner has accepted your Bid dated [\_\_\_\_\_] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

\_\_\_\_\_  
*[Describe Work, alternates, or sections of Work awarded]*

The Contract Price of the awarded Contract is: \$ \_\_\_\_\_ *[note if subject to unit prices or cost-plus]*

[ ] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically. *[Revise if multiple copies accompany the Notice of Award]*

Sets of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner [\_\_\_\_] counterparts of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security *[e.g., performance and payment bonds]* and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any):

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

---

Owner: City of Florence

\_\_\_\_\_  
Authorized Signature

By: \_\_\_\_\_

Title: \_\_\_\_\_

Copy: Engineer

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**AGREEMENT  
BETWEEN OWNER AND CONTRACTOR FOR  
CONSTRUCTION CONTRACT (STIPULATED PRICE)**

Prepared by



Issued and Published Jointly by





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**AGREEMENT  
BETWEEN OWNER AND CONTRACTOR  
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and  
between \_\_\_\_\_ City of Florence \_\_\_\_\_ (“Owner”) and  
\_\_\_\_\_ (“Contractor”).

Owner and Contractor hereby agree as follows:

**ARTICLE 1 – WORK**

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Furnish all labor, equipment and materials as required for the Siuslaw Estuary Trail project as shown in the Project Plans, consisting of complete path and parking lot construction consisting of grading, aggregate base, level 3 HMAC, standard curbs, pedestrian ramps, sidewalks, catch basin with infiltration basin, and associated items required for a complete installation.

**ARTICLE 2 – THE PROJECT**

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

**City of Florence – Siuslaw Estuary Trail**

**ARTICLE 3 – ENGINEER**

3.01 The Project has been designed by Civil West Engineering Services.

3.02 The Owner has retained Civil West Engineering Services (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

**ARTICLE 4 – CONTRACT TIMES**

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

A. The Work will be substantially completed within **120** calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **150** calendar days after the date when the Contract Times commence to run.

4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 3.01 above and that Owner will suffer financial and other losses if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
  - 1. Substantial Completion: Contractor shall pay Owner \$ 850 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
  - 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$ 425 for each day that expires after such time until the Work is completed and ready for final payment.
  - 3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

4.04 *Special Damages*

- A. In addition to the amount provided for liquidated damages, Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

**ARTICLE 5 – CONTRACT PRICE**

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item) as shown on the Bid Form, a sum of:

\$ \_\_\_\_\_

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 10.06 of the General Conditions.

- B. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

## ARTICLE 6 – PAYMENT PROCEDURES

### 6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

### 6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 25<sup>th</sup> day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
  - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract
    - a. 95 percent of Work completed (with the balance being retainage); If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
    - b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion of the entire construction to be provided under the Contract Documents Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

### 6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

## ARTICLE 7 – INTEREST (NOT USED)

## ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
  - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
  - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

- C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

## ARTICLE 9 – CONTRACT DOCUMENTS

### 9.01 *Contents*

- A. The Contract Documents consist of the following:
  - 1. This Agreement (pages 1 to ■■■, inclusive).
  - 2. Performance bond (pages ■■■ to ■■■, inclusive).
  - 3. Payment bond (pages ■■■ to ■■■, inclusive).
  - 4. Other bonds. (None)
  - 5. General Conditions (pages ■■■ to ■■■, inclusive).
  - 6. Supplementary Conditions (pages ■■■ to ■■■, inclusive).
  - 7. Specifications as listed in the table of contents.
  - 8. Drawings listed on the attached sheet index.
  - 9. Addenda (numbers ■■■ to ■■■, inclusive).

10. Exhibits to this Agreement (enumerated as follows):
  - a. Contractor's Bid (pages █ to █, inclusive).
11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
  - a. Notice to Proceed.
  - b. Work Change Directives.
  - c. Change Orders.
  - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

## **ARTICLE 10 – MISCELLANEOUS**

### **10.01 *Terms***

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

### **10.02 *Assignment of Contract***

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

### **10.03 *Successors and Assigns***

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

### **10.04 *Severability***

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

### **10.05 *Contractor's Certifications***

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

#### 10.06 *Other Provisions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or “track changes” (redline/strikeout), or in the Supplementary Conditions.
- B. Pursuant to ORS 279C.505(1) – Contractor shall make payment promptly, as due, to all persons supplying the Contractor with labor or materials for the performance of the work provided for in the contract. Contractor shall pay all contributions or amounts due the Industrial Accident Fund from the contractor or subcontractor incurred in the performance of the contract. Contractor shall not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished.
- C. Pursuant to ORS 279C.505 (2) – Contractor certifies that it has an employee drug testing program in place.
- D. If the Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the contractor or a subcontractor by any person in connection with the public improvement contract as the claim becomes due, the proper officer or officers representing the Owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the contractor by reason of the contract. Other provisions of ORS 279C.515 and ORS 279C.580 concerning payments also apply.
- E. Contractor shall comply with hours of labor rules Pursuant to ORS 279C.520, 279C.540, and 279C.545.
- F. Per ORS 279C.530, Contractor shall promptly, as due, make payment to any person, copartnership, association or corporation furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of the contractor, of all sums that the contractor agrees to pay for the services and all moneys and sums that the contractor collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services. All subject employers working under the contract are either employers that will comply with ORS 656.017 or employers that are exempt under ORS 656.126
- G. Contractor certifies, and it shall be a condition of the Contractor’s bond as provided by ORS 279C.800 to 279C.870, that in performing the Agreement Contractor will pay and cause to

be paid not less than the prevailing wages as of the date of the bid, per hour, per day and per week, for each and every person who may be employed in the performance of this Agreement.

- H. Public Works Bond – Contractor shall have a public works bond filed with the Oregon Construction Contractors Board before starting Work on the Project unless exempt under ORS 279C.836. Contractor shall include in every subcontract a provision requiring every subcontractor to have a public works bond filed with the Oregon CCB before starting Work on the project unless exempt under ORS 279C.836.
- I. 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 Agreement.
- J. The terms of this Agreement shall not be waived, altered, modified, supplemented, or amended, in any manner whatsoever, except by written instrument. Such waiver, alteration, modification, supplementation, or amendment, if made, shall be effective only in the specific instance and for the purpose given, and shall be valid and binding only if it is signed by all parties to this Agreement. The failure of Owner to enforce any provision of this Agreement shall not constitute a waiver by the Owner of that or any other provision.
- K. This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon. Any litigation between the Owner and the Contractor arising out of or related to this Agreement which is not resolved pursuant to SGC 16.01 shall be brought and maintained solely and exclusively in the Circuit Court of the State of Oregon for Lane County. Provided, if any litigation arising under the Agreement must be brought in a federal forum, it shall be brought and maintained solely and exclusively in the United States District Court for the District of Oregon in Eugene, Oregon. Contractor hereby consents to the personal jurisdiction of all courts within the State of Oregon.
- L. Merger. This Agreement, which includes all Contract Documents as identified herein, constitutes the entire agreement between the parties. There are no understandings, agreements, or representations, oral or written, regarding this Agreement, except as specified or referenced herein. Contractor, by the signature below of its authorized representative, hereby acknowledges that it has read this Agreement, understands it, and agrees to be bound by its terms and conditions.
- M. This Agreement may be executed in counterparts, each of which shall be an original, and all of which shall constitute but one and the same instrument.



IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on \_\_\_\_\_ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

City of Florence

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

*(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

250 Hwy 101 North

Florence, Oregon 97439

License No.: \_\_\_\_\_  
*(where applicable)*

*(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)*

*NOTE TO USER: Use in those states or other jurisdictions where applicable or required.*

# Notice to Proceed

Date: \_\_\_\_\_, 2024

Project: **Siuslaw Estuary Trail**

Owner: **City of Florence, Lane County, Oregon**

Owner's Contract No.:

Contract: **Siuslaw Estuary Trail**

Engineer's Project No.: 1503-022

Contractor:

Contractor's Address: *[send Certified Mail, Return Receipt Requested]*

**TO CONTRACTOR:**

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on [\_\_\_\_\_, 2024. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, [the date of Substantial Completion is \_\_\_\_\_, and the date of readiness for final payment is \_\_\_\_\_] **or** [the number of days to achieve Substantial Completion is \_\_\_\_\_, and the number of days to achieve readiness for final payment is \_\_\_\_\_].

Before starting any Work at the Site, Contractor must comply with the following:

*[Note any access limitations, security procedures, or other restrictions]*

\_\_\_\_\_  
 Contractor

\_\_\_\_\_  
 Owner: City of Florence

\_\_\_\_\_  
 Authorized Signature

\_\_\_\_\_  
 Authorized Signature

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Date

*Copy to Engineer*

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**PERFORMANCE BOND**

Date \_\_\_\_\_

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

CONTRACTOR (*Name and Address*): SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

**City of Florence  
 250 Hwy 101 North  
 Florence, Oregon 97439**

**CONTRACT**

Effective Date of Agreement:

Amount:

Description (*Name and Location*): **City of Florence – Siuslaw Estuary Trail**

**BOND**

Bond Number:

Date (*Not earlier than Effective Date of Agreement*):

Amount:

Modifications to this Bond Form: None See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

**CONTRACTOR AS PRINCIPAL**

**SURETY**

\_\_\_\_\_  
 Contractor's Name and Corporate Seal (Seal)

\_\_\_\_\_  
 Surety's Name and Corporate Seal (Seal)

By: \_\_\_\_\_  
 Signature

By: \_\_\_\_\_  
 Signature (Attach Power of Attorney)

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Title

Attest: \_\_\_\_\_  
 Signature

Attest: \_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.**

1. The Contractor and 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 when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:
  - 3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable 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;
  - 3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
  - 3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. 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:
  - 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
  - 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
  - 5.3 Obtain bids or negotiated proposals 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 a contractor selected with the Owners 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 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
  - 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
    - 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
    - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven 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 Paragraph 5.4, and the Owner refuses the payment 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.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, 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. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 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 5; and

7.3 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.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. 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 or its heirs, executors, administrators, successors, and assigns.

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. 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 a declaration of 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 periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

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 herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 14. Definitions

14.1 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 for the Contractor for 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.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

FOR INFORMATION ONLY – (*Name, Address and Telephone*)

Surety Agency or Broker:

Owner's Representative (*Engineer*): **Civil West Engineering Services, Inc.; 486 E Street, Coos Bay, Oregon 97420 –  
ph#541-266-8601**

## PAYMENT BOND

Date \_\_\_\_\_

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

CONTRACTOR (*Name and Address*):

SURETY (*Name, and Address of Principal  
Place of Business*):

OWNER (*Name and Address*):

**City of Florence  
250 Hwy 101 North**

### CONTRACT

Effective Date of Agreement:

Amount:

Description (*Name and Location*): **City of Florence – Siuslaw Estuary Trail**

### BOND

Bond Number:

Date (*Not earlier than Effective Date of Agreement*):

Amount:

Modifications to this Bond Form: None See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature (Attach Power of Attorney)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.**



1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
  - 5.1 Claimants who do not have a direct contract with the Contractor,
    - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
    - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
  - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
  - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
  - 7.2 Pay or arrange for payment of any undisputed amounts.
  - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. 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 Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. 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 the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. 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.
12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, 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.
13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. 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 herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

## 16. Definitions

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **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 Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the 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.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

FOR INFORMATION ONLY – *(Name, Address, and Telephone)*

Surety Agency or Broker:

Owner's Representative: **Civil West Engineering Services, Inc.; 486 E Street, Coos Bay, Oregon 97420 ph# 541-266-8601**





**CERTIFICATE OF SUBSTANTIAL COMPLETION**

Owner:	City of Florence	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	Civil West Engineering Inc.	Engineer's Project No.:	1503-022
Project:	Siuslaw Estuary Trail	Contract Name:	

**This [preliminary] [final] Certificate of Substantial Completion applies to:**

All Work  The following specified portions of the Work:

**Date of Substantial Completion**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

**The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows:** *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities:  None  
 As follows

Amendments to Contractor's responsibilities:  None  
 As follows:

The following documents are attached to and made a part of this Certificate:

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

<b>EXECUTED BY ENGINEER:</b>		<b>RECEIVED:</b>		<b>RECEIVED:</b>	
By: _____	By: _____	By: _____	By: _____	By: _____	By: _____
(Authorized signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)			
Title: <u>Project Engineer</u>	Title: _____	Title: _____			
Date: _____	Date: _____	Date: _____			

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by





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# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
  3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  5. *Bidder*—An individual or entity that submits a Bid to Owner.
  6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
  7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
  8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
  9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
  10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.



11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.

27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.

41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, material-man, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *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; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

## 1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*:
  1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or

authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

- C. *Day*:
  - 1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*:
  - 1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
    - a. does not conform to the Contract Documents; or
    - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
    - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide*:
  - 1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
  - 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
  - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
  - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## **ARTICLE 2 – PRELIMINARY MATTERS**

### **2.01 *Delivery of Bonds and Evidence of Insurance***

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to

Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

## 2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

## 2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
  - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
  - 2. a preliminary Schedule of Submittals; and
  - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

## 2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

## 2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or

progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

#### 2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

### **ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

#### 3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

#### 3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
  1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
  2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of

Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

### 3.03 *Reporting and Resolving Discrepancies*

#### A. *Reporting Discrepancies:*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

#### B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
  - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
  - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

### 3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible

after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

### 3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
  - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
  - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

## **ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK**

### 4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

### 4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

### 4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer



whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

#### 4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
  - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
  - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

#### 4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
  - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
  - 2. abnormal weather conditions;
  - 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
  - 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.

- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

**ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS**

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner’s interest therein as necessary for giving notice of or filing a mechanic’s or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

- A. *Limitation on Use of Site and Other Areas:*
  - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor’s operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
  - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all 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 claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly

or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

### 5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
  - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
  - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
  - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
  - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
  - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
  - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

### 5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
  - 1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
  - 2. is of such a nature as to require a change in the Drawings or Specifications; or

3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
  1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
    - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
    - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
  2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
    - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
    - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract

Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

- c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

#### 5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
  2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
    - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
    - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
    - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
    - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
    - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
    - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
    - d. Contractor gave the notice required in Paragraph 5.05.B.
  2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
  3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

#### 5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
  2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, 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 a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

## **ARTICLE 6 – BONDS AND INSURANCE**

### **6.01 *Performance, Payment, and Other Bonds***

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such



notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.

- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

#### 6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's

interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.

- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

### 6.03 *Contractor's Insurance*

- A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
  1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
  2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
  3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
  4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
  1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
  2. claims for damages insured by reasonably available personal injury liability coverage.
  3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
  1. Products and completed operations coverage:
    - a. Such insurance shall be maintained for three years after final payment.
    - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
  2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
  3. Broad form property damage coverage.
  4. Severability of interest.
  5. Underground, explosion, and collapse coverage.
  6. Personal injury coverage.

7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
  8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, “Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured” or its equivalent.
- D. *Automobile liability*: Contractor shall purchase and maintain automobile liability insurance against 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 automobile liability policy shall be written on an occurrence basis.
  - E. *Umbrella or excess liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer’s liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
  - F. *Contractor’s pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor’s operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
  - G. *Additional insureds*: The Contractor’s commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
  - H. *Contractor’s professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
  - I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
    1. include at least the specific coverages provided in this Article.
    2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
    3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.

4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
  5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

#### 6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

#### 6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
  1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
  2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
  3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are

to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.

4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
  5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
  6. extend to cover damage or loss to insured property while in transit.
  7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
  8. allow for the waiver of the insurer's subrogation rights, as set forth below.
  9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
  10. not include a co-insurance clause.
  11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
  12. include performance/hot testing and start-up.
  13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment,

or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

#### 6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
  - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
  - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

#### 6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

## **ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES**

### *7.01 Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

### *7.02 Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

### *7.03 Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 7.04 “Or Equals”

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or equal” item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an “or equal” item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
    - a. in the exercise of reasonable judgment Engineer determines that:
      - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
      - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
      - 3) it has a proven record of performance and availability of responsive service; and
      - 4) it is not objectionable to Owner.
    - b. Contractor certifies that, if approved and incorporated into the Work:
      - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
      - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor’s Expense:* Contractor shall provide all data in support of any proposed “or equal” item at Contractor’s expense.
- C. *Engineer’s Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each “or-equal” request. Engineer may require Contractor to furnish additional data about the proposed “or-equal” item. Engineer will be the sole judge of acceptability. No “or-equal” item will be ordered, furnished, installed, or utilized until Engineer’s review is complete and Engineer determines that the proposed item is an “or-equal”, which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer’s Determination:* Neither approval nor denial of an “or-equal” request shall result in any change in Contract Price. The Engineer’s denial of an “or-equal” request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.



7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
  2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
  3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
    - a. shall certify that the proposed substitute item will:
      - 1) perform adequately the functions and achieve the results called for by the general design,
      - 2) be similar in substance to that specified, and
      - 3) be suited to the same use as that specified.
    - b. will state:
      - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
      - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
      - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
    - c. will identify:
      - 1) all variations of the proposed substitute item from that specified, and
      - 2) available engineering, sales, maintenance, repair, and replacement services.
    - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
  - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
  - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

#### 7.07 *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 which 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 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 Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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 specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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.

#### 7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist 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 which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

#### 7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

#### 7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then

within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

#### 7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

#### 7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. all persons on the Site or who may be affected by the Work;
  - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

- A. *Shop Drawing and Sample Submittal Requirements:*
  - 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
    - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
    - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
    - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
    - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
  - 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
  - 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop

Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
1. *Shop Drawings:*
    - a. Contractor shall submit the number of copies required in the Specifications.
    - b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.
  2. *Samples:*
    - a. Contractor shall submit the number of Samples required in the Specifications.
    - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
  3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
  2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
  3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
  4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
  5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
  7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
  8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- E. *Resubmittal Procedures:*
1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
  2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
  3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  1. observations by Engineer;
  2. recommendation by Engineer or payment by Owner of any progress or final payment;
  3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  4. use or occupancy of the Work or any part thereof by Owner;
  5. any review and approval of a Shop Drawing or Sample submittal;
  6. the issuance of a notice of acceptability by Engineer;



7. any inspection, test, or approval by others; or
  8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

#### 7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

#### 7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

## **ARTICLE 8 – OTHER WORK AT THE SITE**

### **8.01 *Other Work***

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

### **8.02 *Coordination***

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:

1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
  2. an itemization of the specific matters to be covered by such authority and responsibility; and
  3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

### 8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all 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 such damage, delay, disruption, or interference.

## **ARTICLE 9 – OWNER’S RESPONSIBILITIES**

### 9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### 9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer’s status under the Contract Documents shall be that of the former Engineer.

### 9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

### 9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

### 9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner’s duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner’s duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner’s identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

### 9.06 *Insurance*

- A. Owner’s responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

### 9.07 *Change Orders*

- A. Owner’s responsibilities with respect to Change Orders are set forth in Article 11.

### 9.08 *Inspections, Tests, and Approvals*

- A. Owner’s responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

### 9.09 *Limitations on Owner’s Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor’s failure to perform the Work in accordance with the Contract Documents.

### 9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner’s responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

**ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION**

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

## ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

### 11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
1. *Change Orders:*
    - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
    - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
  2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
  3. *Field Orders:* Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

### 11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes

cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
  - 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
  - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
  - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
  - 1. a mutually acceptable fixed fee; or
  - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
    - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;



- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

#### 11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

#### 11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
  1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
  2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
  3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

### 11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
  - 1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  - 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
  - 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  - 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

### 11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

## **ARTICLE 12 – CLAIMS**

### 12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
  - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
  - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
  - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*:
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
  2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
  3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

## **ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

### **13.01 *Cost of the Work***

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
  2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the

Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
  - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
  - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
  - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
  - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
  - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
  - g. The cost of utilities, fuel, and sanitary facilities at the Site.
  - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
  - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
  - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
  - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
  - 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
  - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

### 13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
  - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
  - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

### 13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
  - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

## **ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

### *14.01 Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

### *14.02 Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
  - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
  - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
  - 3. by manufacturers of equipment furnished under the Contract Documents;
  - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
  - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

#### 14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

#### 14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

#### 14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.



1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

#### 14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

### **ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD**

#### 15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application

for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

**B. *Applications for Payments:***

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

**C. *Review of Applications:***

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
  - a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
  - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
  - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress,

- or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
- b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
    - a. to supervise, direct, or control the Work, or
    - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
    - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
    - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
    - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
  5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
  6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
    - a. the Work is defective, requiring correction or replacement;
    - b. the Contract Price has been reduced by Change Orders;
    - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
    - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
    - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. *Payment Becomes Due:*
1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. *Reductions in Payment by Owner:*
1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
    - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
  - c. Contractor has failed to provide and maintain required bonds or insurance;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
  - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
  - f. the Work is defective, requiring correction or replacement;
  - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - h. the Contract Price has been reduced by Change Orders;
  - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
  - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
  - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - l. there are other items entitling Owner to a set off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
  3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

#### 15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

#### 15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider

the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

#### 15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
  - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
  - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer

will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

#### 15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 15.06 *Final Payment*

##### A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents;
  - b. consent of the surety, if any, to final payment;
  - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
  - d. a list of all disputes that Contractor believes are unsettled; and
  - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

##### B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the

Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due*: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

#### 15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

#### 15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
  - 1. correct the defective repairs to the Site or such other adjacent areas;
  - 2. correct such defective Work;
  - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay 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 such correction or

repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).

- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

## **ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION**

### **16.01 *Owner May Suspend Work***

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

### **16.02 *Owner May Terminate for Cause***

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
  - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
  - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
  - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
  - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
  - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
  - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.



- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

#### 16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
  1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

#### 16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted,

or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

## **ARTICLE 17 – FINAL RESOLUTION OF DISPUTES**

### *17.01 Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
  - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
  - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
  - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
  - 2. agree with the other party to submit the dispute to another dispute resolution process; or
  - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

## **ARTICLE 18 – MISCELLANEOUS**

### *18.01 Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
  - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
  - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

### *18.02 Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

### *18.03 Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if

repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

# SUPPLEMENTARY CONDITIONS

Prepared by



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## Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

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### ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

#### SC-1.01 *Defined Terms*

SC-1.01. Add to the list of definitions in Paragraph 1.01.A by inserting the following as numbered items in their proper alphabetical positions:

Agency – If project has involvement from funding agency, Agency approval of various contract items is required and the term Agency may appear in the Contract Documents. The following Agency is involved and the term Agency means:

None: No funding agency is involved in this project

SC 1.01.A.8 Add the following language at the end of last sentence of Paragraph 1.01.A.8:

The Change Order form to be used on this Project is EJCDC C-941. Agency approval is required before Change Orders are effective.

SC 1.01.A.40 Amend Paragraph 1.01.A.40 to read as follows:

Substantial Completion - The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer as evidenced by Engineer's definitive certificate of Substantial Completion, it is 100% complete in accordance with the Contract Documents with the exception of minor and specific corrective items that would normally be itemized on a final punch list and completed before final acceptance; or if no such certificate is issued, when the Work is complete and ready for final payment as evidenced by Engineer's written recommendation of final payment in accordance with paragraph 14.07. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

SC 1.01.A.48 Add the following language at the end of the last sentence of Paragraph 1.01.A.48:

A Work Change Directive cannot change Contract Price or Contract Times without a subsequent Change Order.

SC 1.01.A.49 Add the following new Paragraph after Paragraph 1.01.A.48:

Abnormal Weather Conditions – Conditions of extreme or unusual weather for a given region, elevation, or season as determined by Engineer. Extreme or unusual weather that is typical for a given region, elevation, or season should not be considered Abnormal Weather Conditions.



## ARTICLE 2 – PRELIMINARY MATTERS

### SC-2.01 Delivery of Bonds and Evidence of Insurance

- SC-2.01 Delete Paragraphs 2.01 B. and C. in their entirety and insert the following in their place:
- B. Evidence of Contractor’s Insurance: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies of insurance (including all endorsements, and identification of applicable self-insured retentions and deductibles) required to be provided by Contractor in Article 6. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
  - C. Evidence of Owner’s Insurance: After receipt from Contractor of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor copies of the policies of insurance to be provided by Owner under Article 6 (if any). Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

### SC-2.02 Copies of Documents:

- SC-2.02.A. Amend the first sentence of Paragraph 2.02.A. to read as follows:

Owner shall furnish to Contractor up to [5] printed or hard copies of the Drawings and Technical Specifications (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF).

## ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

- SC-4.01.A Amend the last sentence of Paragraph 4.01.A by striking out the following words:

In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

- SC-4.05.C.2 Amend Paragraph 4.05.C.2 by striking out the following text: “abnormal weather conditions;” and inserting the following text:

Abnormal weather conditions are further defined as the occurrence of more than 1.5 inches of rain in a 24-hour period on a normal workday or 1.0 inch of snow in a 24-hour period on a normal workday.

## ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

### SC-5.03 Subsurface and Physical Conditions

- SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.B:

- C. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:
  - 1. None.

- D. The following drawings of physical conditions relating to existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities) are known to Owner:
  - 1. None
- E. The reports and drawings identified above are not part of the Contract Documents, but the “technical data” contained therein upon which Contractor may rely, as expressly identified and established above, are incorporated in the Contract Documents by reference. Contractor is not entitled to rely upon any other information and data known to or identified by Owner or Engineer.
- F. Copies of reports and drawings identified in SC-5.03.C and SC-5.03.D that are not included with the Bidding Documents may be examined at Civil West Engineering Services, Inc.; at 486 E Street; Coos Bay, Oregon 97420 during regular business hours and may be available electronically to those bidding. These reports and drawings are not part of the Contract Documents, but the "technical data" contained therein by reference. Contractor is not entitled to rely upon other information and data utilized by Engineer in the preparation of the Drawings and Specifications.

*SC-5.06 Hazardous Environmental Conditions*

SC-5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.
- B. Not Used.

SC-5.06.C.1 Contractor shall be responsible for and to pay all costs associated with the abatement, removal, and disposal of any existing Asbestos-Cement pipe requiring removal or disturbed during the Work which is shown or indicated in Drawings or Specifications.

*SC-5.07 Historical or Archaeological Finds*

SC-5.07 Add the following new paragraph immediately after Paragraph 5.06.K:

- A. Historical or Archaeological Finds – Where historical objects of archaeological or paleontological nature are encountered during the course of construction, including but not limited to ruins, sites, buildings, artifacts, and fossils, the Contractor shall suspend operations in the area, preserve all such objects from disturbance and shall notify the Engineer of the nature and location of such finds. The Engineer will arrange for the disposition of all finds and shall notify the Contractor when to proceed with construction in the affected area

## ARTICLE 6 - BONDS AND INSURANCE

### SC-6.01 *Performance, Payment and Other Bonds*

SC-6.01 Add the following paragraph immediately after Paragraph 6.02.B:

1. The Bonds shall be accompanied by the name, address and phone number of the agent for the surety who is authorized to receive notice of claims against the Bond.

### SC-6.02 *Insurance—General Provisions*

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

1. Bonds and insurance shall be written by companies licensed to do business in the State of Oregon and satisfactory to the Owner.

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B.1:

2. Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

### SC-6.03 *Contractor's Liability Insurance*

SC-6.03 Add the following new paragraph immediately after Paragraph 6.03.C.b.:

Other parties to be named as additional insured include the following:

Tenants (if applicable)

Subcontractors (if not separately insured)

City of Florence

Civil West Engineering Services

SC-6.03 Add the following new paragraph immediately after Paragraph 6.03.J:

- K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverage's under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

a. State: Statutory

b. Applicable Federal (e.g., Longshoremen's) Statutory

c. Employer's Liability \$ 500,000

Contractor shall require all subcontractors to purchase and maintain Workman's Compensation Insurance, including Occupational Disease and Employer's Liability Insurance, in the amounts and coverage as required by all applicable Federal, State or other laws.

2. Contractor's General Liability under paragraphs 6.03.B and C of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody, and control of the Contractor:

General Aggregate	\$2,000,000
Products - Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence (Bodily Injury and Property Damage)	\$1,000,000
Excess or Umbrella Liability	
1) Aggregate	\$1,000,000
2) Each Occurrence	\$1,000,000

Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.

3. Automobile Liability under paragraph 6.03.D of the General Conditions:

Bodily Injury (Each Person)	\$1,000,000
Bodily Injury (Each Accident)	\$1,000,000
Property Damage (Each Accident)	\$1,000,000
Combined Single Limit of	\$1,000,000

4. Contractual Liability required by paragraph 6.03.H of the General Conditions shall provide coverage for not less than the following amounts.

Bodily Injury (Each Person)	\$1,000,000
Bodily Injury (Each Accident)	\$1,000,000
Property Damage (Each Accident)	\$1,000,000
Property Damage (Annual Aggregate)	\$1,000,000

5. All liability policies required by 6.03.I. 1 - 5 shall be primary and non-contributory with Owner and shall contain a waiver of subrogation in favor of Owner.

6. Additional Insureds: Add the following paragraph immediately after Paragraph 6.03.G:

Other parties to be named as additional insured include the following:

- Tenants (if applicable)
- Subcontractors (if not separately insured)
- City of Florence
- Civil West Engineering Services

## ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

SC-7.03 *Services, Materials and Equipment*

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.B:

1. Contractor agrees to prefer goods or services that have been manufactured or produced in the United States of America if price, fitness, availability or quality is otherwise equal.

SC-7.04.A Amend the third sentence of Paragraph 7.04.A by striking out the following words:

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EJCDC® C-800, Supplementary Conditions.

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Unless the specification or description contains or is followed by words reading that no like, equivalent, or 'or-equal' item is permitted.

SC-7.04.A.1 Amend the last sentence of Paragraph a.3 by striking out "and;" and adding a period at the end of Paragraph a.3.

SC-7.04.A.1 Delete paragraph 7.04.A.1.a.4 in its entirety and insert the following in its place:  
[Deleted]

SC-7.05 Add the following new paragraph immediately after Paragraph 7.05.A.3.d:

- e. It shall be the responsibility of the Contractor to insure that the items to be furnished as substitution shall fit within the space and envelope of the originally specified item. The Contractor shall make necessary field measurements to ascertain space requirements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Plans and Specifications. Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the Contractor to install the equipment to operate properly and in harmony with the intent of the Plans and Specifications and to make all changes in the work required by the different arrangement of connections.

SC-7.06.A Amend Paragraph 7.06.A by adding the following text to the end of the Paragraph:

SC-7.06.A.1 The Contractor shall not award work valued at more than fifty percent of the Contract Price to Subcontractor(s), without prior written approval of the Owner.

SC-7.06.E Amend the second sentence of Paragraph 7.06.E by striking out "Owner may also require Contractor to retain specific replacements; provided, however, that".

SC-7.06.M Add the following new paragraphs immediately after Paragraph 7.06.M:

SC-7.06.M.1 Contractor agrees to make all provisions of the contract with the Owner applicable to any Subcontractor performing work under the contract.

SC-7.06.M.2 Contractor and all first tier Subcontractors and Suppliers must comply with prompt payment provisions pursuant to ORS 279C.515. Contractor shall include in each subcontract for property, materials or services (1) a payment clause which obligates the Contractor to pay such Subcontractor or Supplier within 30 days of receiving payment from the Owner, (2) an interest penalty clause which obligates the Contractor to pay the Subcontractor an interest penalty on delinquent payments, and (3) a clause which requires first tier Subcontractors or Suppliers to include similar payment and interest penalty clauses in lower tier subcontracts. These clauses and the rights and obligations described thereby, shall conform to the requirements of ORS 279C.515 and ORS 279C.580.

#### SC-7.09 *Taxes*

SC-7.09 Add the following new paragraphs immediately after Paragraph 7.09.A:

1. Contractor and any Subcontractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
2. Contractor shall pay promptly all contributions or amounts to the State Industrial Accident Fund and the State Unemployment Compensation Fund from Contractor or any Subcontractor in connection with the performance of the contract.

SC-7.10 *Laws and Regulations*

SC-7.10 Add the following new paragraphs immediately after Paragraph 7.10.C:

- D. Payment of Prevailing Wage Rates for Public Works. The Contractor and all persons doing or contracting to do any of the work contemplated by the Contract shall comply with all Federal and State Laws in employment and payment of labor. Contractor shall comply with all provisions of said laws (and pay all related fees), not only in regard to the payment of prevailing wage rates, but also in the matter of the necessary certificates and affidavits required to accompany each request for payment. No payment, progress or otherwise, will be paid unless accompanied by the necessary certificates and affidavits pertaining to prevailing wages.
- E. The minimum wages to be paid workers on this project shall not be less than the prevailing rate including fringe benefits in accordance with ORS 279C, paid to the corresponding classes of workers in the locality where the public work is being provided. Prevailing rates shall be in accordance with the most current version (or as it is modified by addendum) of the "Prevailing Wage Rates for Public Works Contracts in Oregon" as published by the Oregon Bureau of Labor and Industries (BOLI). Such publications can be obtained from the Bureau of Labor and Industries and the U.S. Department of Labor and a copy of the most current version is to be supplied to the Owner with the first pay request. If a dispute arises as to what is the prevailing wage rate for any class of workers, and a dispute cannot be settled by the parties involved, it may be referred to the Commissioner of Labor, State of Oregon, for final determination.
  - 1. The wage rates are minimum rates only and the Owner will not consider any claims for additional compensation because of payment made by the Contractor or a Subcontractor of any wage rate in excess of the prevailing rate.
  - 2. If Owner determines at any time that the prevailing rate of wage has not or is not being paid as required herein, it may retain from moneys due to Contractor an amount sufficient to make up the difference between the wages actually paid and the prevailing rate of wages, and may also cancel the Contract. Liquidated damages for failure to pay the rate of wage required herein shall be an additional amount equal to the unpaid premium, over and above the liability of the Contractor, any Subcontractor, or surety to pay said unpaid minimum to any workers affected.
- F. Under the provisions of Oregon Law, ORS 279C.845, the wage certification form on public works contracts must be provided: Once within fifteen (15) days of the date the Contractor or Subcontractor first began work on the project and once before the final inspection of the project by the public contracting agency: In addition, for projects exceeding ninety (90) days, submissions are to be made at 90-day intervals. Payroll information is to be filed with both the public contracting agency and the Wage and Hour Division, Bureau of Labor and Industries, 1400 S.W. 5th Avenue, Portland, Oregon 97201. This payroll information must be kept by the Contractor and/or Subcontractor for three (3) years.
- G. Contractor shall strictly observe and obey all of the terms and provisions of ORS 279C pertaining specifically, but not exclusively, to the furnishings of Workers Compensation Insurance, payment of laborers and material men, the withholding of State and Federal income and other taxes, hours of labor, and all other regulations provided in said chapter, and shall hold Owner harmless on account thereof.
- H. Contractor shall employ no person for more than eight hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency or where the public policy

absolutely requires it. In such cases, Contractor shall pay the laborer at least time and a half pay for all overtime in excess of eight hours a day and for work performed on any legal holiday specified in ORS 279C.520. When specifically agreed to in a written labor-management negotiated labor agreement, a laborer may be paid at least time and a half pay for work performed in any legal holiday specified in ORS 187.010 and 187.020 and not listed in ORS 279C.540(1). Contractor to comply with ORS 279C.540 to 279C.545 and ORS 653.268 to 653.269 regarding hours of labor and overtime.

- I. Contractor shall comply with ORS 279C.530 and shall make payment promptly, as due, to any person, co-partnership, association, or corporation furnishing medical, surgical, hospital, or other needed care of attention incident to sickness or injury to the employees of Contractor of all sums which the Contractor agreed to pay or collected or deducted from the wages of employees pursuant to any law, Contractor or agreement for the purpose of providing payment for such service.
- J. The Contractor, or its Subcontractors, if any, and all employers working under this Contract are subject employers under Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide Workers' Compensation for all their subject workers as defined under ORS chapter 656 (ORS 279C.530(2)).
- K. Contractor shall comply with all federal, state, and local laws and regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the performance of the Contract. If new or amended statutes, ordinances, or regulations are adopted, or the Contractor encounters a condition not referred to in the bid document not caused by the Contractor and not discoverable by reasonable site inspection which requires compliance with federal, state, or local laws or regulations dealing with the prevention of environmental pollution or the preservation of natural resources, both the Owner and the Contractor shall have all the rights and obligations specified in ORS 279C.525 to handle the situation.
- L. This Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, handicap, marital status, age or national origin. Such action shall include, but not be limited to: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship.
  - 1. The Contractor shall post in conspicuous places available to employees and applicant for employment, notices setting forth the provisions of this nondiscrimination clause. Contractor's and Subcontractor's solicitations and advertisements for employees shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, handicap, marital status, age or national origin.
- M. Contractor certifies that all subcontractors performing work described in ORS 701.005(2) (i.e. construction work) will be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.035 to 701.055 before the subcontractors commence work under the Contract.
- N. Upon award of this contract, the Owner is required to pay a fee to the BOLI Prevailing Wage Rate Unit in accordance with ORS 279C.830 (2) and OAR 839-025-0200. The amount of the fee shall be one tenth of one percent (.001) of the contract price; however, the fee must be no less than \$250 or more than \$7,500 regardless of the contract price.

**SC-7.18**     *Indemnification*

SC-7.18     Add the following new paragraphs immediately after Paragraph 7.18.C.2:

- D. Contractor shall not be required to indemnify any indemnity to the extent the claim, cost, loss or damage is caused by the indemnity's negligence.
- E. The performance of this Contract is at Contractor's sole risk. The service or services to be rendered under this Contract are those of an independent Contractor who is not an officer or agent of the Owner as those terms are used in ORS 30.265.
- F. The Contractor shall not permit any lien or claim to be filed or prosecuted against the Owner in connection with this Contract and agrees to assume full responsibility for their satisfaction should any lien or claim be filed.

## ARTICLE 8 – OTHER WORK AT THE SITE

### SC-8.02 *Coordination*

SC-8.02 Delete Paragraph 8.02A in its entirety and replace with the following:

- 8.02. A. Owner does NOT intend to contract with others for the performance of the work on the Project at the Site. See Division 1 for other information on Coordination.

### SC-8.04 *Claims Between Contractors*

SC-8.04 On Projects involving multiple contractors, add the following new paragraph immediately after paragraph GC-8.03:

- 8.04.A. Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor, Owner, Engineer, or the construction coordinator, then Contractor (without involving Owner, Engineer, or construction coordinator) shall either (1) remedy the damage, (2) agree to compensate the other contractor for remedy of the damage, or (3) remedy the damage and attempt to settle with such other contractor by agreement, or otherwise resolve the dispute by arbitration or at law.
- 8.04.B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Engineer, the construction coordinator and the officers, directors, partners, employees, agents and other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any other contractor against Owner, Engineer, consultants, or the construction coordinator to the extent said claim is based on or arises out of Contractor's performance of the Work. Should another contractor cause damage to the Work or property of Contractor or should the performance of work by any other contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner, Engineer, or the construction coordinator or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner, Engineer, or the construction coordinator on account of any such damage or Claim.
- 8.04C. If Contractor is delayed at any time in performing or furnishing the Work by any act or neglect of another contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a



Claim for an extension of times in accordance with Article 12. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner, Engineer, and construction coordinator for any delay, disruption, interference, or hindrance caused by any other contractor. This paragraph does not prevent recovery from Owner, Engineer, or construction coordinator for activities that are their respective responsibilities.

## **ARTICLE 9 – OWNER'S RESPONSIBILITIES**

### **SC-9.13**     *Owner's Site Representative*

SC-9.13        Add the following new paragraph immediately after Paragraph 9.12 of the General Conditions:

- 9.13        Owner will furnish a part time "Owner's Site Representative" to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner's Site Representative is not Engineer's consultant, agent, or employee.

## **ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION**

### **SC-10.03**     *Project Representative*

SC-10.03.A. Amend Paragraph 10.03.A to read as follows:

Engineer will furnish a Resident Project Representative (RPR) to assist Engineer in providing more extensive observation of the Work. The RPR will be the Engineer's employee or agent at the Site, will act as directed by and under the supervision of the Engineer, and will confer with Engineer regarding the RPR's actions. The authority and responsibilities of the Resident Project Representative and any assistants will be as provided herein, with limitations on the responsibilities thereof as provided in Paragraph 10.08 of the General Conditions.

1.        Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
2.        Serve as Engineer's liaison with Contractor to assist in providing information regarding the intent of the Contract Documents. Serve as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
3.        Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
4.        Observe and report to Engineer appropriate details relative to test procedures.
5.        Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the

schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

10.03.B. The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including “or-equal” items).
2. Exceed limitations of Engineer’s authority as set forth in the Contract Documents.
3. Undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor’s superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor’s work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

### **ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

SC 13.02.C Delete Paragraph 13.02.C in its entirety and insert the following in its place:  
[Deleted]

#### **SC-13.03 Unit Price Work**

SC 13.03.E Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
  1. if the Bid price of a particular item of Unit Price Work amounts to 20 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
  2. if there is no corresponding adjustment with respect to any other item of Work; and
  3. if Contractor believes that Contractor has incurred additional expense as a result thereof, Contractor may submit a Change Proposal, or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, Owner may make a Claim, seeking an adjustment in the Contract Price.

## ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

### SC-14.02 Tests, Inspections and Approvals

SC-14.02.A Add the following new paragraph immediately after paragraph 14.02.A:

1. Timely notice for inspections, tests, or approvals shall mean not less than 48 hours prior to the time when inspection, test, or approval is required.

## ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC-15.01.B Amend the second sentence of Paragraph 15.01.B.1 by striking out the following text: “a bill of sale, invoice, or other.”

SC-15.01.B.3 Add the following language at the end of paragraph 15.01.B.3:

No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Contractor.

SC-15.02.A Amend Paragraph 15.02.A by striking out the following text: “no later than seven days after the time of payment by Owner” and insert “no later than the time of payment by Owner.”

SC-15.01.B Add the following new paragraph immediately after Paragraph 15.01.B.2:

- a. *Payments of Liens, Withholding Taxes, Contributions to Industrial Accident Fund, Labor, and Materials.* The Contractor shall make payment promptly as due to all persons supplying to the Contractor labor or materials for the prosecution of the work provided for herein, and shall pay all contributions or amounts due the State Industrial Accident Fund from the Contractor or subcontractors incurred in the performance of this Contract. The Contractor shall permit no lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished, and shall promptly pay any and all withholding taxes, whether state or federal, all social security charges and all contributions on amounts due to the State Unemployment Compensation Trust Fund, and promptly pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees, or sums whatsoever which are now or may hereafter be required to be paid or withheld under any laws of the state and location where the work is to be performed. Contractor shall assume responsibility for satisfaction of any liens or claims filed or prosecuted and shall defend, indemnify and hold Owner harmless against any such liens or claims.
- b. *Payment of Claims by the Owner.* In the event the Contractor shall fail, neglect, or refuse to make prompt payment of any claim for labor or services furnished to the Contractor or Subcontractor by any person in connection with this contract as such claim becomes due, whether said services and labor be performed for the Contractor or a Subcontractor, then in such event, the proper officer or officers representing the Owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due to the Contractor. The payment of a claim in the manner authorized herein shall not relieve the Contractor or his Surety from his or its obligation with respect to any unpaid claims. If the Owner is unable to determine the validity of any claim for labor or material furnished, the Owner 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 by the Contractor or the Owner. There shall be no final acceptance of the work under the Contract until all such claims have been resolved.

SC-15.01.D. Amend Paragraph 15.01.D.1 to read as follows:

After presentation of the Application for Payment to Owner by Engineer with Engineer's recommendation, the Application for Payment will be reviewed and processed by Owner and any involved funding agencies. The amount recommended and accepted by Owner and any involved agencies will, subject to the provisions of paragraphs 15.01.C.5 and 15.01.E, become due and payable by Owner to Contractor within 45 days of submission to the Owner by Engineer.

SC-15.01.E.1 Add the following new paragraph immediately after Paragraph 15.01.E.1:

- m. Third party claims filed or evidence indicating probable filing of such claims.
- n. Failure of Contractor to make payments properly or promptly to subcontractors for material, labor, or equipment.
- o. Damage to Owner or others.

SC-15.01.E.2 Add the following new paragraph immediately after Paragraph 15.01.E.2:

- a. *The Owner and Contractor are bound by the rights and responsibilities of the prompt payment policies and shall comply with the procedures for prompt payment as stated in ORS 279C.515, 279C.570 and ORS 279C.580.*

### SC-15.03 Substantial Completion

SC-15.03.A Add the following new paragraphs immediately after Paragraph 14.04.A:

1. Substantially complete is further defined and clarified as being 100% complete in accordance with the Contract Documents with the exception of minor and specific corrective items that will be itemized by the Engineer on a final punch list and completed before final acceptance. Final completion of the entire project shall be no later than the time indicated on the Certificate of Substantial Completion. If no date is indicated, then fifteen (15) calendar days from the date of substantial completion will be considered maximum. If final completion is not accomplished within the time indicated, liquidated damages if included in this Contract and as defined in the Agreement will be reinstated at that date and will continue until final completion or a time extension is granted.
2. Liquidated Damages. Should the Contractor fail to accomplish Substantial Completion or Final Acceptance in the time agreed upon in the Contract or within such extra time as may have been allowed for delays by extensions granted as provided in the Contract, the Contractor shall reimburse the Owner for the additional expense and damage for every day, that the Contract remains uncompleted after the date of completion given in the Contract. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the Work within the time agreed is the per diem rate stipulated in the Agreement as a minimum or actual expenses or damages if they exceed this agreed to minimum amount. The said amounts are hereby agreed upon as liquidated damages for the loss to the Owner and on account of the value of the operation of the works dependent thereon. It is expressly understood and agreed

that this amount is not to be considered in the nature of a penalty, but as actual expense and damages experienced by the Owner for delay of completion beyond the agreed to Contract times. Owner is authorized to deduct the amount of such damages from any monies due the Contractor for work performed or material furnished under this Contract, and the Contractor and his sureties shall be liable for any excess. Liquidated damages include only cost and expenses incurred by the Owner for delay of completion beyond the agreed to Contract times. Liquidated damages do not include any other cost, expense or claim Owner may have against Contractor for any other reason.

SC-15.03.B Add the following new subparagraph to Paragraph 15.03.B:

If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, shall be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-15.06 *Final Payment*

SC-15.06.A Add the following paragraph immediately after Paragraph 15.06.A.3:

SC- 15.06.A.4 Final payment will not be made to the Contractor until it files with the Owner a notarized affidavit containing the following statements:

- a. "I (we) hereby certify that all work has been performed and material supplied in accordance with the plans, specifications, and Contract Documents for the above work;
- b. No less than the prevailing rates of wages as ascertained by the governing body of the contracting agency has been paid to laborers and workers employed on this work (a signed State-approved Wage Certification Form certifying that Contractor has paid not less than the prevailing rate of wages as required by law);
- c. No subcontract was assigned or transferred or performed by any subcontractor other than the original subcontractor, without prior notice having been submitted to the Engineer together with the names of all subcontractors;
- d. All suppliers and subcontractors connected with the Work have been paid in full;
- e. All claims for material and labor and other services performed in connection with these specifications have been paid; and
- f. All monies due the State Industrial Accident Fund, the State Unemployment Compensation Trust Fund, the State Tax Commission, hospital associations and/or others have been paid."

SC-15.06.D Add the following paragraph immediately after Paragraph 15.06.D:

- 1 Final Payment shall include all amounts previously withheld as retainage.

## ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

SC-17.01.C Add the following new paragraph immediately after Paragraph 17.01.B:

17.01.C If either party commences any legal action, suit or proceeding against the other to enforce the terms of this Contract or to interpret any provision of these Contract Documents, the prevailing party shall be entitled to recover from the non-prevailing party reasonable attorney's fees and costs, as are fixed by the courts, incurred in any action, suit or proceeding and in any appeal therefrom.

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**Work Change Directive No.**

Date of Issuance:	Effective Date:
Owner: City of Florence	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Civil West Engineering Inc.	Engineer's Project No.: 1503-022
Project: Siuslaw Estuary Trail	Contract Name:

**Contractor is directed to proceed promptly with the following change(s):**

Description:

Attachments: *[List documents supporting change]*

**Purpose for Work Change Directive:**

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- Non-agreement on pricing of proposed change.
- Necessity to proceed for schedule or other Project reasons.

**Estimated Change in Contract Price and Contract Times (non-binding, preliminary):**

Contract Price	\$	[increase] [decrease].
Contract Time	days	[increase] [decrease].

**Basis of estimated change in Contract Price:**

- |   |                                     |
|---|-------------------------------------|
| <input type="checkbox"/> Lump Sum         | <input type="checkbox"/> Unit Price |
| <input type="checkbox"/> Cost of the Work | <input type="checkbox"/> Other      |

RECOMMENDED:

AUTHORIZED BY:

RECEIVED:

By:	By:	By:
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)

Title:	Title:	Title:
Date:	Date:	Date:

Approved by Funding Agency (if applicable)

By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Title: \_\_\_\_\_



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Change Order No. \_\_\_\_\_

Date of Issuance:	Effective Date:
Owner: City of Florence	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Civil West Engineering Inc.	Engineer's Project No.: 1503-022
Project: Siuslaw Estuary Trail	Contract Name:

**The Contract is modified as follows upon execution of this Change Order:**

**Description:**

**Attachments:** *[List documents supporting change]*

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: \$ _____	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order: \$ _____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:

ACCEPTED:

ACCEPTED:

By: _____ Engineer (if required)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title _____	Title _____
Date: _____	Date _____	Date _____

Approved by Funding Agency (if applicable)

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Title: \_\_\_\_\_

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Date of Issuance:	Effective Date:
Owner: City of Florence	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer: Civil West Engineering Inc.	Engineer's Project No.: 1503-022
Project: Siuslaw Estuary Trail	Contract Name:

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**Attention:**

Contractor is hereby directed to promptly execute this Field Order, issued in accordance with General Conditions Paragraph 11.01, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference: \_\_\_\_\_  
Specification(s) Drawing(s) / Detail(s)

---

Description:

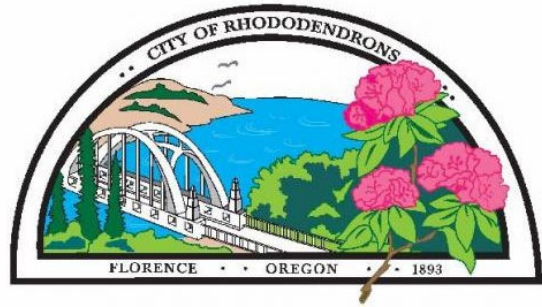
Attachments:

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ISSUED:	RECEIVED:
By: _____ Engineer (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____
Date: _____	Date: _____

Copy to: Owner

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# City of Florence

Lane County, Oregon

## CONTRACT DOCUMENTS VOLUME 2 – Technical Specifications

FOR THE CONSTRUCTION OF

## Siuslaw Estuary Trail

June 2024  
Project No. 1503-022



*Prepared By:*

Civil West Engineering Services, Inc.

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## **SECTION 01010 – SUMMARY OF THE WORK**

### **PART 1 GENERAL**

#### 1.01 WORK SUMMARY: Safe Routes to School Improvements

- A. The Project inspection will be provided by Civil West Engineering Services, Inc., supplemented by the City of Florence and any other applicable agencies.
- B. The work shall be performed primarily within the City of Florence city limits.
- C. The Project Scope is briefly described below:  
  
Furnish all labor, equipment and materials as required for the Siuslaw Estuary Trail project as shown in the Project Plans, consisting of complete path and parking lot construction consisting of grading, aggregate base, level 3 HMAC, standard curbs, pedestrian ramps, sidewalks, catch basin with infiltration basin, and associated items required for a complete installation.
- D. Work shall not begin until Owner has issued the Notice to Proceed to the Contractor.

#### 1.02 PROJECT INSPECTION

- A. Project inspection will be provided by Civil West Engineering Services, Inc. The Project Inspector will be approved by the City prior to commencement of construction activities.
- B. The Project Inspector will perform inspection services as the Project Engineer's authorized representative. However, all engineering decisions will be made by the Project Engineer.
- C. In addition to the Project Inspector, the Project Engineer will also provide periodic inspections of construction and progress.
- D. At completion of the project, the Project Inspector will certify in writing to the Owner and funding agency that construction was inspected by him or her and found to be in accordance with the Plans and Specifications, including any changes therein approved by the Engineer and Department.
- E. Record Drawings will be prepared at the conclusion of construction activities.

#### 1.03 WORK PROGRESS

- A. It is the intent of these Contract Documents that the Work proceeds in a systematic manner so that a minimum of inconvenience to the project area results in the progression of the work. Suitable equipment will be required to properly execute the work with the least amount of disruption to services and access through the work area. Contractor shall contain operations to within the property for this project.
- B. Order and schedule delivery of materials in ample time to avoid delays in construction. If any item is found to be unavailable, notify the Engineer immediately to permit the Engineer's selection of a suitable substitute. Timely delivery of all materials and equipment is the Contractor's responsibility. No extensions in Contract Time will be allowed due to delays caused by late delivery of items. Availability of items should be determined during bidding.

- C. The Contractor shall protect the work and materials from damage due to the nature of the work, the elements, carelessness of others, or from any other cause until the completion and final acceptance of the work. All loss or damage arising out of the nature of the work to be done under these Contract Documents, or from any unseen obstruction or defects which may be encountered in the execution of the work, or from the action of the elements, shall be sustained by the Contractor.
- D. The Contractor shall remove completely all materials designated for removal, to the extent specified and/or indicated in the drawings. For such materials, removal, hauling, disposal (including providing disposal location), and applicable precautions are entirely the Contractor's responsibility. Allow no excess accumulation of non-reusable material at job site(s).
- E. Contractor is responsible for the protection of all existing improvements that are to remain in place. This includes, but is not limited to: existing utilities, roads, driveways, drainage ditches, culverts, fencing, shrubbery, and all landscaping structures and vegetation. Temporary enclosures, walls, covers, or other protection shall be provided and maintained by the Contractor as required. Contractor shall cooperate with the owners of such improvements, and shall restore and/or replace all damaged items as directed, without any additional expense to the Owner or payments to the Contractor.
  - 1. The location and depth shown on the drawings for the existing pipelines are approximate only and are based on Record Drawings, valve locations and other information.
  - 2. Contractor shall pothole and locate the existing utilities prior to placement of new pipelines. Minor field adjustments to the proposed pipeline routes may be required. Existing pipelines shall remain in service and shall be protected in place until completion of new pipelines. Contractor shall provide temporary service connections as required to maintain continued service until completion of new pipelines.
- F. The staging of materials on the roadway or sidewalk is not allowed. The only staging area will be allowed as approved by the City. This includes rock and backfill materials, spoils, construction supplies, and material from trench excavation. Setting up and maintaining staging is the sole responsibility of the Contractor.

**END OF SECTION**

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## **SECTION 01025 – MEASUREMENT AND PAYMENT**

### ***PART 1        GENERAL***

#### **1.01    RELATED REQUIREMENTS**

- A.     Document 00410 – Bid Form
- B.     Document 00700 – General Conditions: Payments to Contractor
- C.     Document 00800 – Supplementary General Conditions: Payments to Contractor

#### **1.02    SUMMARY**

- A.     Wherever in these Specifications an article, device or piece of equipment is referred to in the singular, such reference shall include as many such items as are shown on the Drawings or are required to complete the installation.
- B.     Miscellaneous items required in the project that do not have a corresponding Section in the Bid Form are to be considered incidental costs to the project. Compensation for such items and/or work shall be incorporated into other related bid items or total costs. No separate measurement and payment will occur for such incidental costs.
- C.     Monthly progress payments and final payment will be made in accordance with the Contract, the General Conditions, and the Supplementary General Conditions. A portion of all progress payments will be withheld as “retainage” in accordance with the General and Supplementary General Conditions.
- D.     Additional detail on measurement and payment may be found in other Sections detailing specific items.

#### **1.03    UNIT PRICES**

- A.     Payment will be made on a unit price basis according to the prices provided by the Contractor in the accepted Bid Form (Proposal). Payment will be made for the actual quantity of individual items (units) incorporated and installed in the project.

#### **1.04    LUMP SUMS**

- A.     Payments on lump sum contracts and/or bid items will be made based on the percentage of work complete at the end of the particular payment period.
- B.     Percentage of work complete will be recorded and submitted by the Contractor and estimated by the Engineer based on inspection. Payment will be based on the Contractor’s approved schedule of values.

#### **1.05    PROGRESS PAYMENTS**

- A.     Monthly progress payments will be made as set forth in the Agreement, in accordance with the General Conditions and Supplementary General Conditions.
- B.     At the stated day of the month, submit a monthly payment request in accordance with the General Conditions and Supplementary General Conditions. Base request on actual quantities installed and completed, and/or approved schedule of values with percent complete of each item. Show payment requested for each item, and total payment requested.

- C. Engineer will review payment requests and compare with inspection records to verify quantities and completed items. Engineer will recommend payment amounts for Owner approval and payment.

**END OF SECTION**

**SECTION 01028 – CHANGE ORDER PROCEDURE**

***PART 1        GENERAL***

1.01    SUMMARY

- A.     Make such changes in the Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof, as described by Change Orders signed by the Owner, Engineer, and the Contractor.
- B.     See also applicable sections of the General Conditions and applicable portions of the Supplementary General Conditions.

1.02    PROCESSING CHANGE ORDERS

- A.     Change Orders will be numbered in sequence and dated. The Change Order will describe the changes and will be signed by the Owner, Engineer and the Contractor. Request for estimates for possible changes are not to be considered Change Orders or direction to proceed with the proposed changes.
- B.     Change Orders will be prepared by the Engineer.
- C.     Contractor may request that the Owner consider a Change Order by sending a written Change Order Request to both Owner and Engineer.

**END OF SECTION**

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**SECTION 01040 – COORDINATION**

**PART 1 GENERAL**

1.01 SUMMARY

- A. Restrict work to within public rights-of-way and easements obtained for this project.
- B. The Contractor(s) shall coordinate his work with the following:
  - 1. City of Florence – Public Works Department
  - 2. Oregon Department of Transportation (ODOT)
  - 3. Century Link Telephone & Charter/Spectrum Communications or other affected communications
  - 4. Central Lincoln People's Utility District
  - 5. Other affected utilities and agencies
  - 6. Private Property Owners and general public
- C. Restrict work to within public rights-of-ways. Staging and/ or storage of materials or equipment may be conducted on private property. Prior to start of construction and placement of stored materials, Contractor must provide to Engineer evidence of:
  - 1. Written consent from affected property owner allowing Contractor utilize and place stored materials.
  - 2. Approval for use of site for stored materials by Owner and Engineer.
- D. Coordinate with Owner for site access and any required water service shut-downs. Notify Owner at least 48 hours in advance of when shutdowns of water mainline are needed. Contractor shall not operate system valves without Owner approval. Coordinate with Owner and give minimum 24-hour door hanger notification prior to water service shutdowns.
- E. Permit and maintain access for the Owner and/or residents to any adjacent facilities that are not part of work included within the project.
- F. Coordinate with Owner to determine the locations of underground piping, vaults, valves and other items that could be damaged during construction.
- G. Coordination between projects and Contractors for timing of construction, paving etc.
- H. Restoration and cleanup work shall be completed with each phase of the construction project. Parking lots and properties shall be maintained and kept clean and clear of excess excavation, debris, dirt and other materials.
- I.

**PART 2 SPECIAL PROVISIONS**

4.01 MEASUREMENT AND PAYMENT



- A. Measurement and payment for coordination as described in this section will be included in the lump sum cost for Mobilization. No separate or additional payment will be made for this item.

**END OF SECTION**

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## **SECTION 01046 – PROTECTION OF EXISTING IMPROVEMENTS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. Where Contractor's operations are near utility systems, structures, or are adjacent to other property, no work shall be started until Contractor has made all arrangements necessary for protection thereof have been made. Contractor shall exercise all possible precautions to prevent damage to existing structures, improvements, and underground utilities which are to remain.
- B. Approximate locations of known underground utilities are shown on the Plans. Exact location or extent of such utilities is not guaranteed, and utilities may exist which are not shown on the Plans. Contractor shall call Oregon Utility Notification Center (1-800-332-2344 or 811) for utility locates prior to any digging. Contractor shall also pothole as required ahead of the work to verify the location and depths of affected utilities. No additional compensation will be given for such work or for utilities being different from shown on the plans.
  - 1. All trench excavations and structure excavations within two (2) feet of any existing underground utility shall be performed by hand methods in accordance with state laws.
- C. The Contractor shall be solely and directly responsible to the owner's and operators of such properties and services for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the carrying out of the work to be done under this Contract.
- D. Restoration of Existing Improvements. Except as shown on the Plans or as provided elsewhere in these specifications, the Contractor shall, at their own expense, repair and/or replace all utilities, services, landscaping, structures, substructures and other improvements damaged by the operations associated with this project, as directed. These repairs and replacements shall all be suitable and proper for intended use and in every respect acceptable to the Owner, Engineer and appropriate governing body or owner of such improvement. At minimum, restoration will be required to match the existing adjacent structure/improvement in thickness, finish, quality, quantity, and aesthetics.
  - 1. In the event of interruption of domestic water, electric, telephone, sewer, or other utility services, the Contractor shall promptly notify the proper authority and the Owner. The Contractor shall cooperate with the proper authority in restoration of service as promptly as possible and shall bear all costs of repair.
- E. The Contractor shall pothole existing utility lines ahead of his work so that potential conflicts can be minimized or that minor relocation of the new pipeline routes can be made. Potholing is defined as exploratory excavation of existing utilities to verify their depth and location.

#### **1.02 INTERFERING STRUCTURES, IMPROVEMENTS AND LANDSCAPING**

- A. It shall be entirely the responsibility of the Contractor to locate and protect all existing structures, landscaping, and other improvements in advance of the work. Neither the Owner, Engineer, nor any of their officers or agents shall be responsible to the Contractor

for damages as a result of any structures or improvements being located differently than indicated in the drawings, nor which exist and are not indicated on the drawings.

- B. If interfering power poles, telephone poles, guy wires, or anchors are encountered, the Contractor shall notify the affected utility and the Engineer at least fourteen (14) days in advance of construction to permit arrangements for protection or relocation of the structure. However, failure of utility to respond shall create no obligation on Owner, and Contractor shall protect all utilities against damage, or shall stand all costs involved thereof.
- C. Landscaping, Tree and Plant Protection. Provide adequate protection of existing landscaping against damage from construction operations, including all structures and vegetation. Protect roots, trunk and foliage of existing and new shrubs and trees from all damage including that possible from compaction and dust. Contractor shall be entirely responsible to remove and replace all property which is damaged by work related to the project. Contractor shall bear all costs associated with replacement of existing landscaping, and shall cooperate with the owner of such improvements, the Owner, and the Engineer in all protection and restoration/replacement that is required. In specific circumstances, Contractor may make special arrangements with property owners for removal of landscaping without replacement. Copies of written agreements for all such arrangements shall be furnished to the Engineer.
- D. When construction operations will affect the property of a private citizen (such as driveways, landscaping, etc.), even when such improvements are in the road right-of-way, the Contractor shall notify the owner of such property and the Owner, at least fourteen (14) days in advance of any affecting Work, so that any desired preparations can be made.

### 1.03 ROADS AND ACCESS

- A. All work shall be conducted to minimize damage to existing roadways, easements and parking lots, including limiting wheel loads to acceptable levels. At all times keep roadways, shoulders, and ditches free from excess materials and debris.
- B. Spillage of soil, dust, rock, mud, etc. on all roads (including State, County, City and private roads) used by the Contractor (and any working for Contractor) during construction, shall be prevented as much as possible. If spillage cannot be prevented, an hourly patrol shall be provided by the Contractor to police and sweep clean all spillage. At the conclusion of each workday, such traveled areas shall be left completely clean and free from all extraneous materials. Contractor is entirely responsible to prevent such spills and follow all related laws and regulations. If spillage of hazardous material occurs, Contractor shall immediately notify the proper authorities and remove the spill in the proper manner. Owner will not be liable for any additional costs due to spillage of any kind.
- C. All damaged gravel, concrete and/or asphaltic concrete surfaces shall be repaired as required to conditions acceptable to the governing body and Engineer. No cled or crawl-type equipment shall be operated on paved surfaces, except to cross a road when adequate protection of the surface is provided.
- D. During construction the Contractor shall take necessary measures to avoid and abate excessive dust. Sprinkling of roadways and sites may be necessary and shall be conducted carefully to avoid over wetting while keeping dust to a minimum.
- E. Contractor is responsible for constructing, maintaining, and removing any additional access that Contractor deems necessary for the Work. Contractor must notify Owner

and Engineer, and must obtain written consent from the governing body, prior to construction of additional access not shown on the drawings. All applicable regulations shall be followed in such access construction, including obtaining any required permits.

- F. The Contractor shall provide emergency telephone numbers in the event of property damage or emergencies resulting from problems in the work areas.
- G. During construction the work area must be perpetually tidy. Debris shall not accumulate, and as soon as tools, equipment and materials are not used they shall be put away in an organized manner.

**END OF SECTION**

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## **SECTION 01047 – ARCHEOLOGICAL FINDS**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. This section presents requirements for the preservation and protection of such material of an archaeological or paleontological nature as may be of scientific or historical value; to provide for expeditious protection, investigation, and possible removal of such material; and to provide the Contractor such compensation or relief as may be appropriate for unforeseen work directed by the Engineer under the provisions of this section.
- B. The Owner intends to address state law (ORS 97.745 and 358.920) and federal law (Native American Grave Protection and Repatriation Act of 1990), and local Native American Tribe concerns regarding treatment and disposition of Native American human remains and cultural items uncovered during project activities.
- C. The Contractor will not be required to furnish labor, materials, or equipment not normally required in the course of work executed under other sections of these Contract Documents. Should the need for such labor, materials, or equipment arise, it shall be considered as extra work in accordance with Section 00700.
- D. The City shall notify the Engineer and Tribal Governments 72 hours in advance of any ground disturbance activities. Tribal Governments include the following:
  - a. Coquille Indian Tribe
  - b. Confederated Tribes of Coos, Lower Umpqua, and Siuslaw

#### 1.02 DEFINITIONS

- A. Archaeological finds are defined as evidence of human occupation or use of an area within the contract limit prior to the year 1840. Such evidence may consist of skeletons, stone, or other utensils, or evidence of habitations of structures.
- B. Paleontological finds are defined as evidence of prehistoric plant or animal life, such as skeletons, bones, fossils, or casts and other evidence such as pictographs.

#### 1.03 FINDS

- A. Should finds, as defined above, be made within the contract limits, the Contractor shall immediately stop work in the vicinity of the finds so that further disturbance does not occur and notify the Resident Project Representative & Owner. Work in other areas may continue without interruption.
- B. The Engineer may order work stopped in other areas if, in their opinion, the find is more extensive than may appear from uncovered material.

### **PART 2 EXECUTION**

#### 2.01 WORKMANSHIP

- A. Protection of Finds
  - a. Cover, fence, or otherwise protect all finds, as directed by the Resident Project

Representative, until notice to resume work is given by the Engineer.

- b. Covering will normally be done by covering the find with plastic film held in place by earth, rocks, or other weights placed outside the find. Should additional backfilling be necessary for safety or to prevent caving, place backfill material loosely over the plastic film. Sheet or shore only as directed by the Engineer.
- c. Divert surface runoff away from find by ditching or such other means as the Resident Project Representative may direct.
- d. Place temporary fence to prevent unauthorized access, when directed by the Resident Project Representative.
- e. Dewater finds made below the water table only as directed by the Resident Project Representative.

**B. Removal of Finds**

- a. All finds are the property of either the Owner, the State, or local Native American Tribe. Ownership will be determined by archaeological evaluation. Do not remove or disturb finds without the Owner's written authorization.
  - b. Should the Owner elect to have the Contractor remove a find, provide such equipment, labor, and material as the Engineer may direct to permit the safe removal of the find. Remove finds as directed by the Engineer and under the Engineer's immediate supervision. Provide transportation, as directed by the Engineer, for delivery to such individuals, institutions, or other places as the Owner may find desirable, expedient, or required by law.
- C.** Should the completion of the work of this contract be delayed, in the Engineer's opinion, beyond the required time of completion because of a stop-work order issued by the Engineer under the provisions of this section, the time of completion will be appropriately extended by change order.
- D.** Expenditure of equipment, labor, and materials necessary to protect and/or remove a find will be paid as extra work in accordance with Section 00700. Contractor's activities to stop work at the location of the find and move to another location to resume activity will not be considered extra work.

**END OF SECTION**



**SECTION 01050 – FIELD ENGINEERING**

***PART 1 GENERAL***

1.01 SUMMARY

- A. Construction stakeout – The Contractor shall be responsible for all stakeout.

***PART 2 PRODUCTS – NOT USED***

***PART 3 WORKMANSHIP – NOT USED***

***PART 4 SPECIAL PROVISIONS***

4.01 MEASUREMENT AND PAYMENT – All Schedules

- A. Payment for this, and all items, shall be included within the total lump sum price of the overall project as shown on the bid form. Progress payments will be made based on the progress complete percentage of the schedule of values, as approved by the Engineer.
- B. Field adjustments to alignment and profile of path will be required and must be coordinated with the City or their representative(s). No separate payment shall be made.

**END OF SECTION**

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## **SECTION 01060 – REGULATORY REQUIREMENTS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. The Contractor shall at all times observe and comply with all Federal and State laws and lawful regulations issued and local laws, ordinances and regulations which in any manner affect the activities of the Contractor under this contract and further shall observe and comply with all orders or decrees as exist as present and those which may be enacted later by bodies or tribunals having any jurisdiction or authority over such activities of the Contractor.
- B. The Contractor shall be responsible and liable for all accidents, damage or injury to any person or property resulting from any activity, duty and obligation of the Contractor under this Contract for which the Contractor may be legally liable. The Contractor shall hold blameless and harmless and shall indemnify the Owner and its officers, employees and against any and all claims, demands, loss injury, damage, actions and cost of actions whatsoever which they or any may sustain by reason of any act, omission or neglect of the Contractor or employees, agents, representatives or assignees of the Contractor in connection with the activities, duties and obligations of the Contractor under this Contract.
- C. Erosion Control Requirements
  - 1. Contractor shall use all practicable erosion control measures where applicable including, but not limited to the following:
    - a. Prevent construction materials from entering storm drain and waterways; use impervious materials to cover stockpiles when unattended or during rain events;
    - b. Use filter bags, sediment fences, silt curtains, leave strips or berms, or other measures sufficient to prevent movements of soil. Place catch basin inlet protection at each catch basin.
    - c. Erosion control measures shall be inspected and maintained periodically, as necessary to ensure their continued effectiveness;
    - d. Spoils, if excavated, shall be placed upland and protected from erosion back into storm drain, wetlands and waterways. Spoils are not to be placed on unstable slopes or a known landslide. Spoils piles are to be seeded and protected from erosion.
    - e. Gravel staging area and construction access, where practicable.

**END OF SECTION**

## **SECTION 01100 – REFERENCE STANDARDS**

### ***PART 1        GENERAL***

#### **1.01    SUMMARY**

Abbreviations and Acronyms. Whenever the following abbreviations are used in these specifications or in the drawings, the following definitions apply. Unless otherwise designated, all reference to the following standards, specifications and methods shall imply the latest adopted revision in effect at the time of bid opening. Such standard, except as modified herein, shall have full force and effect as though printed in the specifications.

- A.    AASHTO        American Association of State Highway and Transportation Officials
- B.    ACI        American Concrete Association
- C.    AIA        American Institute of Architects
- D.    AISC        American Institute of Steel Construction
- E.    ANSI        American National Standards Institute
- F.    APWA        American Public Works Association
- G.    ASCE        American Society of Civil Engineers
- H.    ASME        American Society of Mechanical Engineers
- I.    ASTM        American Society of Testing Materials
- J.    AWWA        American Water Works Association
- K.    EPA        United States Environmental Protection Agency
- L.    DEQ        Department of Environmental Quality (both Federal and State)
- M.    DWP        Oregon Dept. of Human Services, Drinking Water Program
- N.    FM        Factory Mutual
- O.    NEC        National Electric Code
- P.    NEMA        National Electric Manufacturers Association
- Q.    NFPA        National Fire Protection Association
- R.    NSF        National Sanitation Foundation
- S.    OAR        Oregon Administrative Rules
- T.    ODOT        Oregon Department of Transportation
- U.    ORS        Oregon Revised Statutes
- V.    OSHA        Occupational Safety and Health Act (both Federal and State)

- W. UL Underwriters' Laboratories
  - X. USDA United States Department of Agriculture
  - Y. SSPC Steel Structures Painting Council or, The Society for Protective Coatings
- 1.02 The abbreviation of "N.I.C." if shown on the plans or specifications represents work that is "Not in Contract." This work is to be completed at a later date by Owner or others and for which the Contractor will not be responsible.

**END OF SECTION**

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## **SECTION 01300 - SUBMITTALS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

This section outlines in general the items the Contractor must prepare or assemble during the progress of the work, including technical submittals, Operations and Maintenance (O&M) data, record drawings, and substitution requests. Submittals are required for each piece of equipment or material even when the item being proposed for use is the same as specified.

#### **1.02 RELATED SECTIONS**

- A. General Conditions – Article 7.04 “Or-equals” and Article 7.05, Substitutes
- B. Supplementary Conditions – SCG 7.05
- C. General Conditions – Article 7.16, Shop Drawings, Samples and Other Submittals
- D. Section 01630 – Product Substitutions
- E. Section 01700 – Closeout Submittals
- F. Section 01780 – Record Drawings
- G. Various sections requiring submittals for equipment and materials

#### **1.03 TECHNICAL PRE-BID SUBMITTAL**

- A. Some of the major equipment items may require approval prior to bid, even when a specific manufacturer and model is specified and contractor plans to use the specified item. For items requiring pre-bid submittals, a complete submittal package must be received by the Engineer no later than 14 days prior to bid opening. Only items that have been approved in writing by the Engineer will be used in the project, and substitution requests for these items will not be considered. Engineer will either approve or reject such items at least 5 days prior to bid date. Items in the specifications that require pre-bid submittals are noted as such and listed below for convenience:

- 1. N/A

#### **1.04 SUBSTITUTION REQUESTS**

- A. Where the specifications state “or-equal”, “or approved equal”, or similar statement, the Engineer alone will determine if the proposed substitute item is allowed.
- B. Requests for substitution for items specified by manufacturer or manufacturer's model number as specified throughout the Contract Documents shall be in writing and be accompanied with sufficient information to allow the Engineer to identify the nature and scope of the request. Information to be provided shall include:
  - 1. Reason the substitution request is being made.
  - 2. All submittal information required for the specified item or equipment, including all deviations from the specified requirements necessitated by the proposed substitution.

3. Reproducible contract drawings, marked up to illustrate the alterations to all structural systems required to accommodate the proposed substitution.
4. If the substitution requires any structural changes, the Contractor will be responsible for costs in evaluating a requested substitution. The cost for such an evaluation will be determined on a case-by-case basis, after receipt of written request. The Engineer will notify the Contractor in writing of said cost. If the Contractor wishes to proceed, he shall advise the Engineer in writing and submit additional information as may be requested. Final approval of a substitution must be made by both the Engineer and Owner.
5. No additional costs of any kind will be incurred by the Owner or Engineer by approval or rejection of any substitution request.

## 1.05 SUBMITTALS

### A. Technical submittals

1. Technical submittals covered by these specifications include manufacturer's information, shop drawings, test procedures, test results, samples, request for substitutions and miscellaneous work related submittals. Submittals shall also include, but not be limited to, all mechanical, electrical and electronic equipment and systems, materials, reinforcing steel, fabricated items, piping and conduit details, and lead time required for delivery to job site.

### B. Contractor Responsibilities

1. The Contractor shall furnish all drawings, specifications, descriptive data, certifications, dimensional drawings, samples, tests, methods, schedules and manufacturers installation and other instructions as required by the contract documents, or the Engineer, to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.
2. The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the specified requirements.
3. The Contractor shall ensure that there is no conflict with other submittals and notify the Engineer in each case where his submittal may affect the work as shown on the Plans.
4. The Contractor shall coordinate submittals among his subcontractors and suppliers.
5. Submittals shall coordinate with the work so that work will not be delayed. Coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly schedule submittals.
6. The Contractor shall not proceed with work related to a submittal until the submittal process is complete.

7. The Contractor shall certify on each submittal document that he has reviewed the submittal, verified final conditions and complied with the contract documents. The Contractor may authorize in writing a material or equipment supplier to deal directly with the Engineer. This interaction shall be limited to contract interpretations to clarify and expedite the work.
8. Charges will be documented and the Contractor will be charged for review of multiple non-conforming submittals for any one (1) item in excess of two (2) times.

#### 1.06 RECORD DRAWINGS

- A. During the course of construction, Contractor shall maintain a marked-up set of the project drawings. See Section 01780.

#### 1.07 ENGINEER'S REVIEW

- A. Review shall not extend to means, methods techniques, sequences or procedures of construction, or to verify quantities, dimensions, weights or gages, or to fabrication processes, except when specifically indicated or required by the contract documents, or to safety precautions or programs.
- B. The Contractor shall submit five (5) copies of all submittal material to Engineer. Two (2) copies will be returned upon final approval. If the submittal is rejected four (4) copies will be returned.
- C. Unless otherwise specified, within 14 calendar days after receipt of submittal, the Engineer will return the marked-up copies. The Contractor shall take appropriate action if the submittal needs to be resubmitted. If specified submittal material is to be used for O&M data, all corrections shall be made and new clean copies shall be submitted with the O&M data.
- D. Review of contract documents, method of work or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibilities for errors therein and shall not be regarded as an assumption of risks or liability by the Engineer or Owner. The Contractor shall have no claim under the Contract on account of failure or partial failure of the method of work, material or equipment so reviewed.

#### 1.08 OTHER SUBMITTALS

- A. Other Submittals required by other sections of these specifications may include traffic control plan.

**END OF SECTION**



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## **SECTION 01310 – CONSTRUCTION PROGRESS SCHEDULES**

### **PART 1 GENERAL**

#### **1.01 SUMMARY**

- A. Provide a progress schedule indicating the times for starting and completing the various stages of work, including any Milestones.
- B. As work progresses, Contractor shall prepare and submit updated progress schedules as necessary.
- C. Schedule duration of each activity shall be based on the work being performed during the normal 40-hour work week with allowances made for legal holidays and normal weather conditions.
- D. Updates – Schedule shall be updated at least once per month as required to maintain accuracy.

#### **1.02 SUBMITTALS**

- A. Within 10 days after the date of the Agreement (Contract), submit a proposed progress schedule to the Owner and Engineer for approval.
- B. Interim Schedule
  - 1. Contractor shall submit within 10 days after award of Contract, but before any scheduled pre-construction conference, an Interim Schedule setting forth all activities for the first two (2) months of construction.
  - 2. Review comments by the Engineer concerning the Interim Schedule shall be considered in developing the Overall Schedule.
  - 3. The Contractor shall submit three (3) copies of the Interim Schedule.
- C. Overall Schedule
  - 1. For Contract Periods exceeding 60 days, the General Contractor shall prepare and submit, within 10 days after the award of Contract, an Overall Schedule composed of all construction operations in connection with the Contract.
  - 2. Overall Schedule, if it is sufficiently developed to equal or exceed the Interim Schedule requirements, may be submitted in lieu of a separately prepared Interim Schedule. In any event, the Interim Schedule shall form the basis for the Overall Schedule and will be considered an integral part of the Overall Schedule.
  - 3. Contractor shall submit three (3) copies to the Engineer for his or her review. Within seven (7) days after receipt of the submittal, the Engineer shall review the submitted schedule and return one copy of the marked-up original to the Contractor. If the Engineer finds that the submitted schedule does not comply with specified requirements, the corrective revisions will be noted on the submittal copy returned to the Contractor for corrections and resubmitted.
- D. Schedule Content

1. Schedules shall indicate the sequence of work and the time of starting and completion of each activity. Activities shall include, but not be limited to, the following items as they pertain to the Contract:
  - a. Each subcontractor's items of work
  - b. Temporary provisions for continued service
  - c. Installation of specific major items
  - d. Submittals from Contractor to Engineer for review and return to the Contractor. Material and equipment order, manufacture and delivery
  - e. Dates for performance of all testing procedures
  - f. Allowance for inclement weather

#### 1.03 PROGRESS OF WORK

- A. The Contractor shall execute work with such progress as necessary to prevent delay to the overall completion of the project and with such forces, materials and equipment to assure completion in the time established by the Contract.
- B. The Contractor may find it necessary to work overtime, double shifts, weekends and/or holidays if such a schedule is required to complete the project within the time allowed.

**END OF SECTION**

## **SECTION 01400 – QUALITY CONTROL**

### **PART 1 GENERAL**

#### **1.01 SUMMARY**

- A. Work shall conform to these specifications and the standards of quality contained herein.
1. Only new items of recent manufacturer and quality specified, free from defects, will be permitted on the Work, unless items are specifically noted as existing to be reutilized. Remove rejected items immediately from the Work and replace with items of quality specified. Failure to remove rejected materials and equipment shall not relieve the Contractor from responsibility for quality and character of items used, nor from any other obligation imposed by the Contract.
  2. No work defective in construction or quality, or deficient in any requirement of the drawings and specifications will be acceptable in consequence of the Owner's or the Engineer's failure to discover or to point out defects or deficiencies during construction; nor will the presence of Resident Project Representatives on the work relieve the Contractor from responsibility for securing the quality and progress of work as required by the Contract. Defective work revealed within the time required by guarantees shall be replaced by the Contractor by work conforming to the intent of the Contract. No payment, whether partial or final, shall be construed as an acceptance of defective work or improper materials.

**END OF SECTION**

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## **SECTION 01500 – TEMPORARY FACILITIES AND CONTROLS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. This section includes mobilization, temporary utilities, temporary construction, safety requirements, temporary environmental controls, and other temporary controls.
- B. Submittals
  - 1. Staging area plan and notification of any obstructions encountered during mobilization.
  - 2. Plans for disposal of waste materials and excavated material not required for fill, including permits as required.
- C. Permits:
  - 1. Contractor shall secure and pay for all permits and fees required pertaining to temporary facilities and all other work.
  - 2. Construction permits as required by other agencies shall be the responsibility of the Contractor to secure.
- D. Mobilization shall include de-mobilization and consist of preparatory work and operations, including but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to and from the project site; for the establishment of offices, buildings and other facilities necessary for work on the project; for premiums on bond and insurance for the project, and for other work and operations which the Contractor must perform or costs he must incur before beginning work on the project and after completion of the project.
- E. Access of Government Officials. Authorized representatives of the Federal, State and Local Governments shall at all times have safe access to the Work, whenever in preparation or in progress, and Contractor shall provide proper facilities for such access and inspections.

### ***PART 2 PRODUCTS***

#### **2.01 MATERIALS**

- A. Contractor shall provide all materials necessary for all work this Section.

### ***PART 3 EXECUTION***

#### **3.01 WORKMANSHIP**

- A. During all construction operations, the Contractor shall construct and maintain such facilities as may be required to provide access by all property owners to their property. No person shall be cut off from access to their place of business or residence, unless the Contractor has made special arrangements with the affected persons and has notified Engineer and Owner. All temporary facilities shall be removed by the Contractor upon completion of the Work.

1. Temporary Utilities
  - a. Electric Power and Telephone
  - b. Electrical power. Power requirements should be confirmed by the Contractor for any special power needs. Arrangements for power shall be the responsibility of the Contractor.
  - c. Phone service shall be the responsibility of the Contractor
  - d. Sanitary Facilities
  
2. The Contractor shall provide chemical toilets of suitable types and maintain them in a sanitary condition at all times, conforming to code requirements and acceptable to the health authorities. They shall be of watertight construction so that no contamination of the area can result from their use. Arrangements shall be made for frequent emptying of the toilets. Upon completion of the work, toilets shall be removed and the area restored to its original condition.
  - a. Portable toilet facilities shall be located only at locations approved by the Owner.
  
3. Water
  - a. Water is currently available from the City water distribution system. The Contractor may acquire a permit and metered connections the City. The Contractor must meet the terms and conditions of the permit as required by the City. All costs for obtaining and using any water shall be borne by the Contractor.
  
4. Safety Requirements
  - a. Proper traffic control shall be provided in accordance with Section 01570.
  - b. Access for Police, Fire, and School Bus Service
  - c. Notify ODOT, the fire department, police department and, when applicable, the School District Bus Company before closing any street or portion thereof, and no closing shall be made without the Engineer's approval. Notify said departments when the streets are again passable for emergency vehicles. Do not block off emergency vehicle access to any area, such as consecutive arterial crossings or dead-end streets, in excess of 300 linear feet, unless the Contractor obtains special written permission from the chief of the fire department. Conduct operations so as to cause the least interference with any fire station access and at no time prevent such access.
  - d. The Contractor shall furnish a list of emergency telephone numbers to both the Engineer and the Owner so that contact may be made easily at all times in cases of emergencies.
  - e. Fire Prevention. Contractor shall perform all work in a fire-safe manner. Contractor shall supply and maintain on site all fire-fighting equipment, supplies, and capable personnel for extinguishing incipient fires as required by all Federal, State and local laws and regulations. Each piece

of internal combustion engine-driven equipment shall be equipped with a fire extinguisher in accordance with the appropriate recommendation of the National Fire Protection Association (NFPA). All engines shall be equipped with functional spark arrestors and sound suppression devices.

5. Temporary Environmental Controls
  - a. The Contractor shall maintain affected areas from his construction free from environmental pollution that would be in violation of federal, state or local regulations.
6. Air Pollution Control
  - a. Minimize air pollution likely to occur from construction operations by wetting down bare soils to control dust and requiring proper combustion emission control devices on construction vehicles.
  - b. Give unpaved streets, roads, and detours or haul roads in the construction area a dust preventative treatment or periodically water to prevent dust. Strictly adhere to applicable environmental regulations for dust prevention.
7. Water Pollution Control and Erosion Control
  - a. Discharge from dewatering, or flushing operations shall not directly impact existing water courses.
  - b. Turbidity shall not exceed 10 percent above natural stream turbidities as a result of the project. The turbidity standard may be exceeded for a limited duration, provided all practicable erosion control measures have been implemented, including, but not limited to:
  - c. Use of filter bags, sediment fences, silt curtains, leave strips or berms, placing mulch and hay bale silt fences, or other measures sufficient to prevent offsite movement of soil.
  - d. Use of an impervious material to cover stockpiles when unattended or during a rain event.
  - e. Graveled construction accesses to prevent movement of material offsite via construction vehicles.
  - f. Sediment traps or catch basins to settle out solids prior to water entering ditches or waterways.
  - g. Spreading mulch on exposed embankments greater than 3 feet in height.
  - h. Place hay bale silt fence at any locations where soil erosion potential is evident and as directed by the Engineer.
  - i. Constructing sediment basins where surface runoff is causing soil erosion or as directed by the Engineer.
  - j. Erosion control measures shall be maintained as necessary to ensure their continued effectiveness.



- k. Petroleum products, chemicals, or other deleterious materials shall not be allowed to enter the water.
- 8. Restoration and Cleanup
  - a. Street Cleanup during Construction
    - 1) Clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day's operations. Storm drains, culverts and ditches plugged as a result of the Contractor's operations shall be restored to the satisfaction of the Engineer at no additional cost to the Owner.
  - b. Street/Road Cleanup
    - 1) Immediately following construction, remove all dirt, mud, rock gravel, and other foreign material at the completion of the day or as otherwise required by the Engineer.
    - 2) After any section of street or road has had surface restoration completed and has been cleaned and accepted by the Engineer, all subsequent cleaning not related to construction activities will be the responsibility of the Owner.

**PART 4 SPECIAL PROVISIONS**

**4.01 MEASUREMENT AND PAYMENT**

- A. Mobilization, Bonds, and Insurance - Payment for this, and all items, shall be included within the total lump sum price of the overall project as shown on the bid form. Progress payments will be made based on the progress complete percentage of the schedule of values, as approved by the Engineer.
- B. Construction Facilities and Temporary Controls - Payment for this, and all items, shall be included within the total lump sum price of the overall project as shown on the bid form. Progress payments will be made based on the progress complete percentage of the schedule of values, as approved by the Engineer.

**END OF SECTION**

## **SECTION 01570 – TRAFFIC REGULATION**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. This section includes traffic control related safety requirements as may be required for the project.
- B. Contractor shall comply with all rules and regulations of County, State, City, and Federal authorities regarding the closing, detouring, and loading of all public streets or highways.
- C. No road (public or private) shall be closed or detoured by the Contractor to the public, except by express written permission of the Engineer and entity governing such roadways. Traffic must be kept open on all roads and streets where no detour is possible. The Contractor shall, at all times, conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. The convenience of the general public and residents, safety, and the protection of property is of prime importance and shall be provided for by the Contractor in an adequate and satisfactory manner.
- D. Submittals
  - 1. Contractor shall prepare and submit for approval a Traffic Control Plan and Pedestrian Traffic Control Plan to the City and any other appropriate governing body with jurisdiction of roads impacted or affected by Contractor's construction activities. At a minimum, the Traffic Control Plan will include proposed signage (location, description, verbiage, etc.) for the Project Area.

### ***PART 2 PRODUCTS***

#### **2.01 MATERIALS**

- A. Contractor shall furnish all flaggers, barricades, lead cars, warning signs, lights, signals, etc. as required to comply with regulations and provide safety.
- B. All signs, lights, flags and other warning and safety devices shall meet the current MUTCD standards affecting the location of construction, or to applicable City/County standards.
- C. Barricades shall conform to the Standard Specifications for Highway Construction of the State Highway Department affecting the location of construction, or to City or County Standards where applicable.

### ***PART 3 EXECUTION***

#### **3.01 WORKMANSHIP**

- A. Contractor shall, at their own expense, and without further or other order, provide, erect and maintain at all times during the progress or temporary suspension of the work, suitable barricades, fences, signs or other adequate warnings or protection and shall provide, keep and maintain such danger lights, signals, and flaggers as may be necessary or as may be ordered by the Engineer to insure the safety of the public as well as those engaged in connection with the work.

- B. Failure of the Engineer to notify the Contractor to maintain barricades, barriers, lights, flares, danger signals, or watchmen, shall not relieve the Contractor from this responsibility. All barricades and obstructions shall be protected at night by signal lights which shall be suitably distributed and kept burning from sunset to sunrise. Barricades shall be of substantial construction and shall be suitably painted to increase their visibility at night.
- C. Whenever the Contractor's operations create a hazardous condition, Contractor shall furnish flagmen and guards as necessary, or as directed, to give adequate warning to the public of any dangerous conditions to be encountered. Contractor shall furnish, erect, and maintain approved fences, barricades, lights, signs, and any other devices that may be necessary to prevent accidents and to avoid damage and injury to the public. Flaggers and guards, while on duty and assigned to give warning to the public, shall be equipped with approved red wearing apparel and a red flag which shall be kept clean and in good repair.
- D. Contractor shall provide access to private properties at all times, except during urgent stages of construction when it is impractical to carry on the construction and maintain traffic simultaneously. Coordinate all construction activities with the affected property owners.
  - 1. Contractor shall prepare and submit for approval a Traffic Control Plan to the City and any other appropriate governing body with jurisdiction of roads impacted or affected by Contractor's construction activities. At a minimum, the Traffic Control Plan will include proposed signage (location, description, verbiage, etc.) for the Project Area.
- E. At the end of each day, the Contractor shall leave work in such condition that it can be traveled without damage to the work and without danger to the public.
- F. If, in the opinion of the Engineer or other governing traffic authority, traffic control is lacking or otherwise unsafe or deficient, the Engineer may require that all work be halted until the traffic control measures can be improved to an acceptable level.

**PART 4 SPECIAL PROVISIONS**

**4.01 MEASUREMENT AND PAYMENT**

- A. Measurement and Payment for Traffic and Pedestrian Control shall be considered incidental to all other work stated on the bid form. This includes compensation for all equipment, labor, and materials required to provide continuous traffic and pedestrian control during the site improvements as shown on the Plans. No separate payment shall be made.

**END OF SECTION**

## **SECTION 01610 – STORAGE AND PROTECTION**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. Protect products scheduled for use in the Work by means as described in this Section and as recommended by the manufacturer.

#### **1.02 MANUFACTURER'S RECOMMENDATIONS**

- A. Except as otherwise approved by the Owner, determine and comply with manufacturers' instructions on product handling, storage and protection.

#### **1.03 PACKAGING**

- A. Deliver products to the job site in their manufacturer's original container, with the labels intact and legible.
- B. Maintain packaged materials with seals unbroken and labels intact until time of use.
- C. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements at no additional cost to the Owner.
- D. The Owner may reject as non-complying such material and products that do not bear identification satisfactory to the Owner as to the manufacturer, grade, quality and other pertinent information.

#### **1.04 STORAGE**

- A. No materials shall be stored on-site.

#### **1.05 PROTECTION**

- A. Protect stored materials from moisture and temperature, and unauthorized handling.
- B. Provide protection for finished surfaces.
- C. Maintain finished surfaces clean, unmarred and suitably protected until accepted by the Owner.
- D. Provide proper protection for all workers, pedestrians and citizens.

#### **1.06 REPAIRS AND REPLACEMENTS**

- A. In event of damage, promptly make replacements and repairs to the approval of the Owner and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the Owner to justify an extension of the Contract Time of Completion.
- C. Repair all scratches and damage to painted surfaces promptly with proper color and material.

- D. Backfill or other soil materials to be incorporated into the Work which have become too wet due to improper storage and protection shall be properly dried or replaced prior to incorporation into the Work.

**END OF SECTION**

## **SECTION 01630 – PRODUCT SUBSTITUTIONS**

### **PART 1 GENERAL**

#### **1.01 SUMMARY**

- A. This Section describes procedures for securing approval of proposed product substitutions.

#### **1.02 PRODUCT OPTIONS**

- A. The Contract is based on standards of quality established in the Contract Documents.
- B. See Section 01300 Submittals, and the General Conditions (Sections 7.04, 7.05 and 7.16) for additional information on submittals and substitutions.
- C. In agreeing to the terms and conditions of the Contract, the Contractor has accepted the responsibility to verify that the specified products will be available and to place orders for all required materials in such a timely manner as is needed to meet his agreed construction schedule.
- D. The Owner has not agreed to the substitution of materials or methods called for in the Contract Documents, except as they may specifically otherwise state in writing.
- E. Where materials and methods are specified by naming one single manufacturer or model number, without stating that equal products will be considered, only the material and method named is approved for incorporation into the Work.
- F. Where materials and methods are specified by name or product number, followed by the words "or equal approved in advance", materials and methods proposed by the Contractor to be used in lieu of the named materials and methods shall in all ways be equal or exceed the qualities of the named materials and methods. For consideration as an "equal approved in advance", complete detailed submittals (5 copies) must be received by the Engineer at least fourteen (14) days prior to the bid opening date. Approved substitute items will be listed by addendum prior to bid opening.
- G. Where the phrase "or equal," or "or approved equal," occurs in the Contract Documents, do not assume that the materials, equipment or methods will be approved as equal unless the item has been specifically so approved for this Work. Prepare detailed submittal and submit to Engineer. Substitutes will not be incorporated into the work unless submittal is approved by the Owner via the Engineer.
- H. Submittals shall include all technical information and diagrams as necessary to allow Engineer to evaluate the proposed substitution. Any/all differences between the specifications or specified equipment and the proposed substitution shall be clearly noted in the submittal. Submittals shall clearly indicate the specific model numbers, part numbers, and options of the proposed substitution.

#### **1.03 DELAYS**

- A. Delays in construction arising because of the time required for approval of substitution requests will not be considered by the Owner as justifying an extension of the agreed Time of Completion.

**END OF SECTION**

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## **SECTION 01700 – CONTRACT CLOSEOUT**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. Section includes procedures and requirements for finalizing and closing out the Project(s).
- B. Final clean-ups and restorations shall be done prior to requesting final inspections.

### **PART 2 PRODUCTS-NOT USED**

### **PART 3 EXECUTION**

#### 3.01 RESTORATION AND CLEAN-UP

- A. Upon completion of any portion of the work, promptly remove temporary facilities generated by that portion of the work, including surplus materials, equipment and machinery unless directed otherwise by the Engineer or the Owner. All construction work by the Contractor shall be clean and free of rubbish, dirt, overspray, and extraneous materials to the satisfaction of the Engineer before acceptance of the work.
- B. Street/Road Cleanup. All roadways affected during construction shall be cleaned and restored. All ditches and culverts shall be cleaned and re-graded for proper drainage. Culverts broken or damaged by construction activities shall be restored to their original condition and location. Immediately following construction, remove all dirt, mud, rock, gravel, and other foreign material at the completion of the day or as otherwise required by the Engineer.
- C. Site Restoration and Cleanup. Restore or replace any ground covering (e.g., bark chips, cinders, gravel, river rock, etc.) to the original condition or better. Replace topsoiled areas, rake and grade to conform to their original contours. Replace any damaged landscaping or plantings to prior conditions in manner acceptable to Owner. Reseed grass areas as approved. Seed and protect any disturbed slopes.

#### 3.02 CERTIFICATIONS

- A. Contractor shall provide certifications in accordance with the Standard General Conditions Article 15 and Supplementary Conditions SC-15.01 prior to final payment.
- B. See Section 01740 for Warranty requirements.

### **PART 4 SPECIAL PROVISIONS**

#### 4.01 MEASUREMENT AND PAYMENT

- A. This item shall be considered incidental and no separate measurement and payment will occur.

**END OF SECTION**



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## **SECTION 01740 – WARRANTIES**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. Installed Materials Warranties. Prior to 75% completion and payment for work under this Contract, the Contractor shall furnish the Owner through the Engineer, all warranty and/or guarantee forms normally furnished by the manufacturer of equipment. Warranty form shall include the specific equipment installed, the duration of the warranty, details of the warranty, and the installer's name, address and phone number. Installation date will be filled in by the Owner and will coincide with date of substantial completion of the work under this contract. All such warranties shall name the Owner as the warranted party.
- B. Attention is directed to various other sections of the Contract Documents where specific material or installation warranties may be required for items specified.

#### 1.02 CONTRACTORS WARRANTY OF WORK

- A. Contractor shall guarantee the Work for a period of one (1) year from the date of Final Acceptance. All materials and workmanship that prove defective within the one-year guarantee period shall be promptly replaced or corrected with no additional cost to the Owner. Written certification that Contractor will replace all materials and workmanship that prove defective within one-year after the date of Final Acceptance is required for project close-out and shall accompany application for Final Payment.
- B. Contractor shall correct any work not in compliance with specifications and is responsible for all repairs of damage to other improvements, natural or artificial structures, systems, equipment and vegetation cause by, or resulting in whole or in part from occurrences beginning during the warranty period and are the result of defects in construction or materials installed under this Contract. Contractor shall be responsible for all costs associated with site cleanup and remediation caused by, or resulting in whole or in part from, defects in its work or materials.
- C. Within 10 calendar days of the Owner's written notice of defects, Contractor shall begin repair of the defects and all related damage. If Contractor or Contractor's Surety fails to correct and repair the defects in a timely manner, the Owner may have the correction and repair performed by others. Contractor or Contractor's Surety shall promptly reimburse the Owner for all expenses incurred to correct and repair the defects.
- D. In case of an emergency where delay could result in serious loss or damage, the Owner may make emergency corrections and repairs without written notice to Contractor. Contractor or Contractor's Surety shall promptly reimburse the Owner for all expenses incurred to correct and repair the defects.
- E. On Contractor's letterhead; provide written letter stating that Work has been completed in accordance with the Contract Documents and that a one year warranty of the work will be provided from the date of Final Acceptance. Written certification that Contractor will replace all materials and workmanship that prove defective within one-year after the date of Final Acceptance is required for project close-out and shall accompany application for Final Payment.
- F. One-Year Warranty Inspection. On the 11th month following final project completion and acceptance, Contractor shall be available to be present during the on-site warranty

inspection by Owner. Any defects identified in materials or workmanship shall be corrected within 30 days by the Contractor at his own expense

**PART 2      *PRODUCTS- NOT USED***

**PART 3      *EXECUTION- NOT USED***

**PART 4      *SPECIAL PROVISIONS***

4.01    MEASUREMENT AND PAYMENT

- A.      This item shall be considered incidental and no separate measurement and payment will occur

**END OF SECTION**

## **SECTION 01780 - PROJECT RECORD DRAWINGS**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. This section outlines in general the Contractor requirements for preparing and maintaining record drawings of the project.
- B. Contractor shall provide access to the Record Drawings to the Engineer and Owner throughout construction and shall finalize and submit complete record drawings upon completion of the work.
- C. Accurate Record Drawings or "As-Builts" are considered extremely important and it shall be entirely the Contractor's responsibility to maintain a complete and accurate record of all details of the project as he constructs and installs equipment and materials.
- D. Engineer or Owner may stop work if it is determined that Contractor is not properly recording details in record drawings and require correction and accurate documentation of all previous work before additional work proceeds.
- E. Engineer must accept and approve the drawings prior to recommending final payment.

#### 1.02 RELATED SECTIONS

- A. General Conditions – Article 7, Section 7.11, Record Documents

#### 1.03 SUBMITTALS

- A. Submit two complete sets of initial marked-up Record Drawings immediately upon completion of construction work. Engineer will review for completeness and either approve or return one set with comments and corrections.
- B. If initial submittal required corrections, submit one complete set of corrected marked-up Record Drawings to Engineer with or before request for final payment.

### **PART 2 PRODUCTS**

#### 2.01 RECORD DRAWINGS

- A. Maintain one set of black-line prints of the Contract Drawings. Mark-up drawings using erasable red-colored pencil. Use additional colors as necessary to clearly document changes from original drawings for different categories of work at the same location.
- B. Use clear original or copy of project drawings for mark-up. Use shop drawings for markup when they are more capable of showing actual physical conditions completely and accurately.
- C. All deviations or differences from the original drawings, including dimensional, location, layout, material, and other details shall be noted clearly. Any additional information discovered during construction shall also be noted including location and depth of buried utilities and structures not shown in the original drawings.

2.02    **FORMAT**

- A.     Organize Record Drawings into manageable sets using plans and shop drawings as applicable. Keep sets bound and protected.
- B.     Keep on-site during construction and clearly identify as “Record Drawing” on cover.

**PART 3            EXECUTION**

3.01    **RECORDING AND MAINTENANCE**

- A.     Record data as soon as possible after obtaining it. Do not wait until the end of the job or a portion of the job to record data.
- B.     Give particular attention to information concealed that would be difficult to identify or measure and record later. Record and check the markup before enclosing concealed installations.
- C.     Require the individual who installed or constructed the portion of the work, or otherwise obtained the record data, to prepare that portion of the marked-up record print.
- D.     Incorporate changes and additional information previously marked on Record Drawings, erase, redraw, and add details and notations where applicable.
- E.     Refer instances of uncertainty to Engineer for resolution.

**END OF SECTION**

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SECTION 02511	LOCATOR WIRE AND WARNING TAPE
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SECTION 02900	LANDSCAPE RESTORATION & CLEANUP

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**SECTION 02230 – CLEARING & GRUBBING**

**PART 1 GENERAL**

1.01 WORK INCLUDED

- A. The work to be performed under this section shall include all labor, equipment, and materials necessary for the removal of vegetation and organic matter including, trees, logs, stumps, roots, shrubs, brush, grass and other organic materials as specified herein and as necessary to complete the proposed improvements. This work shall also include the preservation and protection from injury or defacement of all vegetation and objects designated to remain, hauling and disposal of all resulting materials, backfilling of all voids resulting from clearing and grubbing operations, and grading of areas along the project alignment which are not included elsewhere in grading.
- B. Clearing and grubbing work shall be performed in strict compliance with all City, County, State and Federal laws and requirements pertaining to clearing, disposal, erosion control, and other related operations.
- C. Extra care shall be taken when construction occurs on private property. For areas within easements the Contractor shall coordinate with the Owner and private property owners prior to removal or trimming of any vegetation.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

3.01 CLEARING

- A. Clearing shall consist of the felling, trimming or cutting of trees, stumps, shrubs, brush and branches, and the clearing of downed timber, vines, grass and other vegetation to the limits specified herein, with the exception of items designated either on the Plans or within these Specifications to remain. The ground surface shall be cleared completely of all growth and organic matter as specified. Some trees may be designated in the project drawings to be removed. These will be removed at a minimum. Other trees not shown in the project drawings may have to be removed in order to complete the work at no additional cost to the Owner.
- B. The owners of the property that have trees or anything else removed have all rights to trees and anything cleared from their property. If the property owner wants the trees or anything else, the contractor will move said items to the property owner's desired location not extending beyond the property boundaries of the property it was removed from. Anything not wanted by the property owner will be disposed of at the contractor's expense.
- C. Trees of which less than one-half (1/2) of the lower portion of the trunk is within the area to be cleared may be left in place unless they are so situated that they interfere with other work to be completed under this contract, in which case they shall be removed.
- D. Trimming
  - 1. Tree branches hanging within the zone extending from the ground surface to 13-feet above the finished roadway grade, or 9-feet above other areas, shall be cut



off to the boles in a workmanlike manner in conformance with tree surgeon practice, as directed.

2. The Contractor shall remove additional tree branches as directed by the Engineer in such a manner that the tree presents a balanced appearance.
3. Scars resulting from trimming of branches shall be treated with an approved tree sealant.

E. Clearing Limits

1. Clearing shall be performed within the limits shown in the project drawings, and as directed.

3.02 GRUBBING

A. Grubbing shall consist of the removal of all embedded wood and other organic matter. Materials to be removed include stumps, trunks, buried logs, roots one-inch (1") in diameter and larger and other objectionable material.

B. Grubbing Limits

1. Grubbing shall be performed within all clearing area limits, as specified above, to a depth of six-inches (6") below the ground surface, or subgrade, whichever is deeper.
2. At all trenches and other excavations, grubbing shall be conducted to six-inches (6") outside the exposed sides of the excavation. All stumps shall be completely removed to firm undisturbed soils.

3.03 DISPOSAL

- A. All materials and debris resulting from clearing and grubbing operations shall become property of the Contractor at the place of origin and shall be hauled away and disposed of by the Contractor.
- B. Materials resulting from clearing and grubbing operations shall not be disposed of on lands owned or controlled by the Owner except by written permission. If so permitted, the Contractor shall place materials only at locations and in such manner as directed by the Owner.
- C. The Contractor shall obtain written permission from the owner of any property upon which clearing and grubbing materials are to be disposed. Copies of the agreement between the property owner and the Contractor shall be furnished to the Owner and Engineer.
- D. No burning of materials shall be allowed at the project site unless approved by the Owner in writing. No excess accumulation of materials shall be allowed at the project site.

3.04 PRESERVATION OF EXISTING VEGETATION

- A. The Contractor shall protect from injury all trees, shrubs, vines, plants, grasses and other vegetation outside of areas to be cleared and grubbed, or which are designated by the Engineer to be preserved. Operations which may damage such vegetation to remain shall be conducted in areas where damage will not result.

- B. All items designated to remain which are damaged by the Contractor's operations shall be restored or replaced by the Contractor to as nearly as possible original condition and location at no cost to the Owner.

### 3.05 COMPLIANCE WITH LAWS AND REGULATIONS

- A. The clearing and grubbing work shall be performed in strict compliance with all City, County, State and Federal laws and requirements pertaining to clearing, hauling, disposal, erosion control, and related operations.

### 3.06 BACKFILLING AND GRADING

- A. Stump holes and other excavations which result from clearing and grubbing operations shall be backfilled with suitable material and compacted in accordance with Section 02315.
- B. Holes in areas to be excavated or trenched at a later time may be temporarily backfilled or covered as approved to provide for public safety until completion of final backfill.
- C. Areas subject to Clearing and Grubbing shall be smoothed and reshaped to blend to surrounding grades.

## **PART 4 SPECIAL PROVISIONS**

### 4.01 MEASUREMENT AND PAYMENT

- A. Payment for Clearing & Grubbing shall be included within the Lump Sum price for Demolition & Site Preparation for the amount stated on the Bid Form. Payment shall include compensation for the removal and disposal of all cleared debris and materials and labor required to complete the work described herein.
- B. Tree Removal shall be paid on a unit basis for the amount as stated on the Bid Form. Payment shall include compensation for the removal and disposal of removed trees and material and labor required to complete the work described herein.

**END OF SECTION**

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## **SECTION 02250 – DEMOLITION AND SITE PREPARATION**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. The work in this section includes the furnishing of all labor, equipment, materials, incidentals, and performing all work required for the removal and disposal of concrete, asphalt, miscellaneous structures, debris and other items or improvements of manmade origin, in accordance with the Plans and these Specifications.
- B. The area in which removal work is to be performed shall be confined to the minimum dimensions, within the public right-of-way or easements, which will permit proper construction of the proposed improvements, or as otherwise indicated.

### ***PART 2 PRODUCTS***

#### **2.01 MATERIALS**

- A. Trench Excavation and Backfill shall comply with Section 02315.
- B. Landscape restoration and reseeding shall be as specified in Section 02900.

### ***PART 3 EXECUTION***

#### **3.01 WORKMANSHIP**

- A. Pavements, Curbs, Walks and Driveways
  - 1. Where construction operations require the removal of pavements and other concrete flatwork or structures, bituminous pavements or portions thereof, the area to be removed shall be neatly sawcut. Just prior to placement of AC pavement, final sawcuts shall be made 12-inches outside the limits of the trench on each side. All cuts shall be clean, vertical cuts made true to lines designated or approved by the Engineer.
  - 2. The Contractor shall remove and dispose of all pavement and structures, or portions thereof, which lie within the limits of excavation.
  - 3. Pavements and/or structures designated to remain but damaged as a result of the Contractor's operations shall be sawcut and removed as described above and replaced or restored at the sole expense of the Contractor.
- B. Salvaged Materials
  - 1. Metal riser rings, manhole lids and other reusable materials removed shall remain the property of the City and shall be salvaged as directed by the City Engineer and delivered to the City's storage yard by Contractor.
  - 2. Other salvageable materials shall become the property of the Contractor and shall be disposed of by the Contractor away from the site.

- a. Salvaged materials of any kind shall not be reused in new work without the written approval of the Engineer.
- C. All items and materials designated to remain shall be protected against damage as required. Damage to items or materials not intended for removal shall be repaired promptly by the Contractor to the satisfaction of the affected property owner. If the Engineer determines it necessary, repairs shall consist of complete replacement of the affected items or materials. All such repairs and replacements shall be made by the Contractor without compensation.
- D. Disposal of Materials
  1. All materials, except those determined by the Engineer or Owner to be reusable, shall become property of the Contractor at the place of origin and shall be disposed of by the Contractor in conformance with all laws, regulations and rules legally imposed on such activities.
    - a. Contractor shall make every effort to salvage or recycle construction demolition items and debris as is feasible.
  2. Materials shall not be disposed of on City owned or City controlled lands except by written permission of the City, and if so permitted, the materials shall be placed only at such locations and in such manner as the City may direct. Materials may be disposed of on private properties only with written permission of the property owner(s) involved, and with copies of the agreement furnished to the City and Engineer.
- E. All existing ditches damaged by the Contractor by his operations and incidental ditching shall be re-constructed as required as to maintain existing drainages and ditches. The Contractor shall maintain channel width and side slopes of existing conditions.

**PART 4 SPECIAL PROVISIONS**

**4.01 MEASUREMENT AND PAYMENT**

- A. Payment for Demolition and Site Prep shall be included within the total lump sum price for the amount as stated on the Bid Form.

**END OF SECTION**

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## **SECTION 02310 – ROADWAY EXCAVATION**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. This work consists of furnishing all labor, materials, incidentals and equipment, as well as performing all work required for Roadway Excavation.
- B. Excavation must be in accordance with ORS 757.541 to 757.571 and all other applicable laws and regulations.
- C. Adhere to rules and recommendations of the Oregon Department of Environmental Quality *Erosion and Sediment Control Manual*, most recent edition.
- D. Excavation of any material encountered regardless of nature, character or condition to the limits shown on the plans. All excavation is unclassified and boulders and solid rock are included as common excavation.

#### 1.02 REFERENCES

- A. Oregon Standard Specifications for Construction (OSS) – Latest version of the Oregon Department of Transportation/APWA Oregon Chapter Standard Specifications for Construction.
- B. Oregon Department of Environmental Quality (DEQ) *Erosion and Sediment Control Manual*, most recent edition.

#### 1.03 DEFINITIONS

- A. Excavation – excavation consists of the removal of all material at site to the limits shown on the Plans or as directed. Excavation shall be classified as either common excavation or rock excavation as specified in Section 02315.
- B. Subgrade – Subgrade is defined as the bottom of the excavated area on which the aggregate sub-base is to lay which provides support for the new roadway surface.
- C. Subgrade Foundation Stabilization – Subgrade stabilization is defined as removing unsuitable material from the bottom of an excavation as directed by the Engineer, and furnishing, placing and compacting specified material to provide firm foundation and support.
- D. Aggregate base – Aggregate base is defined as furnishing, placing and compaction of specified aggregate base for the entire excavated area for the new roadway from the top of the approved subgrade to the bottom of the HMAC surface.

### **PART 2 PRODUCTS**

#### 2.01 MATERIALS

- A. 1½"-0 aggregate bases shall meet the requirements as specified in Section 02720 Aggregate Base. This material shall be used as subgrade stabilization, where required.
- B. 1"-0 or ¾"-0 aggregate bases shall meet the requirements as specified in Section 02720 Aggregate Base. This material shall be used as the aggregate base.

### **PART 3      EXECUTION**

#### **3.01    GENERAL**

- A.      Remove, haul, and dispose of all formations and materials, natural or man-made, irrespective of nature or conditions encountered, within lines and grades shown on the Plans or defined herein, and as necessary for completion of the proposed improvements. The method of excavation shall be as determined by the Contractor, and as required for special protection of existing improvements. Special care shall be taken to avoid over excavation below the planned subgrade elevation. Clearing and Grubbing and Removal of Structures and Obstructions to be completed prior to excavation.
  
- B.      When the precise location of subsurface structures and/or utilities is unknown, locate such items by hand excavation prior to utilizing mechanical excavation equipment. Use hand excavation when mechanical equipment might damage existing improvements which are to remain undisturbed.
  
- C.      Shoring and Bracing
  - 1.      Sheet and brace excavation as necessary to prevent caving and to protect adjacent structures, property, workers and the public.
  - 2.      All sheeting, shoring and bracing shall conform to safety requirements of OSHA and other Federal, State and local agencies.
  
- D.      Dewatering
  - 1.      Furnish, install and operate all necessary machinery, appliances and equipment to keep excavations free from water during digging and initial backfilling. Dispose of water in such a manner as to prevent damage to public or private property, or nuisance, or menace to the public.
  - 2.      At all times have on hand sufficient pumping equipment and machinery in good working condition for all ordinary emergencies, including power outage. Have available, at all times, competent workers for operation of the equipment.
  - 3.      Control surface runoff to prevent entry or collection of water within excavations. All excavations shall be kept free of water during placement of backfill and/or concrete placement.
  - 4.      Comply with all laws regarding storm water runoff, protection of natural resources, and other applicable laws and regulations.

#### **3.02    EXCAVATION**

- A.      Once the existing topsoil, AC pavements and other materials designated for removal have been stripped away and removed. Excavate to the lines and grades shown on the project Plans, allowing for forms, shoring, working space and the required thickness of specified backfill. Unless otherwise specified or shown on the Plans, excavations shall extend a sufficient distance from walls and footing to allow for placing and removal of forms and for inspections, except where concrete is specified to be placed directly against specified surfaces.
  
- B.      Final excavation beneath the roadway shall be completed using an excavator equipped with a smooth-edged bucket to minimize subgrade disturbance. Loose or disturbed

material shall be removed prior to placement of aggregate base material. A smooth excavation may not be practical due to the presence of rock fragments. Well embedded, protruding rock fragments may be left in the bottom of the excavation.

**3.03 OVER EXCAVATION / SUBGRADE STABILIZATION**

- A. Over excavation and foundation stabilization shall be required where soil is encountered extending below the planned subgrade elevation beneath the roadway or where soft or unsuitable soil is encountered beneath utility trenches. The Engineer will determine if over excavation is required.

**3.04 DISPOSAL OF EXCESS MATERIALS**

- A. Excavated materials not suitable or required for backfill shall be hauled away and disposed of on approved sites arranged by the Contractor. No site shall be used for disposal of materials without written approval of the property owner. All costs associated with the hauling and disposal of materials shall be borne by the Contractor. The Contractor shall be entitled to any proceeds received from the sale of excess materials.

**3.05 AGGREGATE BASE MATERIAL**

- A. Placement of aggregate base materials shall be as specified in Section 02720 Aggregate Base.
- B. See Section 02321 for compaction testing requirements during backfilling operations.

**PART 4 SPECIAL PROVISIONS**

**4.01 MEASUREMENT AND PAYMENT**

- A. Measurement and Payment for Roadway Excavation shall be included in the lump sum cost for Demolition & Site Prep, as stated on the Bid Form. Payment shall include all excavation, grading, cleanup, compaction, testing and disposal of excess excavated materials from the project site.
- B. Payment for all excavation and grading required to facilitate path construction as shown in the Plans and described herein shall be paid in the lump sum for Path Grading, as stated on the Bid Form. No separate payment shall be made.
- C. Payment for Aggregate Bases shall be made in accordance to Section 02720.
- D. Payment for Asphalt Concrete pavement shall be made in accordance with Section 02740.

**END OF SECTION**



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## **SECTION 02321 – COMPACTION TESTING**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. The Contractor shall retain and pay for the service of an approved, recognized independent testing laboratory to conduct laboratory tests on materials and field testing to determine the relative compaction of trench backfill, subgrades, embankments, gravel surfacing, aggregate base and asphalt concrete pavement, as indicated. The approved Testing Agency shall recommend methods of compaction to Contractor and issue final report to the Owner, through the Engineer, regarding compaction testing results and material compliance with the specifications.
- B. These specifications call for field compaction efforts to achieve a specified relative compaction for each of the indicated classes of backfill. Determination of in-place density shall be made by means of non-destructive nuclear probe method testing in accordance with ASTM D2922-01 and ASTM D3017-01 test methods.

#### **1.02 DEFINITIONS**

- A. Relative Compaction -- The ratio, expressed as a percentage, of the in-place density of the backfill material to the maximum density of the same material as determined by the ASTM D698 Standard Test Method.

### ***PART 2 PRODUCTS***

#### **2.01 APPROVED TESTING AGENCIES**

- A. Foundation Engineering; 820 N.W. Cornell Ave.; Corvallis, OR 97330; (541) 757-7645
- B. Western Testing; 3329 N.E. Stephens; Roseburg, OR 97470; (541) 957-1233
- C. Western Testing; 2455 Maple Leaf, Bay #4; North Bend, OR 97459; (541) 266-9875
- D. Carlson Testing; 89970 Hwy 99N; Eugene, OR 97402; (541) 345-0289
- E. SHN Consulting Engineers & Geologists, Inc.; 275 Market Ave, Coos Bay, OR 97420; (541) 266-9890
- F. Other certified private testing laboratory approved by Engineer

### ***PART 3 EXECUTION***

#### **3.01 WORKMANSHIP**

- A. Field Testing
  - 1. Testing to determine the relative compaction of materials placed and compacted by the Contractor shall be performed a short distance behind construction. Tests shall be taken on each lift of the material prior to placement of the succeeding lift to ensure proper compaction is obtained. The Testing Agency shall perform testing at such locations and elevations as to be representative of the entire material and area being compacted. The Engineer shall have authority to require testing at times and locations he deems necessary.

2. A sufficient number of density tests shall be taken on the first section of subgrade and trench backfill placed by the Contractor to establish the effectiveness of the Contractor's compactive efforts. If tests indicate that the specified relative compaction for a given material is not being achieved, the Contractor shall modify compaction methods in order to obtain the specified results.
    - a. If changes are observed in moisture content, compaction method, or subgrade condition, as determined by the Owner or Engineer, the Contractor will be required to perform additional compaction tests, to determine a new compactive effort requirement.
  3. A minimum of one (1) test will be required to be performed every 300 feet along the path corridor and three (3) tests on the parking lot. The collection of compaction tests performed shall be performed at locations and depths such that, in the opinion of the Engineer, the collection of compaction test results delivered to the Engineer are representative of the entire material being compacted.
  4. Additional site visits or tests may be required to prove Contractor is meeting compaction requirements or as requested by the Owner, Engineer, and other affected utilities.
- B. Failing Tests – For areas failing to meet the specified compaction, the Contractor shall be responsible to perform all additional work necessary to achieve specified compaction at no additional cost to the Owner. Additional work may include further compactive effort, moisture treatment, other compaction methods, removal and replacement of failing materials, or other processes required to obtain the specified results.
- C. Any subsequent settlement of backfilled areas during the one-year warranty period shall be considered to be the result of insufficient compaction and shall be promptly repaired by the Contractor at no additional cost to the Owner.
- D. The Contractor shall not be allowed any additional compensation for down time incurred as a result of compaction testing or waiting for test results.

#### **PART 4 SPECIAL PROVISIONS**

##### **4.01 MEASUREMENT AND PAYMENT**

- A. Payment for Compaction Testing shall be included within the unit prices for gravel path, aggregate base rock, asphalt concrete pavement, and other associated items relative to the project. The price shall include compensation for all costs associated with compaction testing, including sampling, laboratory testing, field testing, administration, and all other work required to obtain certification of backfills placed under this Contract.
1. Only Compaction Tests with results meeting the requirements of these Specifications will be accepted. All costs associated with or arising from additional work required due to failing compaction test results, including removal and replacement of material, shall be borne by the Contractor.
  2. Contractor must submit invoice from Testing Agency clearly identifying Project, location and date of testing, material tested, test method, test results, specified compaction, maximum dry density of material tested, and number of tests taken. Only tests directed by the Engineer and which obtain passing results will be paid for.

**END OF SECTION**

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## **SECTION 02511 – LOCATOR WIRE & WARNING TAPE**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. This section consists of furnishing all labor, material and equipment, and performing all work required for the burying of an insulated copper conductor wire and plastic underground warning tape in the trench with installed non-ferrous and/or nonconductive (plastic, etc.) water and sewer lines. See the Standard Detail Drawings for trench cross section.

### **PART 2 PRODUCTS**

#### 2.01 MATERIALS

- A. Sewer Lines
  - 1. Tracer wire shall be No. 12 AWG, solid copper with green colored insulation. Insulation shall be 0.030-inch thick HDPE designed for direct bury.
  - 2. Underground warning tape shall be 6-inch wide, 4-mil thick, APWA Standard Green color, reading "CAUTION – BURIED SEWER LINE BELOW."

### **PART 3 EXECUTION**

#### 3.01 WORKMANSHIP

- A. Sewer Lines
  - 1. Wire and warning tape shall be buried the entire length of the trench, placed in accordance with the Standard Detail Drawings, for all nonconductive pipelines.
  - 2. Wire shall be brought to the surface and connected at each manhole and sewer cleanout. Distance between tracer lead access locations shall not exceed 1,000 feet. All joints and/or splices in the wire shall be made with a designed waterproof splice kit. Wire shall be taped to pipe every 5 feet and shall be run straight with a small amount of slack. Wire shall be routed outside each manhole or cleanout riser. Wire shall be exposed inside all cleanout covers and a minimum of 24" of wire provided. At manholes, pass wire into manhole between concrete grade ring and manhole lid frame and provide a minimum of 24" coiled wire.
  - 3. Warning tape shall be placed over the pipe zone material, approximately 15 to 18 inches below finish grade, in accordance with the Standard Detail Drawings. Lay tape flat and untwisted, centered over the pipe and with wording facing upwards.

### **PART 4 SPECIAL PROVISIONS**

#### 4.01 MEASUREMENT AND PAYMENT

- A. Payment for Locator Wire & Warning Tape shall be included within a portion of the unit amount for gravity sewer and storm pipe and fittings. A separate payment will not be made for these items.

**END OF SECTION**

## **SECTION 02630 – STORM DRAIN PIPING & FITTINGS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. This item shall include furnishing and installing of the storm drain piping and fittings as required for replacement as identified on the Plans.
- B. The Contractor shall provide manufacturer's certifications, including test results for all piping, fittings and appurtenances supplied. All submittals shall be in conformance with the requirements of Section 01300.
- C. All work shall conform to the latest version of the Oregon Standard Specifications (OSS) Part 00400, except as specified herein and shown on the Plans.

### ***PART 2 PRODUCTS***

#### **2.01 MATERIALS**

- A. All pipe, fittings and appurtenances shall be new and unused.
- B. PVC Pipe and fittings for storm drain piping shall conform to Class 12454-B, as defined in ASTM D1784. Pipe and fittings shall meet the requirements of ASTM D-3034 for 4" – 15" pipe SDR 35. Neoprene gaskets with push on joints shall conform to ASTM F477.
  - 1. All fittings and accessories shall be as manufactured and furnished by the pipe supplier or an approved equal and shall have bell and spigot configurations compatible with that of the pipe. Fittings and accessories shall have the same requirements as the pipe.
- C. Non-Shrink Grout. Grout shall be Sika 212, Euco N-S, Five Star, or approved equal nonmetallic cementitious commercial grout exhibiting zero shrinkage per ASTM C827. Grout shall not be amended with cement or sand and shall not be reconditioned with water after initial mixing. Nonshrink grout shall be placed and packed only with the use of an approved commercial bonding agent. Unused grout shall be discarded after 20 minutes.

### ***PART 3 EXECUTION***

#### **3.01 PIPE INSTALLATION**

- A. All pipe and fittings shall be installed in accordance with the manufacturer's recommendations and APWA standards.
- B. Remove from job site material, which in the judgment of the Engineer is damaged, not as specified, or otherwise rejected. Payment will not be made for damaged or rejected materials, their removal, or for repairs to such materials.
- C. Preparation of Trench – Excavate and prepare trench for pipe laying to the lines and grades as specified and shown on the Plans. Place any required foundation stabilization and compact pipe bedding prior to laying pipe. Stabilize trench as required and comply with OSHA safety provisions.

- D. Place and compact pipe bedding material before placing pipe in the trench. When applicable, dig depression for pipe bells to provide uniform bearing along the entire pipe length. Thoroughly compact bedding material to prevent future bellies.
- E. Install to lines and grades shown on the Plans. Maximum deviation shall not exceed 0.05 feet vertically.
- F. Prior to lowering pipe into the trench, the Engineer or City representative will check for damage to the pipe. The Contractor shall repair or replace, as directed, all damaged or flawed pipe prior to installation.
- G. Thoroughly clean inside the pipe before laying. Prevent foreign material from entering the pipe while it is being placed in the trench. Remove all foreign material from the inside of the pipe and joint before the next pipe is placed. Keep debris, tools, rags or other materials out of the pipes at all times.
- H. Lay pipe with bell ends facing the direction of laying. For lines on an appreciable slope, face bells up-grade unless otherwise directed by the Engineer. Thoroughly clean the ends of the pipe to remove all foreign matter from the pipe joint. Lubricate the bell and spigot ends with approved pipe lubricant, as recommended by the manufacturer.
- I. Care must be taken to ensure the pipe is not moved and the side support fill is not disturbed when moving sheeting or trench boxes.
- J. Place materials in the pipe zone in layers not greater than 6 inches thick and in a manner that equalizes the pressure on the pipe and minimizes stress. As required under the haunches of pipe and areas not accessible to mechanical tampers or to testing, compact with hand methods to ensure thorough contact between the material and the pipe. Before placing the pipe zone material, condition, aerate, or wet the material so that the moisture content of each layer is within minus 4% to plus 2% of optimum moisture content.
- K. Provide proper Backfill Class material as required. Backfill the trench above the pipe zone in successive lifts. Do not allow the backfill to free-fall into the trench until at least 3 feet of cover is provided over the top of the pipe. Modify the compaction as necessary to protect the pipe. Compact each lift to not less than 95% of the maximum dry density.

### 3.02 VIDEO INSPECTION OF GRAVITY SYSTEMS

- A. All gravity storm drain lines constructed as part of the project shall be televised and recorded at the end of construction prior to acceptance. Recording shall be conducted after all backfill and compaction, but prior to final surface restoration. All pipes shall be thoroughly flushed by the Contractor immediately prior to the video inspection. Recording shall be per section 02635. Any sections of storm pipe not meeting specifications or exhibiting defects shall, at the Contractor's expense, be corrected to meet specification. Repaired sections shall be re-televised. All repairs must be completed before acceptance of the project.
- B. The storm drain lines constructed as part of the project will also be video inspected near the end of the one year warranty period to determine if any defects exist in the system. The warranty video inspection will be conducted during a season of high groundwater as close to the end of the warranty period as possible. The warranty period will continue to be in effect, regardless of duration, until all video recordings are received and approved. All defects in the system will be corrected at the Contractor's expense.

**PART 4 SPECIAL PROVISIONS**

4.01 MEASUREMENT AND PAYMENT

- A. Measurement and payment for Storm Drain Piping as described in this section shall be made on a per lineal foot basis up to two feet from the outside wall of any connecting catch basin, manhole, etc. for the amount as stated on the Bid Form for each material, size, and backfill class as stated on the Bid Form. Payment for this bid item may include but not shall not be limited to compensation for potholing or exploratory excavation for location of existing utilities, trench excavation, pipe installation, bedding and backfill, pipe zone materials, compaction, testing, fittings, connection to existing storm drain manholes and all other items necessary for a complete installation as shown on the Plans and specified herein.
- B. Payment for storm drain Video Inspection shall be included within the unit price amount for each material, size, and type of storm line as shown in the Bid Form.
- C. Payment for connection to new basins and manholes shall be included within the unit price per each structure.

**END OF SECTION**

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## **SECTION 02631 – CATCH BASINS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. This section includes the furnishing and installing catch basins including curb inlets, drop basins, and ditch inlets. Catch basins shall conform to the type as shown on the Plans and shall include frames and grates.
- B. Catch basins shall be precast unless specified otherwise or as approved by the Engineer. Catch basins shall conform to the sizes, dimensions and locations as shown on the Plans.
- C. Minor revisions in the new catch basins may be required to allow for adjustment of new drain pipe grades. The Contractor shall field verify pipe penetrations and dimensions (height) required and shall not be entitled to any additional compensation for revising precast catch basins to allow for minor field revisions.
- D. Contractor shall provide submittals for precast structures including manufacturer's drawings and installation instructions.

### ***PART 2 PRODUCTS***

#### **2.01 MATERIALS**

- A. Catch Basins
  - A. Drop Inlets
    - a. Drop inlets shall be type G-1 per City Standard Details.
- B. Grout shall be non-shrink as specified in Section 03600.
- C. Aggregate base material shall conform to Section 02720.
- D. Cast-in-place concrete shall conform to Section 03300.

### ***PART 3 EXECUTION***

#### **3.01 GENERAL**

- A. All inside surfaces shall be smooth and free of depressions or protrusions. Cast-in-place concrete shall comply with Section 03300.
- B. Connecting pipe shall be placed the full thickness of wall and flush with inner face. Place pipe at the required grade and alignment. Connect pipe to each catch basin and area drain with grout as required for water tight joints.
- C. Precast cast basins shall be installed per manufacturer's recommendations.
- D. Aggregate base material shall be compacted to at least 95 percent of maximum density as determined by AASHTO T-180. Unless otherwise shown, depth of base material shall be a minimum of 6-inches.



**PART 4      SPECIAL PROVISIONS**

4.01    MEASUREMENT AND PAYMENT

- A.      Payment for Catch Basins and other work in this section shall be made per unit price for each as stated on the Bid Form. Payment for this bid item includes but is not limited to compensation for precast catch basin, top, frame and grate(s), excavation, aggregate base and backfill, connection of SD piping and all other related work for a complete installation of each storm drain catch basin type.
  
- B.      Connection of piping up to 2 feet from the outside wall of the catch basin, curb inlet or drop basin shall be considered incidental to the work. No additional payment will be allowed.

**END OF SECTION**

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## **SECTION 02720 – AGGREGATE BASE**

### ***PART 1 GENERAL***

#### 1.01 SUMMARY

- A. This section includes all work necessary for furnishing, placing, compacting and grading aggregate base and gravel shoulder on the prepared surface to the lines, grades, thicknesses and cross sections shown on the Plans or where indicated.

#### 1.02 REFERENCES

- A. ASTM D698 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort
- B. OSS – Oregon Standard Specifications for Construction, most recent Edition.

#### 1.03 SUBMITTALS

- A. Contractor shall furnish sample of proposed material for visual inspection by Engineer and Owner for approval prior to importing to site.

### ***PART 2 PRODUCTS***

#### 2.01 MATERIALS

- A. Aggregate base course rock shall be 1"-0 or ¾"-0 angular crushed rock conforming to OSS Section 00641 and shall be obtained from a source pre-approved by the Owner. Use clean, hard, durable aggregates, reasonably well-graded from the maximum size to dust.
- B. Aggregate sub-base shall be 1 ½"-0 angular crushed rock conforming to OSS Section 00641. Use clean, hard, durable aggregates, reasonably well-graded from the maximum size to dust.
- C. Path top course shall be ¼" minus angular crushed rock forming to OSS Section 00641. Use clean, hard, durable aggregates, reasonably well-graded from the maximum size to dust.

### ***PART 3 EXECUTION***

#### 3.01 WORKMANSHIP

- A. Excavate to proper sub-grade depths or elevations as shown on the Plans or as necessary to provide required thickness of aggregate base. Remove, haul, and dispose of all formations and materials, natural or man-made, irrespective of nature or conditions encountered, within lines and grades shown on the Plans or defined herein, as necessary for completion of the proposed improvements. The method of excavation shall be determined by the Contractor, and as required for protection of existing site features designated to remain.
- B. Preparation of sub-grade – Provide a firm sub-grade surface on which aggregate base is to be placed.
  - 1. Sub-grade Over Excavation & Replacement – Remove and dispose of any unstable or unsuitable materials as directed by the Owners representative or

Engineer. Replace any excavated materials with successive lifts of aggregate sub-base or other materials as directed by the Owners representative or Engineer. Grade and compact, as required, to provide a smooth surface that conforms to the surrounding grades.

2. Sub-grade Compaction – compact exposed sub-grade by wetting or other means until it is firm and unyielding, per OSS 00344.45.

C. Placement

1. When, in the judgment of the Engineer, the weather is such that satisfactory results cannot be achieved, operations shall be suspended. Owner shall not be liable for damages or claims of any kind or description due to the suspension of operations by the Engineer.
2. Aggregate base materials shall be deposited on the sub-grade at a uniform quantity per linear foot so that the Contractor will not resort to spotting, picking up, or otherwise shifting material. Segregation of aggregates shall be avoided and material so spread shall be free of pockets of coarse or fine materials.
3. Place aggregate base materials such that when compacted and finish graded it will conform to the grades and sections shown on the Plans. Aggregate base materials shall be placed in maximum lifts of 6-inches, or as approved by the Engineer. Place each layer in spreads as wide as practical and to the full width of the course before a succeeding layer is placed.

D. Compacting and Shaping

1. Shape and maintain the surface of each layer of aggregate base during compaction operations such that the surface of each layer is parallel to the established grade and cross section for the finished surface within 0.05 foot.
2. Aggregate base materials shall be compacted to 95% maximum dry density as determined by the ASTM D698 test method.
3. Comply with Section 02321, Compaction Testing.

**PART 4 SPECIAL PROVISIONS**

4.01 MEASUREMENT AND PAYMENT

- A. Measurement and payment for Aggregate Base shall be included in the unit price items for the amounts stated on the Bid Form for concrete sidewalks, pedestrian ramps, driveways, asphalt pavements, and other related site improvements. Payment shall include compensation for materials, hauling, placing, compacting, testing and all other incidental work.
- a. Measurement and payment for Aggregate Base material used under the following items shall be considered incidental to that line item:
    - i. Standard Curb and Gutter
    - ii. Standard Concrete Sidewalk w/ 4" Aggregate Base
    - iii. Standard Concrete Driveway w/ 6" Aggregate Base
    - iv. Pedestrian Ramp w/4" Aggregate Base
    - v. Valley Gutter

- B. Payment for Gravel Pathway w/ Aggregate & Geotextile shall be made on a unit price basis per square foot as shown on the Bid Form. Payment shall include compensation for materials, hauling, placing, compacting, testing and all other incidental work. Payment for "Trail Cross Drains" will be included within this cost. 12" Storm culverts shown shall be paid separately.
- C. Payment for Asphalt Concrete pavement shall be made in accordance with Section 02740.

**END OF SECTION**

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## **SECTION 02740 – HOT MIX ASPHALT CONCRETE PAVEMENT**

### ***PART 1 GENERAL***

#### 1.01 SUMMARY

- A. This section includes furnishing all materials, labor and equipment necessary to construct asphalt concrete pavement to the lines, grades and cross sections shown or established, including one or more courses and overlays. Work shall be performed in conformance with any applicable State, County or City Standards.

### ***PART 2 PRODUCTS***

#### 2.01 DEFINITIONS

- A. Hot Mixed Asphalt Concrete (HMAC) – Asphalt concrete is a hot mix of asphaltic cement; well graded, high quality aggregate; mineral filler and additives, as required; plant mixed into a uniformly coated mass, hot laid in on a prepared foundation, and compacted to a specified density.
- B. Oregon Standard Specifications (OSS) – The Oregon Department of Transportation/APWA Oregon Chapter Standard Specifications for Construction, most recent edition.
- C. ASTM D946 - Standard Specifications for Penetration-Graded Asphalt Cement for use in Pavement Construction; 2009. ASTM D946-09a

#### 2.02 MATERIALS

- A. Unless otherwise specified herein, types, grades, quality and proportions of materials shall conform to specified and/or applicable sections of the current Oregon Standard Specifications.
- B. HMAC shall be Level 3 HMAC, 1/2-inch Dense Graded Mix in accordance with OSS Section 00745.
- C. Asphalt Tack Coat shall consist of CSS-1 or CSS-1h emulsified asphalt (EA) tack coat conforming to OSS 00730.
- D. Base Aggregate shall be as specified in Section 02720 of these specifications.
- E. Joint Sealant:
  - 1. Joint seal shall meet the test requirements of ASTM D244.
  - 2. Joint seal material shall be CRS-1 or CRS-2 and shall meet the requirements of OSS; Section 02710 for Cationic Emulsified Rapid Setting Asphalt
- F. When required to by the contract Contractor shall add HMAC Reinforcing Fibers to the HMAC Mix as described in this section. See HMAC Reinforcing Fibers section of the Technical Specifications, Section 02741.

### ***PART 3 EXECUTION***

#### 3.01 WORKMANSHIP

- A. Unless otherwise specified herein, HMAC shall be mixed, processed, hauled, laid, compacted and finished in accordance with OSS Section 00745.
- B. Notify the Engineer at least 48-hours prior to placement of base aggregate and asphalt concrete pavement to permit inspection.
- C. When, in the judgment of the Engineer, the weather is such that satisfactory results cannot be achieved asphalt concrete paving operations shall be suspended. Owner shall not be liable for damages or claims of any kind or description due to the suspension of operations by the Engineer. HMAC shall not be placed when the ambient temperature is below 40° F, or surface is wet or frozen.
- D. Adhere to all applicable State and/or OSHA regulations pertaining to road closure, traffic control, and other related safety precautions.
- E. To provide for the convenience and safety of the traveling public, pavement replacement shall be performed immediately following the completion of backfilling operations. In the event that pavement replacement cannot be performed as such, the Contractor shall maintain the trench backfill on a daily basis, as directed, until pavement replacement has been completed.
- F. Subgrade and aggregate base shall be prepared, compacted and finished in accordance with Section 02720.
- G. Pavement Sawcutting
  - 1. Utility trenches in existing pavement areas shall be sawcut immediately prior to repaving. Sawcuts shall be made a minimum of 12-inches outside the limits of the trench, or to the outer extents of pavement damaged as a result of the Contractor's operations, whichever is greater.
- H. Tack Coat Asphalt
  - 1. Contact surfaces of manholes, catch basins, gutters and existing pavements shall be treated with a layer of tack coat asphalt. Do not place on wet surfaces.
  - 2. Joints between existing and new AC pavement shall be filled with tack coat asphalt.
  - 3. Apply tack coat asphalt with a pressure distributor capable of uniformly applying the emulsified asphalt at even heat on variable surface widths up to 16-feet, at readily determined and controlled rates from 0.05 to 0.20 gallons per square yard, and with uniform pressure. Pressure distributor shall include a tachometer, pressure gages, accurate volume measuring devices and a thermometer for measuring temperature of tank contents. Pressure distributor shall be equipped with a positive power asphalt pump and full circulation spray bars adjustable both laterally and vertically. Set bar height for triple lap coverage.
  - 4. Minimum surface temperature at the time of placement of tack coat asphalt shall not be less than 50° F.
  - 5. Tack coat shall only be applied to clean dry surfaces. All loose material should be removed by sweeping, flushing with water or other approved methods.
  - 6. Apply tack coat asphalt at the following rates for the indicated surfaces.

<b>Surface</b>	<b>Application Rate (gallons / yd<sup>2</sup>)</b>	
	<b>Undiluted</b>	<b>Diluted 1:1 with Water</b>
New HMAC	0.05 – 0.07	0.10 – 0.13
Oxidized HMAC	0.07 – 0.10	0.13 – 0.20
Milled HMAC	0.10 – 0.13	0.20+

7. Tack coat asphalt shall be at a temperature between 140° F and 185° F as recommended by the manufacturer at the time of application.
  8. Do not place HMAC on the tack coat until the asphalt separates from the water, but before it loses its tackiness.
- I. Asphalt Concrete Pavement
1. HMAC shall be a minimum of 250° F at the time of placement.
  2. Storage of HMAC in silos shall not be permitted.
  3. Control of line and grade shall be manual.
  4. HMAC shall be covered during hauling if rain or cold air temperatures are encountered any time between loading and placement. HMAC will be rejected if any of the following is observed: mix falls below minimum specified temperature; slumping or separating; solidifying or crusting; absorbing moisture. Rejected loads shall be disposed of at the Contractor's expense.
  5. Deposit HMAC from the hauling vehicles so segregation is prevented. HMAC shall not be windrowed.
- J. Placement
1. HMAC should be placed using a self-contained, self-propelled paver supported on tracks or wheels that do not contact the mix being placed.
  2. When leveling irregular surfaces and raising low areas, do not exceed 2-inches actual compacted thickness on any one lift.
  3. Place the mix in the number of lifts and courses, and to the compacted thickness for each lift and course as shown on the Plans. Limit the minimum lift thickness to twice the maximum aggregate size in the mix.
  4. The compacted depth of new asphalt concrete pavement on public streets shall be 4-inches, minimum. Asphalt concrete paving for utility trench patches shall be 4-inches, minimum, or shall match the existing paving, whichever is greater. Asphalt concrete overlays on public streets shall have a minimum thickness of 4-inches. On non-public roads or driveways, match existing thickness, with a minimum thickness of 2-inches. Asphalt concrete pavement in excess of 2-inches thick shall be constructed in multiple lifts of approximately equal thickness. The maximum compacted thickness of any individual lift shall not exceed 2-inches.
  5. Pavement shall be placed, shaped, compacted and finished to the grades and cross sections shown on the Plans or established. Taper new overlays at limits to match existing asphalt pavement.



6. HMAC shall be compacted using self-propelled steel wheeled static rollers, vibratory rollers, or pneumatic tired rollers capable of achieving the minimum compaction specified. If vibratory rollers are used, they should be specifically designed for compaction of HMAC, have adjustable amplitude and frequency, and be capable of at least 2000 vibrations per minute. Finish rolling should be performed by a static roller or a vibratory roller in the static mode.
7. Asphalt concrete pavement shall be compacted to a minimum of 92% relative compaction with the theoretical maximum density determined by AASHTO T-209. Testing shall be performed at random locations using a nuclear gauge operated in the back-scatter mode. At least one density test shall be performed every 1000 lineal feet on each spread or a minimum of one test each day of production. At least one density test will be required.
8. No traffic shall come in contact with any newly paved surface until surface has cooled and set sufficiently to prevent marking. The Contractor is responsible for traffic control.
9. Test the top surfaces with a 12-foot long straight edge in conformance with Section 00745.70 of OSS. The finish grade shall have a smooth uniform surface for storm drainage with no low spots that would collect water, causing puddling.
10. Surface of the asphalt concrete after compaction shall be smooth and true to a tolerance of 0.02 foot of the established cross section and grade, conforming to Section 00745.70 of OSS. Any mixture that become loose or broken, mixed with dirt or is in any way defective, shall be removed and replaced with fresh hot mixture which, when compacted, shall conform to the surrounding area. There shall be no sign of roller marks. All cost in correcting defective surfaces shall be borne by the Contractor.
  - a. Tolerances
    - 1) Flatness: Maximum variation of 1/4 inch measured with a 10-foot straight edge
    - 2) Variation from Trued Elevation: Within 1/2 inch.
  - b. Protection
    - 1) Immediately after placement protect pavement form mechanical injury for 7 days or until surface temperature is less than 140 degrees.
    - 2) No traffic shall come in contact with any newly paved surface until surface has cooled and set sufficiently to prevent marking. The Contractor is responsible for this traffic control.
    - 3) After completion of paving, the Contractor shall remove from the site all debris resulting from the Contractor's operation.
    - 4) All costs incurred in the repair of deficiencies or damages shall be borne by the Contractor, and no additional compensation shall be due to the Contractor.

K. Warranty

1. Contractor shall maintain all asphalt concrete paved areas and shall furnish all required materials and workmanship at no additional cost to the Owner for a period of one year following the Owner's acceptance of the complete project.
2. If any newly paved asphalt concrete surfaces settles, cracks, breaks, or becomes otherwise defective within the warranty period as described herein, then the deficiencies or damages in surfacing shall be immediately repaired by the Contractor upon request and in a manner approved by the Engineer.
3. All costs incurred in the repair of deficiencies or damages shall be borne by the Contractor, with no additional compensation allowed.

**PART 4 SPECIAL PROVISIONS**

**4.01 MEASUREMENT AND PAYMENT**

- A. Payment for HMAC-Level 3 shall be paid for at the per ton amount as stated on the Bid form. Payment shall include compensation for all work necessary to prepare, lay, compact and otherwise fully complete the new asphalt concrete pavement surface. There will be no separate measurement of bituminous cements or additives contained in the mixture or used otherwise in the work. Payment will be made only for material incorporated into the specified limits.
- B. The cost for sawcutting existing pavement shall be considered incidental to the work. No additional compensation will be allowed for this item.

**END OF SECTION**

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## **SECTION 02760 – PAVEMENT MARKINGS**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. This Section includes all materials and workmanship for durable permanent pavement striping and pavement markings.

#### **1.02 DEFINITIONS**

- A. Oregon Standard Specifications (OSS) – The joint Oregon Department of Transportation/APWA Oregon Chapter Standard Specifications for Construction.
- B. ODOT Qualified Products List (QPL) – The Qualified Products List published every six months by the Oregon Department of Transportation, Construction Section.

### ***PART 2 PRODUCTS***

#### **2.01 MATERIALS**

- A. All markings shall be from the QPL. Parking stalls, centerline pavement and miscellaneous markings for these two projects shall be painted.
- B. 4" Striping – White and yellow, solid and skip lines shall conform to OSS (2015) Section 00860 with 15 mils wet thickness for each marking application.
- C. Paint shall be reflectorized in type and shall be specifically made for application upon asphaltic concrete surfaces and shall comply with Sections 00860 and 00867 and other related sections of the ODOT Standard Specifications for Construction.
- D. Crosswalks, stop bars, directional arrows and railroad crossings shall be Thermoplastic and white in color. Thermoplastic pavement markings shall be Type B (preformed fused thermoplastic film) as specified in Section 00867 of the ODOT Standard Specifications for Construction.

### ***PART 3 EXECUTION***

#### **3.01 DURABLE PAVEMENT STRIPING APPLICATION**

- A. Apply striping to the lines and locations shown on the Plans or as directed. For overlay projects replace striping to match existing striping unless otherwise directed. Apply 2 coats.
- B. Lay out a continuous guideline for each line and receive approval from the Engineer prior to striping.
- C. Place permanent striping prior to traffic being allowed on the pavement if the pavement has cured sufficiently. If scheduling does not allow placement of permanent striping prior to allowing traffic on the roadway, install and maintain flexible pavement markers until permanent striping is completed.
- D. Apply striping material only when the surface is sufficiently dry, clean and free of contaminants such as surface oils. Some striping materials require the asphalt to cure for several weeks prior to placement.

- E. Place striping parallel and true to line. Place skip stripes so that they are in cycle with existing striping on at least one end of the project. Allowable tolerances for application are as follows:
1. Side to Side – ½ inch on tangents; 1 inch on curves.
  2. Length of Skips – 10 feet +/- 2 inches.
  3. End to End on Skips – 30 feet +/- 2 inches. Place skips on cycle to a tolerance of 2 inches. A tolerance of 12 inches will be allowed on the first skip of a run, but it shall be on cycle in one skip.
  4. Double Lines – Parallel, with a gap tolerance of +/- 3/8 inch.

### 3.02 FINISHING AND CLEANUP

- A. Protect applied markings from traffic until sufficiently dry to prevent damage or tracking by normal traffic movements. At a minimum, place cones or tubular markers next to all pavement markings, and place barricades at all areas where cross traffic is anticipated.
- B. Remove or repair all unacceptable work and dispose of at the Contractor's expense. Repair or replace unacceptable work immediately if it causes a safety problem. The removed material becomes the property of the Contractor. If additional traffic control is required for removal of unacceptable material, provide it as directed and at no additional cost to the Owner.
- C. Do not open up any work area to traffic that is not adequately striped and suitable for safe driving.

## **PART 4 SPECIAL PROVISIONS**

### 4.01 MEASUREMENT AND PAYMENT

- A. Payment for Pavement Markings shall be made on a lump sum basis as stated on the Bid Form. Payment will include all materials, labor and equipment required for layout and application of durable pavement markings and striping as described herein and as shown on the plans. No separate payment will be allowed.

**END OF SECTION**

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## **SECTION 02770 – CURBS & GUTTERS**

### ***PART 1 GENERAL***

#### 1.01 SUMMARY

- A. The work in this section includes the furnishing of all labor, materials, equipment and performing all work for the placement of new curbs and gutters as shown on the Plans and as required for roadway improvements.

### ***PART 2 PRODUCTS***

#### 2.01 MATERIALS

- A. Concrete shall be as specified in Section 03300.
- B. Expansion and joint filler shall be ½-inch thick preformed asphalt fiberboard conforming to ASTM D994.
- C. Poured joint sealer for expansion joints shall be polyurethane-base, non-sag elastomeric sealant, and gray in color. Sika Corporation “Sikaflex-1A” or approved equal.

### ***PART 3 EXECUTION***

#### 3.01 WORKMANSHIP

- A. The dimensions of the curbs and gutters shall conform to the details shown within the Construction Plans.
- B. Curbs and gutters shall be placed on compacted aggregate base of ¾”-0 materials; aggregate base shall be in a moist condition. A minimum of 4-inches of compacted aggregate shall be used.
- C. Forms shall have sufficient strength to resist the pressure of the concrete and to prevent leakage. Forms shall extend for the full depth of concrete and shall be adequately braced. Forms shall be cleaned and coated with an appropriate release agent before concrete is placed against them. Face forms shall be removed as soon as possible to permit finishing of face. Front and back forms shall be removed, after concrete has set, without damage to the concrete.
- D. Concrete shall be deposited into the forms without segregation and then tamped and spaded for complete consolidation. Mechanical vibration may also be used.
- E. Joints shall be placed at appropriate intervals for the section replaced. Maximum spacing of isolation joints shall be 50 feet, contraction joints shall be 10 feet all other control joints shall be 15-feet and shall match same spacing as concrete sidewalk.

### ***PART 4 SPECIAL PROVISIONS***

#### 4.01 MEASUREMENT AND PAYMENT

- A. Measurement and Payment for Standard Curb and Gutter and Standard Vertical Curb shall be paid per lineal foot for the amount as stated on the Bid Form. Measurement shall be taken at the face of the curb at flow line. Payment shall include but is not limited to compensation for placement of aggregate base material, formwork, placement of

concrete, expansion joints, finishing, curing, backfilling, and all other items necessary for a complete installation.

- B. Curb and gutter and curb within the area of pedestrian ramps or driveway aprons will be paid for under the square footage of those line items, see Section 02775.

**END OF SECTION**

## **SECTION 02775 – SIDEWALKS, DRIVEWAY APPROACHES AND SIDEWALK RAMPS**

### ***PART 1 GENERAL***

#### 1.01 SUMMARY

- A. The work in this section includes the furnishing of all labor, materials, equipment and performing all work for the placement of new sidewalks, driveway approaches, valley gutters and sidewalk access ramps using Portland cement concrete.

#### 1.02 RELATED SECTIONS

- A. Section 02770 Curbs and Gutters
- B. Section 03300 Cast in Place Concrete

### ***PART 2 PRODUCTS***

#### 2.01 MATERIALS

- A. Concrete shall be as specified in Section 03300.
- B. Expansion and joint filler shall be ½-inch thick preformed asphalt fiberboard conforming to ASTM D994.
- C. Poured joint sealer for expansion joints shall be polyurethane-base, non-sag elastomeric sealant, and gray in color. Sika Corporation "Sikaflex-1A" or approved equal.
- D. Handicap accessible ramp grades shall meet ADA Standards. Optional Calculation Tables for Point Elevations available in the Plan Details.
- E. If required or indicated on the plans, reinforcing steel shall be as specified in Section 03200.
- F. Aggregate base shall be as specified in Section 02720. If no specific size or grade is noted, furnish either 1"-0 or ¾"-0 as directed by the Engineer a minimum of four (4) inches thick.
- G. Truncated Domes (Sidewalk Ramps) with detectable warning surfaces for sidewalk ramps shall be supplied by Armor-Tile, Detectable Warnings systems or other approved equal.

### ***PART 3 EXECUTION***

#### 3.01 WORKMANSHIP

- A. Properly prepare bedding and foundations using appropriate materials and workmanship, depths, widths, and cross sections shown on the plans and details or as directed.
- B. Bring areas on which structures are to be constructed to established line, and make firm, dry and free of all unsuitable or deleterious materials before placing concrete. Existing concrete surfaces shall be clean and moist at the time of placing new concrete.
- C. Forms shall have sufficient strength to resist the pressure of the concrete and to prevent leakage. Forms shall extend for the full depth of concrete and shall be adequately braced. Forms shall be cleaned and coated with an appropriate release agent before



concrete is placed against them. Face forms shall be removed as soon as possible to permit finishing of face. Front and back forms shall be removed, after concrete has set, without damage to the concrete.

- D. Concrete shall be deposited into the forms without segregation and then tamped and spaded for complete consolidation. Mechanical vibration may also be used.
1. Sidewalks shall be 4-inches thick Portland cement concrete placed on a minimum of four (4) inches of compacted  $\frac{3}{4}$ "-0 aggregate base material and shall match existing sidewalks at limits of replacement.
  2. Handicap accessible ramps grades shall meet ADA Standards.
  3. Residential driveway approaches shall be a minimum of 6-inches thick Portland cement concrete as shown in project Details placed on a minimum of six (6) inches of compacted  $\frac{3}{4}$ "-0 aggregate base material.
    - a. No rebar or wire mesh is required for residential driveways.
    - b. Transition flares shall be constructed to the same standards as residential driveway approaches.
  4. Commercial driveway approaches shall be a minimum of 8-inches thick reinforced Portland cement concrete as shown in project Details placed on a minimum of six (6) inches of compacted  $\frac{3}{4}$ "-0 aggregate base materials.
    - a. Transition flares shall be constructed to the same standards as residential driveway approaches.
  5. Scored joints shall be required at 5-foot centers.
  6. Protect and keep moist during curing.
- E. Joints shall be placed at appropriate intervals for the section replaced. Joints shall be the preformed filler type and shall be not less than  $\frac{1}{2}$  inch wide and placed flush or no more than  $\frac{1}{8}$  inch below the concrete surface.
- F. Construct suitable connections between new and existing concrete where existing driveways, walks, and other structures are cut back to permit the new construction or where the new construction abuts existing concrete. Unless shown or directed otherwise, furnish and place minimum  $\frac{1}{2}$  inch thick preformed expansion joint filler between new and existing concrete.
1. Between driveways, walks, monolithic curbs and sidewalks, and surfacing, provide expansion joints:
  2. Between driveways and concrete pavement.
  3. Transversely in walks opposite expansion joints in adjoining curbs and elsewhere so the distance between joints does not exceed 45 feet.
  4. Transversely in walks at a distance of 16 feet to 8 feet from the ends of walks which abut curbs.
  5. Around poles, fire hydrants, posts, boxes, and other fixtures which protrude through or against the structures.

G. Surface Finishing

1. Remove forms, if any, from structures after the concrete has taken its initial set and while the concrete is still green.
2. Repair minor defects with mortar containing one part Portland cement and two parts sand. Do not plaster exposed surfaces.
3. The top and face of the sidewalk shall be true and straight, free from humps, sags, or other irregularities. The surface shall not vary more than  $\frac{1}{4}$  inch from the edge of a 12-foot-long straightedge laid on the top or face of the structure, except in curves. Contractor shall furnish the straightedge and operate it for testing, if needed.
4. Finish concrete surfaces to smooth and uniform texture by troweling, floating, and cross brooming. Lightly groove or mark surfaces into squares or other shapes to match markings on similar or existing surfaces in the vicinity, as directed.
5. On all sidewalk ramps and accessible route islands, install truncated domes as shown. Place according to the manufacturer's recommendations.

3.02 Curing

1. Cure and protect concrete after placing and finishing.
2. Keep the concrete free from contact, strain, and public traffic for at least seven calendar days, or longer, as directed.
3. Do not apply curing compounds to the designated truncated dome areas of sidewalk ramps and accessible routes.

**PART 4 SPECIAL PROVISIONS**

4.01 MEASUREMENT AND PAYMENT

- A. Payment for Standard Concrete Sidewalk w/ 4" Aggregate Base shall be on a square foot basis for the amount as stated on the Bid Form for each type regardless of thickness. Measurement shall be from back of curb to back of walk for the total lineal footage of the sidewalk. Sidewalk along the back of pedestrian ramps or driveway aprons shall be paid for under the square footage of that line item. Payment shall include compensation for all labor and materials necessary for the excavation, preparation and placement of aggregate base materials pertaining to sidewalks, all necessary formwork, backfilling, placement of concrete, expansion joints, finishing, curing and all else required for complete construction of new sidewalks.
- B. Payment for Pedestrian Ramp w/ 4" Aggregate Base shall be made on a unit price basis per square foot for the amount stated on the Bid Form. Measurement shall be from lip of gutter to back of sidewalk or to the back of curbing, if shown. Payment shall include compensation for all labor and materials necessary for the excavation, preparation of aggregate base materials pertaining to ADA ramps, all necessary formwork, backfilling, placement of concrete, expansion joints, Truncated Domes, finishing, curing, and all else required for a complete placement of new ADA ramps.

1. Truncated Domes shall be considered incidental to the work associated with the installation of ADA ramps. No additional compensation shall be made for the labor and materials required for the placement of truncated domes. If radius domes are required in order to meet ADA requirements, they shall be provided at no additional cost to the Owner.
- C. Payment for Standard Driveway w/ 6" Aggregate Base shall be made on a unit price basis per square foot for the amount stated on the Bid Form. Measurement shall be from lip of gutter to back of driveway. Payment shall include compensation for all labor and materials necessary for the excavation, preparation of aggregate base materials pertaining to driveway, all necessary formwork, backfilling, placement of concrete, expansion joints, finishing, curing, and all else required for a complete placement of new driveways.
- D. Measurement and Payment for Valley Gutters shall be made on a square foot unit cost as stated on the Bid Form. Payment shall include compensation for all labor and materials necessary for the preparation and placement of aggregate base materials pertaining to valley gutters, all necessary formwork, reinforcement, backfilling, placement of concrete, expansion joints, finishing, curing and all else required for complete construction of new valley gutters.

**END OF SECTION**

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## **SECTION 02900 – LANDSCAPE RESTORATION & CLEANUP**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. This section covers the work necessary to reseed, restore and cleanup the site(s). Work shall include the removal of all construction equipment, rubbish, construction debris, and unused materials of any kind resulting from the project activities.
- B. Site cleanup shall include the cleanup of all pavement surfaces, whether new or existing within the limits of the project and shall include the replacement of any disturbed pavement markings.
- C. The site restoration will require an approved plan from CoosWA or approved equal specializing in watershed native species cultivation. Site restoration will follow all recommendations given in the plan at no additional cost to the owner for any additional recommendations.
- D. Contractor responsible for maintaining landscape restoration until sufficiently established to survive without maintenance or six months, whichever comes first.

### ***PART 2 PRODUCTS***

#### **2.01 RESEEDING MATERIALS**

- A. Grass seed shall be from blue tag stock and from the latest crop available. Deliver each variety in standard containers labeled in accordance with Oregon State laws and U.S. Department of Agriculture rules and regulations under the Federal Seed Act. Provide with label showing seed variety, percentage of purity, germination, maximum weed content, date of test within nine months of date of delivery, and as set forth in the General Seed Certification Standard by the Oregon State University Certification Board. Mold or other evidence of container having been wet or otherwise damaged will be cause for rejection of each lot of seed. Grass seed may be delivered to the project as a mixture provided each variety of grass seed in the mixture is identified and labeled as specified.
- B. Where imported topsoil is required, provide natural, fertile, friable topsoil, representative of local productive soil, and 90% free of clay lumps or other foreign matter larger than 2-inches in diameter, not frozen or muddy, with pH 5.0 to 7.0, and not less than 3% humus as determined by loss of ignition of moisture-free samples dried at 100° C. Gravel portion (particles larger than 2 mm) shall not exceed 15% of total volume. Topsoil shall be free of quack grass, horsetail and other noxious vegetation and seed. Should such regenerative material be present in the soil, all resultant growth, both surface and root, shall be removed by the Contractor within 1-year of acceptance of the work at no expense to the Owner.
- C. Provide a lime compound of ground dolomitic limestone not less than 85% total carbonates and magnesium, ground so that 50% passes a number 100 sieve and 90% passes a number 20 sieve. Coarser material will be acceptable provided the specified rates of application are increased proportionately on the basis of quantities passing the number 100 sieve.
- D. Furnish fertilizer in moisture-proof bags marked with weight and the manufacturer's certified analysis of the contents showing the percentage for each ingredient. Furnish fertilizer in a dry condition free from lumps and caking, in granular or palletized form, of standard commercial grade conforming to all State and Federal regulations and to the standards of the Association of Official Agricultural Chemists.

- E. Areas with plants removed should be replanted with native species according to consultation with CoosWA or approved equal specializing in watershed native species cultivation for a vegetation plan and plantings supply nursery. The consultation, plan, planting and any other recommendations from CoosWA or approved equal will add no additional cost to the owner.
- F. Provide all other materials required to accomplish the work specified.

**PART 3 EXECUTION**

**3.01 WORKMANSHIP**

**A. Surface Dressing**

- 1. Slopes, sidewalk areas, planting areas, easements and roadways shall be smoothed and dressed to the required cross section and grade by means of a grading machine insofar as it is possible to do without damaging the work or existing improvements, trees and shrubs. Supplement machine dressing by hand work as directed.
- 2. Upon completion of the cleaning and dressing, the project shall appear uniform in all respects. Grade all areas true to line and grade as shown or as approved. Where the existing planting is below sidewalk and curb, fill and dress the area to the walk regardless of limits shown. Wherever fill material is required in the planting area, make finished surface high enough to allow for final settlement.
- 3. Remove and dispose of all excavated or construction materials, equipment, and rubbish of all kinds resulting from the work. Where brush and trees beyond the limits of the project have been disturbed or damaged, remove and dispose of or restore same, as directed, at no expense to the Owner.
- 4. Clean all drainage facilities such as inlets, catch basins, culverts and open ditches of all excess material or debris resulting from the work, to the satisfaction of the Owner.
- 5. Clean all pavement surfaces, whether new or existing within the limits of the project. Clean existing improvements such as curbs, gutters, walls, sidewalks, castings for manholes, monuments, water gates, lamp poles, vaults, signs, and other similar installations as approved. Flush the roadway with a pressure type flusher as approved. Hand sweep or flush all sidewalks as directed.

**B. Restoring Planted Areas**

- 1. Hand rake and drag all formerly grassed and/or planted areas leaving disturbed areas free from rocks, gravel, clay, or any other foreign material and ready, in all respects, for seeding. The finished surface shall conform to the original surface, be free draining and free from holes, rough spots, or other surface features detrimental to a seeded area.
- 2. Plant grass seed only at times when local weather and other conditions are favorable to the preparation of the soil and to the germination and growth of grass. Sow grassed areas evenly with a mechanical spreader at a rate of one pound per 300 square feet, roll with packer to cover seed, and water with fine spray. Method of seeding may be varied as approved, however, responsibility to establish a smooth, uniformly grassed area will not be waived.

3. The contractor will be responsible for ensuring that the planted area is maturing properly from one-year from when restoration is complete. If the planted area is not self-sustaining after one-year, the contractor will be required to repeat the restoration process with a new plan developed by CoosWA or approved equal.

**PART 4 SPECIAL PROVISIONS**

**4.01 MEASUREMENT AND PAYMENT**

- A. Payment for Landscape Restoration & Cleanup shall be paid for as a lump sum item as shown on the Bid Form, and shall include topsoil, seed, landscape shrubs/trees, site cleanup, and all other materials and work required to provide complete restoration of the site.

**END OF SECTION**

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<b>SECTION 03300</b>	<b>CAST IN PLACE CONCRETE</b>
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## **SECTION 03110 – CONCRETE FORMWORK AND ACCESSORIES**

### ***PART 1 GENERAL***

#### **1.01 WORK INCLUDED**

- A. Concrete formwork required for all project structural concrete.
- B. Formwork design, placement, proper securing and support, and removal.
- C. Coordination for various wall and slab penetration locations and sizes including sleeve positioning for casting in place.

#### **1.02 RELATED SECTIONS**

- A. Section 03300 – Cast-In-Place Concrete
- B. Section 03200 – Concrete Reinforcement

#### **1.03 REFERENCES**

- A. American Concrete Institute (ACI) 318-11, Chapter 6 – Formwork, Embedded Pipes, and Construction Joints.
- B. ACI 347R-04 – Guide to Formwork for Concrete
- C. ACI Special Publication, SP-4(7<sup>th</sup>) – Formwork for Concrete

#### **1.04 QUALITY ASSURANCE**

- A. The formwork shall be designed for the loads, lateral pressure, and allowable stresses outlined in "Recommended Practice for Concrete Formwork", ACI 347 and for design considerations, wind loads, allowable stresses and other applicable requirements of the local building code. The design and construction of the formwork shall be the responsibility of the CONTRACTOR. Form design shall be certified by a Registered Structural Engineer.
- B. Forms shall be constructed by laborers experienced in concrete formwork erection. Formwork shall be constructed such that the hardened surfaces shall conform to the tolerance limits of ACI 347.
- C. Formwork shall be true in every respect to produce hardened concrete to the required shape, size, grade, and alignment as indicated on the Construction Drawings, and of sufficient strength, bracing, and rigidity to maintain their position and shape under the loads and operations incidental to placing and curing the concrete, as well as other forces resulting from the movement of the forms. The forms shall be mortar-tight at the time concrete is placed in them and shall be so constructed that the surfaces of the finished concrete will be reasonably free from ridges, fins, offsets, or similar defects. Adequate and suitable means for removing the forms without injury to the surfaces or edges of the finished concrete shall be provided.
- D. Resulting work which is not in conformance with applicable contract specifications shall be promptly removed and replaced.

#### **1.05 DELIVERY, STORAGE AND HANDLING**

- A. Protect form materials from damage that may affect finish appearance or form stability.
- B. Keep forms clean and free from deleterious materials. Protect form coating to prevent contamination.
- C. Protect form ties from rusting.

## **PART 2 PRODUCTS**

### 2.01 FORM MATERIALS

- A. Plywood Forms will be grade marked B-B Plyform, Exterior Class 1 and 2 and HDO Medium Density Overlaid Plywood Concrete Form, B-Matte Formquard or equal, conforming to the requirements of U.S. Products Standard PS-1.
- B. Metal Forms will use smooth metal plate free from surface irregularities.

### 2.02 ACCESSORIES

#### A. Form Ties

1. Shall be factory fabricated form ties, snap-off type of adequate design to prevent form deflection and concrete spalling upon removal. The permanently embedded portion shall terminate not less than  $\frac{3}{4}$ -inch from the face of finished concrete. The permanently embedded portion shall have a waterseal washer located at the approximate center of walls.
2. Breakback Distance: Ties will be placed so that the set back in the concrete is such that the portion of the tie remaining after snap-off and removal of exterior portions is at least 1 inches back from the concrete surface.
3. Do not use wire ties and wood spacers

#### D. Form Release Agents

1. Form coating will be non-grain-raising and non-staining resin or polymer type that will not leave residual matter on the surface of the concrete or adversely affect bonding to concrete of paint, plaster, mortar, protective coatings, waterproofing or other applied materials. Coatings containing mineral oils, paraffin, and other non-drying ingredients are not permitted. For concrete surfaces contacting potable stored water, the coatings and form release agents shall be completely non-toxic and approved by the EPA for the intended use.

#### E. Form Joint Caulking

1. Manufacturer and Brand: Sonneborn Sonolac, Dap Acrylic Latex, or approved

#### E. Chamfer Strips – clear white pine or similar with planed surface against concrete.

## **PART 3 EXECUTION**

### 3.01 PREPARATION

- A. Ensure that reinforcing steel is properly placed according the spacing and tolerances required, and that proper inspection has been conducted.

- B. Ensure waterstops are installed as required when placed prior to formwork.
- C. Review plans for wall and slab penetrations and imbedded items.
- D. Remove debris and foreign matter from formwork. Clean form contact surfaces. Replace with new material when necessary or when directed.
- E. Remove loose rust and foreign matter from reusable hardware prior to installation into Formwork.
- F. Re-use Forms only when contact surfaces equal original use and forms have been adequately cleaned.

### 3.02 INSTALLATION

- A. Comply with ACI 318 and ACI 347. Fabricate with facing materials that produce the specified tolerance requirements of ACI SP-4, produce true surfaces and lines, sharp corners, and surfaces free of offsets, bulges, ridges, etc.
- B. Carefully conform to the shapes, lines and dimensions of the drawings. Ensure that edges are chamfered where shown. Form any Surface Indentations shown on the Drawings.
- C. Arrange to provide concrete cold joints as indicated on the drawings. Unless otherwise directed, make contraction, expansion, and construction joints only where shown. Continue reinforcing steel across construction joints which are not indicated to be free moving.
- D. At forms for exposed concrete, fill form panel joints with Form Joint Caulking Compound, and strike compound flush with panel on face adjacent to exposed Concrete, or cover joints with thin, smooth, plastic, pressure-sensitive tape.
- E. At forms for exposed concrete, seal Form Ties against leakage with Form Joint Caulking Compound.
- F. Make form joints tight to prevent leakage. Minimize the number of form joints used.
- G. Ensure that formwork is properly supported, tied, and braced to prevent deflection and maintain shape (see allowable tolerances for formwork).
  - 1. Provide bracing as required to meet load requirements.
  - 2. Protect against undermining or settlement when placed on ground.
  - 3. Anchor as required to prevent upward or lateral Formwork movement during Concrete placement.
  - 4. Locate ties equidistant and symmetrical. Align vertically and horizontally.
- H. Provide Access Openings as required for cleaning and inspection of Forms and Embedded Items prior to placing Concrete. Locate where not exposed to view.
- I. Anchor Bolts: Set with templates to assure accurate bolt positioning

- J. During Concrete placement, in areas where Formwork develops weakness, settlement, or distortion, stop concrete placement, remove placed concrete, and remove or strengthen Formwork.
- K. Reposition to true alignment prior to, during, and after Concrete placement, if necessary.

### 3.03 ALLOWABLE TOLERANCES FOR FORMWORK

- A. Variation from Plumb: 1/4 inch in 10 feet maximum
- B. Variation of Building Lines: 1/4 inch in any Bay or 20 feet maximum
- C. Variation in Cross-Sectional Dimensions: Minus 1/8 inch; plus 1/4 inch
- D. Variation in Surface Tolerance: 1/8 inch in any 10 feet measured with 10-foot straightedge.
- E. Maximum Deflection of Form facing between Supports:  $0.00025 \times \text{Span}$
- F. Wall Locations: Accurately size and locate within 1/8 inch.

### 3.04 FORM TREATMENT

- A. All forms shall be adequately treated with form release agent to prevent concrete damage during form removal.
- B. Prior to each use: Apply form coating to contact surfaces in accordance with Manufacturer's instructions. Conduct surface preparation in accordance with manufacturer's instructions prior to coating forms.
- C. When treating previously set forms, carefully prevent coatings from covering reinforcing steel, waterstops, imbedded items, or existing concrete.
- D. Prevent coatings from collecting in puddles.

### 3.05 FORM REMOVAL

- A. Leave forms and shoring in place until concrete has attained sufficient strength to safely support own weight and imposed loads.
- B. Remove forms at time and in manner to insure safety of structure, and without concrete surface damage.
- C. At exposed concrete, form removal time shall be uniform to avoid color differences.
- D. Remove top forms from any sloping concrete surfaces as soon as concrete is self-supporting. Repair and finish, if necessary, and cure immediately.

### 3.06 CLEANING AND REPAIRING

- A. Including Work of other Trades, clean, repair, and touch-up, or replace when directed, products which have been soiled, discolored, or damaged by Work of this Section.

- B. Remove debris from Project Site upon Work completion, or sooner if directed.

**PART 4 SPECIAL PROVISIONS**

4.01 MEASUREMENT AND PAYMENT

- A. Payment for Concrete Formwork & Accessories shall be included within a portion of the unit amount for Bid Form items as outlined in section 03300 Cast-In-Place Concrete. A separate payment will not be made for these items.

**END OF SECTION**

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## **SECTION 03200 – CONCRETE REINFORCEMENT**

### ***PART 1      GENERAL***

#### **1.01    SUMMARY**

- A.      Section includes reinforcement for concrete including deformed steel bars, welded-wire-fabric, and fiber reinforcement.
- B.      Supply, detail shop drawings, and place reinforcement.
- C.      Provide reinforcing to the sizes and dimensions shown on the drawings and according to approved shop drawings for rebar placement.

#### **1.02    RELATED SECTIONS**

- A.      Section 03110 – Concrete Formwork and Accessories
- B.      Section 03300 – Cast-In-Place Concrete

#### **1.03    REFERENCES**

- A.      American Standards for Testing and Materials (ASTM), latest edition
  - 1.      ASTM A 615 – Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
  - 2.      ASTM A 185 – Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
  - 3.      ASTM A 82 – Specification for Steel Wire, Plain, for Concrete Reinforcement
- B.      American Concrete Institute (ACI), latest edition
  - 1.      ACI 315-99 – Details and Detailing of Concrete Reinforcement
  - 2.      ACI 318 – Building Code Requirements for Reinforced Concrete
  - 3.      ACI 408R – Bond and Development of Straight Reinforcing Bars in Tension
  - 4.      ACI 439.3R-07 – Types of Mechanical Splices for Reinforcing Bars
- C.      Oregon Structural Specialty Code (OSSC) – Adopted Oregon code, 2010 edition or latest revision.
- D.      Concrete Reinforcing Steel Institute (CRSI)
  - 1.      CRSI Manual of Standard Practice, 1997
  - 2.      CRSI Reinforcing Bar Detailing, 1999
  - 3.      CRSI 63 – Recommended Practice for Placing Reinforcing Bars
  - 4.      CRSI 65 – Recommended Practice for Placing Bar Supports

#### **1.04    SUBMITTALS**

- A.      Certified Mill Test Reports for steel.

- B. Detail and placement drawings. Submit in accordance with Section 01300 at least 14 days prior to reinforcement fabrication.
  - 1. Reinforcing steel shall be detailed in accordance with the "ACI Detailing Manual" SP-66 (04), ACI Committee 315; CRSI; and in conformance with the project drawings.
  - 2. Shop drawings shall include sufficient plan, section, and elevation drawings of all beams, walls, slabs, footings, columns, and other shapes to clearly show all reinforcement details, spacing, and sizes.
  - 3. Bends, splices, hooks, ties and all other details shall be shown. Drawings shall indicate any fieldwork required.
  - 4. Shop drawings shall show steel specifications and conformances.
- C. Samples of all proposed bar supports with a written description of where each support is proposed to be used.

#### 1.05 QUALITY ASSURANCE

- A. Coordinate with other Trades affecting or affected by Work of this Section.
- B. Bends, hooks, laps, splices, cover, and other details shall conform to OSSC Section 1907; and ACI 318, except where more stringent requirements are shown in the drawings or specified herein.
- C. Perform reinforcement work in accordance with CRSI Documents 63 and 65.
- D. Conduct field measurements as necessary prior to fabrication. Conform to the approved detail and placement drawings.
- E. All materials shall be new, unused, specifically manufactured for the intended purpose.
- F. Any welding shall be conducted by persons with Welder Certification in accordance with AWS D1.4.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Materials shall be delivered properly bundled and labeled to show grade, size and location. Deformed bars shall be marked with the letter "S" per ASTM A615. Deliver with suitable hauling and handling equipment.
- B. Properly store to protect from moisture. Cover steel with waterproof covering and store so that materials are not against unprotected earth.
- C. Handle material carefully to protect from cuts, nicks, kinks, deformation, and other damage. Ensure worker safety.

### **PART 2 PRODUCTS**

#### 2.01 REINFORCEMENT MATERIALS

- A. Reinforcing Bars for Concrete



1. All structural reinforcement shall be deformed bars.
2. Deformed billet steel; ASTM A 615, Grade 60

## 2.02 ACCESSORIES

- A. Provide all Accessories necessary for proper Reinforcement placement, spacing, support, and fastening. Bricks, broken CMU, spalls, rocks or similar materials shall not be used for support of reinforcing steel.
- B. Tie Wire: 16-gauge minimum, black annealed steel; acceptable patented system.
- C. Bar Supports, Bolsters, Chairs and Spacers
  1. Sized and shaped for strength and support of reinforcement during installation and placement of concrete. Use only approved materials.
  2. High density concrete dobies. Compressive strength equal or greater than concrete to be placed. No plastic or low cement content dobies accepted.
  3. Chairs: Stainless steel. With plastic tips when used at surfaces that will be exposed to view.
  4. Spacers: Plastic wheel type. Preco Barspan Wheels, or approved equal.
  5. Plastic Shims may be used to support plastic spacers.

## **PART 3 EXECUTION**

### 3.01 PREPARATION

- A. Verify that surfaces to receive Reinforcement are accurately sized and located, square, plumb, rigid, secure, and otherwise accurately prepared.
- B. Prior to starting Work, notify General Contractor about defects requiring correction.
- C. Reinforcement shall be free from mud, oil or other nonmetallic coatings that decrease bond.
- D. Remove surface rust and mill scale with wire brush. Heavily rusted bars shall not be used.
- E. Do not start Work until conditions are satisfactory.

### 3.02 PLACEMENT

- A. Perform reinforcement work in accordance with CRSI Documents 63 and 65, and fabricate in compliance with ACI 315.
- B. Conform to approved placement and detail drawings and specified tolerances herein.
- C. Reinforcement shall be accurately placed and adequately supported before concrete is placed, and shall be secured against displacement within the tolerances of this section.
- D. All reinforcement shall be bent cold unless otherwise permitted by the Engineer.

- E. Reinforcement partially embedded in concrete shall not be field bent unless approved by the Engineer.
- F. Do not weld splices, crossing bars, or other locations.
- G. Splices: Provide bars in full lengths to preclude the need for splices as much as possible. Locate any allowed splices not indicated on the drawings at points of minimum stress. Development length and splices shall conform to ACI 318. At wire mesh, lap one full mesh plus 2-inches. Splices of adjacent bars shall be staggered. Use greater splice lengths where shown in the drawings.
- H. Spacing: Comply with OSSC Section 1907.6, contract drawings, and approved shop drawings.
- I. Protective Concrete Cover: Comply with OSSC Section 1907.7 minimums. Provide greater cover where shown in the drawings.
- J. Bars in slabs shall be supported on well-cured concrete blocks or approved chairs.
- K. Tolerances:
  - 1. Concrete Cover: Plus or minus  $\frac{1}{4}$  inch.
  - 2. Spacing Between Bars:  $\frac{1}{4}$  inch.
- L. Bar relocation to avoid interference with other reinforcement, conduits or embedded items: 1 bar diameter, unless otherwise approved by Engineer.
- M. Reinforcement around openings: Unless otherwise shown on the drawings, place at least double the area of steel removed by the opening around the opening and extend on each side sufficiently to develop bond in each bar. At square or rectangular openings, place at least one diagonal bar at each corner.

### 3.03 PROTECTION

- A. Protect other Work against damage and discoloration caused by Work of this Section.
- B. Protect placed reinforcement from subsequent movement and inclement weather until concrete is placed.

### 3.04 FIELD QUALITY CONTROL

- A. The Engineer or Owner representative shall be notified when reinforcing steel is ready for inspection. Inspection must occur before any concrete is placed.

## **PART 4 SPECIAL PROVISIONS**

### 4.01 MEASUREMENT AND PAYMENT

- A. Payment for Concrete Reinforcement shall be included as a portion of the unit price for any items requiring concrete reinforcement. Payment shall include all labor, materials as required to complete the work described herein. No separate payment for Concrete Reinforcement will be made.

**END OF SECTION**

## **03300 CAST-IN-PLACE CONCRETE**

### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. Section includes work required to supply, place, finish and cure cast-in-place concrete, including mix design, certifications, and submittals and testing.
- B. Rinsing out of transit mix trucks, washing or wetting of concrete, site cleanup, or other activity related to water at the site shall be in conformance with all EPA requirements for the prevention of water runoff to storm water sewers or creeks.

#### 1.02 RELATED SECTIONS

- A. Section 03110 – Concrete Formwork and Accessories
- B. Section 03200 – Concrete Reinforcement
- C. Section 02800 – Grouting

#### 1.03 REFERENCES

- A. American Standards for Testing and Materials (ASTM), latest editions
  - 1. ASTM C31 – Standard Specification for Making and Curing Concrete Test Specimens in the Field
  - 2. ASTM C33 – Specification for Concrete Aggregate
  - 3. ASTM C39 – Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
  - 4. ASTM C94 – Standard Specification for Ready-Mixed Concrete
  - 5. ASTM C143 – Standard Test Method for Slump of Hydraulic Cement Concrete
  - 6. ASTM C150 – Standard Specification for Portland Cement
  - 7. ASTM C231 – Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
  - 8. ASTM C260 – Standard Specification for Air Entrained Admixtures for Concrete
  - 9. ASTM C309 – Standard Specification for Liquid Membrane – Forming Compounds for Curing Concrete
  - 10. ASTM C494 – Standard Specification for Chemical Admixtures for Concrete
  - 11. ASTM C618 – Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
- B. American Concrete Institute (ACI), latest editions
  - 1. ACI 301 – Standard Specification for Structural Concrete in Buildings

2. ACI 304R – Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
  3. ACI 305R – Recommended Practice for Hot Weather Concreting
  4. ACI 306R – Recommended Practice for Cold Weather Concreting
  5. ACI 309R – Guide for Consolidation of Concrete
  6. ACI 318 – Building Code Requirements for Reinforced Concrete
  7. ACI SP-15 – Field Reference Manual (*have copy on-site*)
- C. Oregon Structural Specialty Code (OSSC) – 2010 Edition or latest revision.

#### 1.04 SUBMITTALS

- A. Mix design submittals and certificates of compliance shall be furnished at least 30 days prior to any anticipated concrete placement. All submittals must be approved by the Engineer prior to placement of any concrete.
- B. Contractor is responsible to obtain design of the concrete mix that shall conform to ASTM C94 and the requirements of this section. Mix design shall be prepared by a professional testing laboratory or concrete mix design professional.
- C. Submit properties of each mix design for each class of concrete including:
1. Average compressive strength of proposed mixture
  2. Documentation of strength test results of similar concrete mixtures in accordance with ACI 318
  3. Slump
  4. Air Content
  5. Density
  6. Water/Cement ratio
  7. Maximum aggregate size
  8. Cementitious materials and type
  9. Admixtures
- D. Certificates of compliance for aggregate, cement, and admixtures signed by the concrete supplier certifying that materials meet or exceed these specifications.
- E. Concrete placement schedule showing construction joint locations and type, and placement sequence.
- F. Product data for proposed curing compounds, admixtures, hardeners, sealers, etc. to be used.

#### 1.05 QUALITY ASSURANCE

- A. Perform work in accordance with ACI 301.
- B. Conform to ACI 305R in hot weather.
- C. Conform to ACI 306R in cold weather.
- D. Installer Qualifications: Concrete work shall be finished by persons with at least 5 years experience with work of similar scope and quality.
- E. No chloride containing admixtures shall be used.
- F. On-Site water addition to concrete will not be permitted.
- G. Conduct field-testing as specified.
- H. Admixtures shall be added in strict conformance with the manufacturer's instructions.
- I. Manufacturer Qualifications: Concrete supplied from concrete plants with current certification under the NRMCA Certification of Ready Mixed Concrete Production Facilities. Individual with responsibility for concrete mixtures certified as an NRMCA Concrete Technologist Level 2.

#### 1.06 DELIVERY

- A. Concrete shall be scheduled and delivered in a timely manner in accordance with ASTM C94 and ACI 304R. Ensure that forms and reinforcement are complete and ready to accept concrete prior to scheduling delivery.
- B. When installing a continuous pour section, ensure that trucks arrive and concrete is placed with no greater than 45 minutes elapsing between lifts.

### **PART 2 PRODUCTS**

#### 2.01 CEMENTITIOUS MATERIALS

- A. Hydraulic Cement per ASTM C150
- B. Fly Ash: ASTM C618, up to 15% by volume of cement content

#### 2.02 WATER

- A. Water used for mixing shall be clean and potable.

#### 2.03 AGGREGATE

- A. Aggregates shall be natural materials conforming to ASTM C33 as modified herein.
- B. Aggregates shall be nonreactive as defined in ASTM C33 and tested per ASTM C289.
- C. Aggregate shall contain no soil, friable particles, organic matter, or other deleterious materials. Aggregate shall be washed prior to use in the concrete mix.
- D. Aggregates shall contain no chert, limestone, or shale.
- E. Coarse Aggregate:

1. Use coarse aggregate from only one source for exposed concrete in a single structure.
2. Coarse aggregate shall be smooth, rounded and uniform. No more than 15% shall be elongated (max. dimension 5 times min. dimension).
3. Coarse aggregate shall be durable, sound and hard.
4. Maximum Size: 3/4-inch, but not more than one-fifth of narrow dimension between sides of Formwork, one-fourth depth of slab, nor three fourths of narrowest distance between Reinforcing Steel.

F. Fine Aggregate:

1. Use fine aggregate from only one source for exposed concrete in a single structure.
2. Fine aggregate shall not exceed 40% by weight of combined aggregate total, except when coarse aggregate maximum size is 1/2-inch or less.
3. Fine aggregate shall be durable, sound, clean and hard.
4. Sand Equivalent of 75 minimum per ASTM D2419.

G. Combined (Coarse and Fine) Gradation per ASTM C136:

US Standard Sieve	% Passing by Weight
1 1/2-inch	100
1-inch	90-100
3/8-inch	45-75
No. 4	33-50
No. 8	28-44
No. 16	23-38
No. 30	10-22
No. 200	0-2

## 2.04 CHEMICAL ADMIXTURES

A. General:

1. When two or more admixtures are used, they shall be certified by the manufacturer(s) to be compatible.
2. Chlorides are not permitted in any form.
3. Air Entraining and Water Reducer admixtures are required.
4. All admixtures shall be added at the batch plant, unless otherwise specified.

B. Midrange Water Reducer:

1. Shall conform to ASTM C494, Type A and F.
2. Master Builders, Inc. "PolyHeed" Series; or approved equal.

C. High-Range Water Reducer (Superplasticizer):

1. Shall conform to ASTM C494, Type F or G; and ASTM C1017, Type I or II.

2. Master Builders, Inc. "Rheobuild"; or approved equal.
- D. Air-Entraining Admixture:
1. Shall conform to ASTM C260.
  2. Master Builders, Inc. "MicroAir", "MB-AE 90"; or approved equal.

#### 2.05 BONDING AGENT

- A. Required where new concrete is poured against existing concrete, and on embedded items with less than 1½-inches of cover.
- B. 100% solids, two component epoxy bonding compound meeting ASTM C881, Type II, Grade 2, Class B or C materials except as modified herein.
- C. Properties:
1. Bond Strength @ 14 days (ASTM C882) – 1800 psi minimum
  2. Tensile Strength @ 7 days (ASTM D638) – 4400 psi minimum
  3. Tensile Elongation @ 7 days (ASTM D638) – 1.49% maximum
- D. Master Builders, Inc. "Concresive Liquid PL"; or approved equal.

#### 2.06 CURING COMPOUNDS AND SEALERS

- A. Evaporation Reducer: Spray applied monomolecular film that reduces the rate of surface moisture evaporation, minimizes plastic shrinkage, and does not effect the cement hydration process. Master Builders, Inc. "Confilm"; WR Meadows "Sealtight Evapre"; or approved equal.
- B. Exterior Use Liquid Membrane-Forming Curing Compound: Shall conform to ASTM C309, Type I, Class B and ASTM C1315, Type 1, Class A. WR Meadows "CS-309-25"; or approved equal.
- C. Interior Use Liquid Membrane-Forming Curing Compound: Water-base acrylic curing and sealing compound conforming to ASTM C309, Type I, Class B and ASTM C1315, Type 1, Class A. WR Meadows "Vocomp-25-1315"; or approved equal.
- D. Concrete Sealer: Non-yellowing, acrylic co-polymer solution meeting ASTM C309, Type 1, Class B and ASTM C1315, Type 1, Class A. WR Meadows "TIAH 1315"; or approved equal.

#### 2.07 CONCRETE HARDENERS

- A. Liquid concrete densifier and hardener, chemical resistant, colorless, with 100% active chemicals. WR Meadows "Liqui-Hard"; or approved equal.

#### 2.08 VAPOR BARRIER

- A. ASTM D2103 – Polyethylene Film and Sheeting, 6 mils thickness.

#### 2.09 HIGH-PERFORMANCE CONCRETE MIX

- A. Use: All water-holding structures and adjoining structures, equipment pads, footings, support walls, retaining walls, and others not designated for standard concrete. May be

used in place of standard concrete except for interior slabs where a smooth trowel finish is required.

B. Mix Design Requirements:

1. Cement: Portland Cement, Type II, ASTM C150.
2. Water / Cementitious Materials Ratio: 0.35-0.40 by weight
3. Strength: 4500 psi minimum, ASTM C39
4. Slump before plasticizer: 1.5 to 3-inches, ASTM C143
5. Air Content: 5.5-7% by volume, ASTM C231
6. Water Reducer: High-Range
7. Maximum slump at time of placement: 8-inches (with rheoplastic admixture)

2.10 STANDARD CONCRETE MIX

A. Use: Sidewalks and walkways, curbs and gutters, reinforced concrete parking areas and other miscellaneous structures

B. Mix Design Requirements:

1. Cement: Portland Cement, Type I or II, ASTM C150
2. Water / Cementitious Materials Ratio: 0.45-0.50 by weight
3. Strength: 3500 psi minimum, ASTM C39
4. Air Content: 2.5-5% by volume, ASTM C231
5. Water Reducer: Mid or High-Range
6. Maximum slump at time of placement: 5-inches or less

**PART 3 EXECUTION**

3.01 PREPARATION

- A. Examine all reinforcement, formwork, waterstops, premolded joint fillers, and other embedded items to ensure they are accurately placed, properly secured and cleaned.
- B. Ensure that inspection of reinforcement is complete and installation approved.
- C. Ensure concrete mix design and test certifications have been submitted and approved.
- D. Ensure that all required materials and equipment are on-site and operable.
- E. Ensure that subgrade and base rock are properly placed and compacted. Place vapor barrier and leveling sand at slab-on-grade locations. Sprinkle subgrades and other porous surfaces with water to reduce adsorption.
- F. Apply form release agent to formwork.



- G. Apply bonding agent where required.
- H. Notify General Contractor of work requiring correction. Do not start work until conditions are satisfactory.
- I. Review for various locations to receive different types of concrete mixes.
- J. Notify Engineer at least 48 hours in advance of concrete placement.

### 3.02 CONCRETE PLACEMENT

- A. Comply with ACI 304, ASTM C94, ACI 305R and 306R, and OSSC Section 1905 as required.
- B. Convey and place by methods with will prevent material separation, segregation, and loss. Mix for at least 10 minutes and at least 3 minutes immediately prior to discharging at the job site.
- C. Concrete shall be delivered to site and placed within formwork within 1½ hours after the introduction of water to the mixture.
- D. Deposit concrete continuously or in layers so that no concrete will be placed on concrete that has hardened sufficiently to cause the formation of seams or other planes of weakness. Where seams are unavoidable, provide construction joints as directed.
- E. Do not convey pneumatically placed concrete through aluminum pipe.
- F. Do not retemper concrete, or add water on-site for other reasons.
- G. Use trunks or tremies when pouring walls to ensure concrete does not drop or fall more than 4 feet. Place in layers not exceeding 2 feet in depth.
- H. Screed all slabs to true levels or slopes, true within ¼ inch per 10 feet. Evenly slope to any drain at 3/16 inch per foot, unless otherwise shown on Drawings.
- I. When mean temperature exceeds, or is expected to exceed 80°F during placement and finishing operations, steps shall be taken in accordance with ACI 305R to reduce concrete temperature and water evaporation. Slabs will be fog sprayed from the completion of screeding until curing is begun (except during troweling). Submit detailed hot weather concreting procedure to Engineer for approval at least 2 days prior to planned placement.
- J. When mean temperature falls below, or is expected to fall below 40°F, comply with ACI 306R. Concrete shall be protected from freezing by means acceptable to the Engineer. Submit detailed cold weather concreting procedure to Engineer for approval at least 2 days prior to planned placement.

### 3.03 CONSOLIDATION

- A. Employ mechanical, high frequency vibrators to consolidate concrete around reinforcement, into corners and angles of formwork, and to exclude rock pockets, air bubbles and honeycomb.
- B. Have sufficient number of vibrators and tampers on-site. Minimum of 1 device per each 20 c.y. placed per hour.

- C. Vibration shall be in accordance with ACI 309. Vibrator frequency shall be between 8000 and 12000 rpm.
- D. Hold Vibrator in one spot no longer than 15 seconds; keep in constant motion, insert and withdraw at points approximately 18 inches o.c.
- E. Maintain vibrator in vertical position when penetrating concrete walls. At slabs, hold vibrator perpendicular to the surface at all times.
- F. Vibrate each successive lift. Extend vibrator into previous lift to avoid seams.
- G. Transporting concrete with vibrator is not permitted.
- H. Maintain spare vibrators at jobsite during concrete placement.
- I. Supplement vibration by forking and spading along surfaces of forms and between reinforcing whenever flow is restricted.

### 3.04 CONTROL JOINTS

- A. Form to true, straight lines, with adjacent slab sections flush at Joints. Make panels as close to square as possible.
- B. Conform to ACI 302 and the Project Drawings. If not shown, submit control joint layout plan to Engineer for approval.
- C. Joints shall be formed by tooling into fresh concrete. The joint shall be perpendicular to the concrete surface and  $\frac{1}{4}$  of the thickness of the slab. Zip strips not allowed.
- D. Fill joint as directed with proper joint sealants.
- E. Extend Reinforcement through Joints, unless otherwise shown on Drawings.
- F. If necessary, and approved by Engineer, joint may be saw cut as soon as concrete has sufficiently hardened to prevent dislodging of aggregates. Saw continuous slots perpendicular to surface and  $\frac{1}{4}$  of slab thickness. Must be complete within 12 hours of concrete placement.

### 3.05 CONCRETE FIELD TESTING

- A. Samples for concrete tests shall be taken in accordance with ASTM C172.
- B. If total quantity of a class of concrete for the project is less than 50 cubic yards, strength tests are not required when evidence of satisfactory strength is submitted to and approved by Engineer.
- C. Samples for compressive strength tests of each class of concrete shall be taken not less than once per day, nor less than once for each 150 cubic yards of concrete, nor less than once for each 5000 feet squared of surface area of walls or slabs. If the total volume of concrete for each class is such that less than 5 tests are required, then samples shall be made from at least 5 random batches or each batch if less than 5 batches is required.
- D. Acceptance of concrete shall be based on strength test results of standard cured cylinders in accordance with ASTM C 31 and tested at 28 days in accordance with ASTM C 39. Strength test results are the average of two specimens.

- E. When strength cylinders are made, tests of slump per ASTM C143, air content per ASTM C94, temperature per ASTM C1064 and density per ASTM C138 shall be made and recorded with the strength test results.
- F. Strength of each concrete class shall be deemed satisfactory when both of the following criteria are met:
  - 1. The average of three consecutive compressive-strength tests equals or exceeds specified compressive strength
  - 2. Any individual compressive-strength test result does not fall below specified compressive strength by more than 500 psi.
- G. When compressive strength tests indicate low strength, follow procedure in ACI 318 chapter 5.6.4 Investigation of low-strength test results.

### 3.06 FINISHES

- A. Rough Form Finish
  - 1. Finish resulting after form removal with fins or projections exceeding ¼-inch removed, and with tie holes and defective areas repaired and patched.
  - 2. Location: Formed concrete surfaces not exposed to view in the finished structure.
- B. Standard Smooth Finish
  - 1. As-cast surface with all fins and projections completely removed and smoothed, and with all tie holes and defective areas repaired and patched for a uniform, smooth appearance.
  - 2. At unformed surfaces, such as tops of walls, strike-off smooth and finish with a texture matching adjacent surfaces.
  - 3. Location: Formed surfaces exposed to view in the finished structure.
- C. Float Finish
  - 1. After placing slabs, do not work the surface until ready for floating. Begin floating when the surface water has disappeared or when the concrete has stiffened sufficiently to permit the operation of a power-driven float, or by hand-floating if area is small or inaccessible to power units.
  - 2. Check the level of the surface plane to a tolerance not exceeding ¼-inch in 10 feet when tested with a 10-foot straightedge placed on the surface in not less than two different angles from a reference point. Cut down high spots and fill low spots. Uniformly slope surfaces to drain where shown on the drawings.
  - 3. Immediately after leveling, refloat the surface to a uniform, smooth, granular texture. Do not overfinish.
  - 4. Location: Monolithic slab surfaces that are to receive a trowel finish and other finishes.
- D. Trowel Finish
  - 1. After floating, begin the first trowel finish operation using a power driven trowel. Consolidate the concrete surface by the final hand troweling operation, free of trowel marks, uniform in texture and appearance, and with a surface plane

tolerance not exceeding 1/8-inch in 10 feet when tested with a 10-foot straightedge.

2. Do not absorb wet spots with neat cement or cement-sand mixture, and do not use chemical dryers.
  3. Location: Monolithic slab surfaces exposed to view, or to be covered with resilient floor covering, or to receive liquid hardener treatment.
- E. Nonslip Broom Finish
1. After concrete has received floating finish specified above, provide light brushing with fiber-bristle broom perpendicular to traffic flow.
  2. Location: Exterior walks and other horizontal walking surfaces.

### 3.07 CONCRETE SURFACE REPAIRS

- A. After removal of forms, repair and patch defective areas with specified repair mortar.
- B. In honeycomb and rock pocket areas, saw cut area and remove material down to solid concrete. Saw cut edges perpendicular to the concrete surface. Thoroughly clean out loose material, saturate area with water to a saturated surface dry condition and brush-coat the area to be patched with a slurry coat of structural repair mortar. Place additional mortar to patch the area before the slurry coat has dried. Smooth and blend to surrounding surface. Do not feather edges.

### 3.08 CONCRETE CURING AND PROTECTION

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Protect concrete from rapid moisture loss before and during finishing operations with a fog spray or evaporation reducer. Apply evaporation reducer in accordance with manufacturer's instructions after screeding and bull floating, but before power floating and troweling.
- B. Curing shall begin as soon as the finishing operation has been completed and the surface will not be damaged by the curing method. Curing shall be maintained for not less than 7 days.
- C. Curing Methods: Perform curing of concrete by curing compound, by moist curing, by moisture-retaining cover curing, or combinations thereof, as specified herein.
  1. Moist Curing. Use one of the following methods:
    - a. Keep concrete surface continuously wet by covering with water
    - b. Use continuous water-fog spray
    - c. Cover concrete with absorptive cover (burlap cloth, 9 oz./s.y.), thoroughly saturate with water, and keep continuously wet. Completely cover all concrete and lap edges 4-inches. Place moisture retaining cover (polyethylene film) over absorptive cover.
  2. Moisture-Retaining Cover. Cover all surfaces completely with polyethylene sheets, lap edges at least 3-inches, and seal with waterproof tape. Immediately repair any holes or tears with sheet material and tape.

3. Curing Compound. Use specified compound and apply in accordance with manufacturer's instructions. Apply within 1 hour of final finishing operations or form removal. Maintain continuity of coating and protect from damage during curing period. If finish materials are to be applied later, follow manufacturer's instructions for compound removal.
- D. Exterior Structural Concrete: Cure for 7 days with moist cure or moisture-retaining cover. After 7 day period, apply specified or approved sealing compound to surfaces that will be exposed in the finished structure.
- E. Interior Slabs to be Covered (with resilient flooring): Cure for 7 days with moist cure or moisture-retaining cover. Or; cure for 7 days using specified or approved interior curing/sealing compound. Ensure compound compatibility with adhesives.
- F. Interior Slabs Exposed and Other Exposed Interior Concrete: At interior slab locations that will remain uncovered, interior curbs, equipment pads, etc., cure for 7 days with moist cure or moisture-retaining cover. After 7 days, or as recommended by the manufacturer, apply liquid chemical hardener. Follow manufacturer's instruction for hardener application. Apply at least two coatings unless otherwise recommended by the manufacturer and approved. Protect adjoining work from overspray and remove all excess hardener from surface of floor slab.
- G. Protect all surfaces from damage until curing is complete and sealers and hardeners have dried.

### 3.09 CORRECTION AND REMOVAL OF DEFECTIVE WORK

- A. Remove and replace any concrete which shows excessive cracks or severe damage. Remove and replace slabs which do not drain properly, or are improperly finished, and other defective concrete as directed.
- B. Remove and replace work with improper cover over steel, concrete containing wood, cloth or other foreign matter.
- C. Fill and repair all voids, rock pockets, and other defects as directed. Voids larger than 3/4-inch shall be considered excessive and such work shall be removed and replaced.
- D. Remove and replace any concrete that has been improperly cured or finished.
- E. Should concrete fail to meet the minimum specified 28 day strength as determined by tests on both the regular and spare cylinders, the concrete will be deemed defective and shall be removed and replaced. Contractor shall bear the entire cost of such testing, removal, redesign, and replacing of defective concrete.
- F. Concrete which has improper water/cement ratios, and/or improper air contents shall be removed and replaced as directed.
- G. Contractor shall bear all costs for removal and replacement of defective work.

## PART 4 SPECIAL PROVISIONS

### 4.01 MEASUREMENT AND PAYMENT

- A. Payment for Cast-In-Place Concrete shall be included within the unit price for all items requiring it. No separate payment shall be made.

**END OF SECTION**

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## **SECTION 03600 GROUT**

### ***PART 1 GENERAL***

#### **1.01 SUMMARY**

- A. Section includes various types of grout as may be required for the project as shown on the Drawings and as required.
- B. Work includes supply, preparation, mixing, application, finishing and curing of grout.

#### **1.02 RELATED SECTIONS**

- A. Section 03200 – Concrete Reinforcement
- B. Section 03300 – Cast-In-Place Concrete

#### **1.03 REFERENCES**

- A. ASTM C1107 - Standards Specification for Packaged Hydraulic-Cement Grout (Nonshrink)
- B. ASTM C109 - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars – Modified
- C. ASTM C1090 - Standard Test Method for Measuring Changes in Height of Cylindrical Specimens from Hydraulic Cement Grout
- C. ASTM C939 - Standard Test Method for Flow of Grout for Preplaced-Aggregate Concrete (Flow Cone Method)
- D. ASTM C827 – Test Method for Early Volume Change of Cementitious Mixtures
- E. ASTM C882 – Test Method for Bond-Strength of Epoxy-Resin Systems Used with Concrete.
- F. ACI 351 - Grouting for Support of Equipment and Machinery

#### **1.04 SUBMITTALS**

- A. Submit list of each type of grout proposed for each location to be grouted. Include manufacturer's specifications, use recommendations, surface preparation and application instructions, and protection of adjacent surfaces.
- B. Submit three copies of submittal package. Grout shall be approved prior to use.

#### **1.05 QUALITY ASSURANCE**

- A. Grout Manufacturer shall be consulted when questions arise during selection of a particular grout for application. Grout used shall be as recommended by the manufacturer for each type of application.
- B. Grout shall be mixed, placed and cured in strict conformance to the manufacturer's instructions. Surfaces to be grouted shall be carefully prepared according to the manufacturer's instructions. Improper surface preparation and curing are the most common causes of grout failure and problems.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in manufacturer's sealed containers with contents clearly labeled.
- B. Store materials in a dry area at a temperature between 40 and 100°F.

**PART 2 PRODUCTS**

2.01 STANDARD NON-SHRINK GROUT

- A. Non-metallic, non-bleeding, cement based non-shrink grout meeting ASTM C1107, Grades B or C. Pumpable and pourable with positive expansion per ASTM C827.
- B. Compressive Strength at Flowable Consistency per ASTM C109: 2500 psi at 1 day, 5000 psi at 3 days, and 8000 psi at 28 days (minimums).
- C. Use: Grouting around pipe and conduit penetrations in concrete slabs, and other locations where non-shrink grout is called for and other specified grouts are not required.
- D. Manufacturers: Dayton Superior Corp. "1107 Advantage Grout"; ThoRoc "621 Construction Grout"; EUCO "NS Grout"; or approved equal.

2.02 DRY PACK GROUT

- A. Cement based, non-shrink, noncorrosive, non-metallic, high density, high strength grout for dry pack applications. Meets COE CRD-C-621.
- B. Compressive Strength per ASTM C109: 3000 psi at 1 day, 6500 psi at 7 days, and 8000 psi at 28 days (minimums) at damp pack consistency.
- C. Use: Pipe penetration patches in precast concrete, overhead applications and other areas where poured or pumped grout use is not practical.
- D. Manufacturers: Dayton Superior Corp. "Sure-Grip Grout Dri-Pak"; W.R. Meadows "Pac-It"; EUCO "Dry Pack Grout"; or approved equal.

2.03 ACCESSORIES

- A. Aggregate: Washed pea gravel, maximum 3/8-inch size.
- B. Water: Clean potable water.
- C. Curing Compound: Water based, acrylic as recommended by grout manufacturer.

**PART 3 EXECUTION**

3.01 MIXING

- A. Mix materials in accordance with the manufacturer's instructions.
- B. Where grout depth will exceed 2-inches, add aggregate at a maximum rate of 25 pounds per 55 pound bag.
- C. Do not retemper mix.



### 3.02 PREPARATION

- A. Carefully prepare all surfaces to be grouted in accordance with the manufacturer's recommendations and as specified. Concrete must be cured for 28 days before placing grout.
- B. Clean surfaces to remove loose and foreign material by waterblasting, mechanical abrasion, or sandblasting. Surface shall be free of dirt, oil, curing compounds and laitance.
- C. Remove unsound concrete by chipping or grinding. Grind or sandblast steel surfaces to remove all rust, mill scale and paint.
- D. Install forms to contain liquid grout. Seal joints and corners.

### 3.03 INSTALLATION – CEMENTITIOUS GROUTS

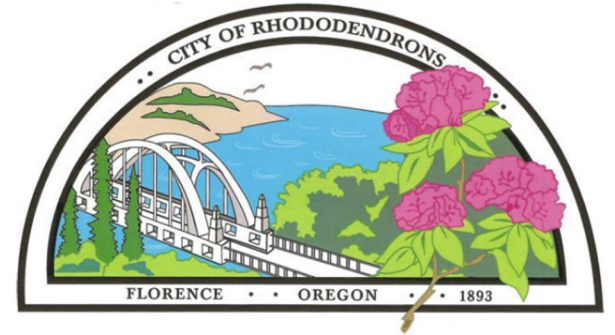
- A. Follow manufacturer's instructions.
- B. Just prior to grouting, thoroughly saturate concrete surfaces for 24 hours; remove excess water.
- C. Place grout continuously by most practical means. Work from one side to avoid entrapped air.
- D. Grout may be rodded or tamped, but do not vibrate.
- E. Apply curing compounds to exposed grout in accordance with manufacturer's instructions or cure with wet burlap for 3 days. Curing shall commence immediately after placement.

## **PART 4 SPECIAL PROVISIONS**

### 4.01 MEASUREMENT AND PAYMENT

- A. Payment for grout shall be considered incidental to bid items requiring grouting and associated costs shall be included within the cost basis as stated on the Bid Form. No separate measurement or additional payment will be made for these quantities and/or items.

**END OF SECTION**



# City of Florence

Lane County, Oregon

**VOLUME 3 - Project Drawings**

FOR THE CONSTRUCTION OF

## **Siuslaw Estuary Trail**

June 2024  
Project No. 1503-022



*Prepared By:*

Civil West Engineering Services, Inc.

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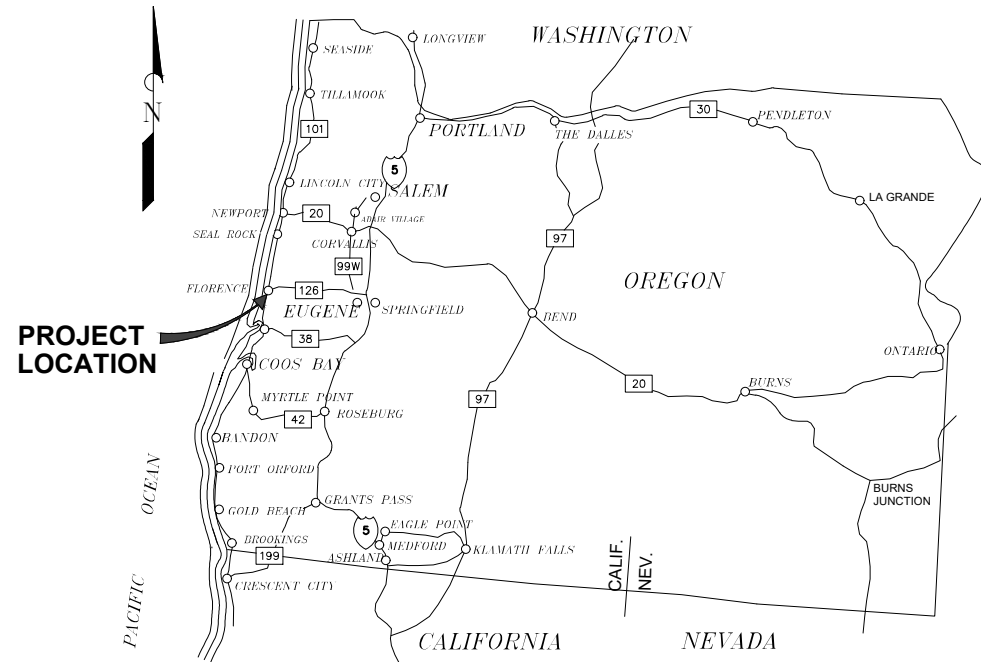
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# CITY OF FLORENCE

## LANE COUNTY

# SIUSLAW ESTUARY TRAIL

PROJECT NO. 1503-022  
JUNE 2024



**LOCATION MAP**



**VICINITY MAP**  
NOT TO SCALE

**SHEET INDEX**

SHEET #	SHEET NAME
<b>GENERAL</b>	
C0	COVER & SHEET INDEX
G1	GENERAL NOTES, ABBREVIATIONS, AND LEGEND
<b>SIUSLAW ESTUARY TRAIL, PHASE 1 PLAN AND PROFILE</b>	
C1	STA 0+00 TO 2+00
C2	STA 2+00 TO 4+00
C3	STA 4+00 TO 6+00
C4	STA 6+00 TO 8+00
C5	STA 8+00 TO 10+00
C6	STA 10+00 TO 12+00
C7	STA 12+00 TO 14+00
C8	STA 14+00 TO 15+25
<b>NEW PARKING AREA CIVIL PLAN</b>	
C9	PARKING LOT IMPROVEMENT AND DEMOLITION PLAN
C10	EROSION CONTROL PLAN
C11	TREE REMOVAL PLAN

<b>FUTURE FOOT BRIDGE LOCATION MAP</b>	
C12	FUTURE FOOT BRIDGE LOCATION
<b>DETAIL</b>	
D1	TRAIL CROSS SECTION AND DRIVEWAY DETAIL
D2	CATCH BASIN AND CURB DETAILS
D3	SIDEWALK DETAILS
D4	VALLEY GUTTER DETAILS
D5	DRIVEWAY DETAIL
D6	INFILTRATION BASIN & TRENCH DETAILS
D7	CONCRETE BOLLARD DETAIL

**PROJECT DIRECTORY & UTILITY REPRESENTATIVE CONTACT INFORMATION:**

<b>CIVIL ENGINEER</b> CIVIL WEST ENGINEERING 486 E STREET COOS BAY, OREGON 97420 541-266-8601	<b>CITY OF FLORENCE</b> MIKE MILLER 250 US HWY 101 FLORENCE, OREGON 97439 541-997-4106	<b>CENTRAL LINCOLN PUD</b> ROBIN HICKS 966 HWY 101 FLORENCE, OR 97439 rhicks@cencoast.com 541-997-5617 (alt) 541-997-3414	<b>CHARTER SPECTRUM</b> JOSHUA LIGHTNER joshua.lightner@charter.com 541-921-9189	<b>CENTURY LINK</b> LUKE PILON luke.pilon@centurylink.com 541-484-7827	<b>COASTCOM BY WAVE</b> PETE KALNINS pete@coastcom.net 541-351-0157
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REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP	DRAWN BY: JRP	CHECKED BY: SDL
PROJECT NO: 1503-022		

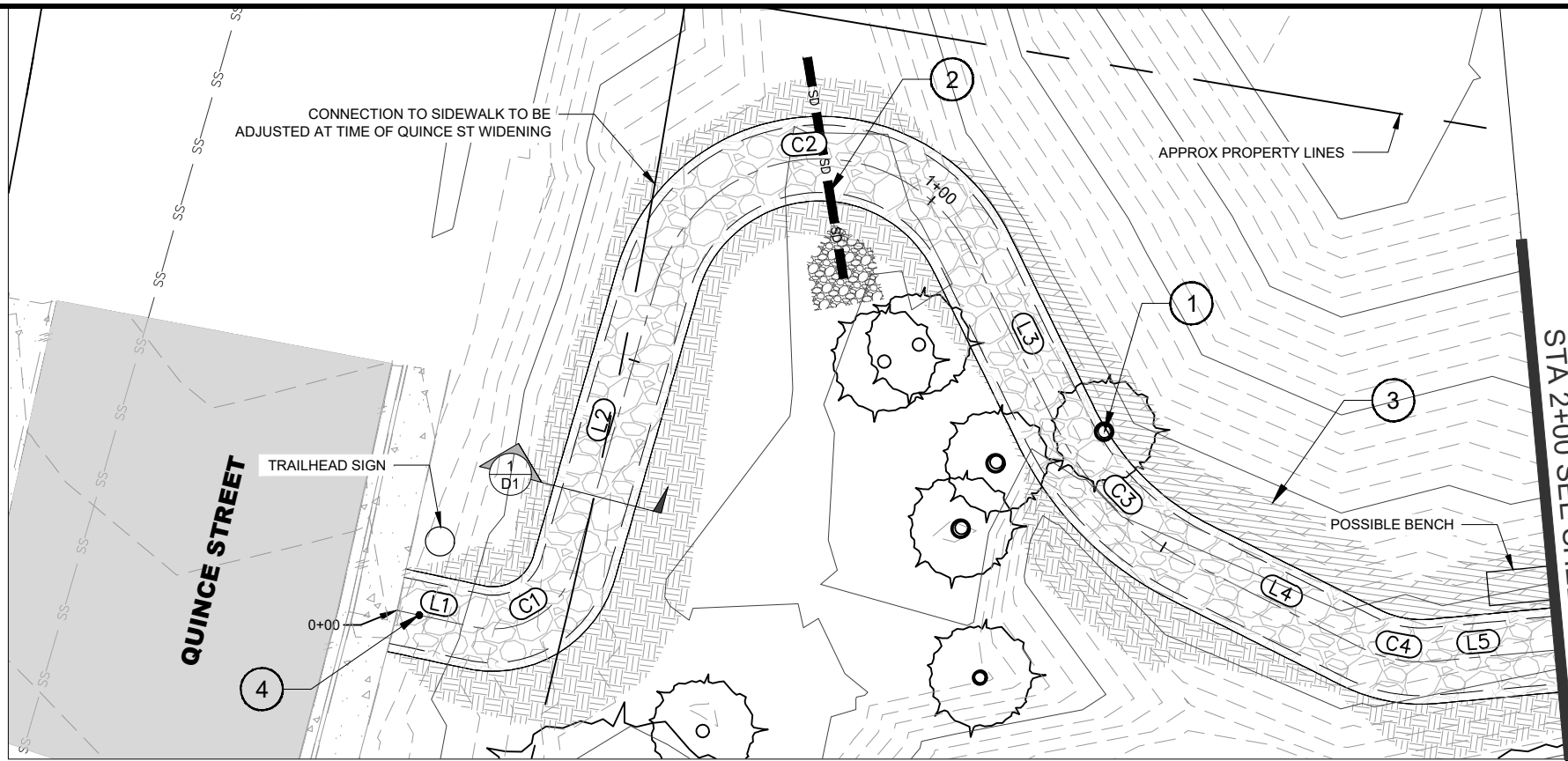
CITY OF FLORENCE LANE COUNTY	SIUSLAW ESTUARY TRAIL	COVER
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PLAN STA 0+00 TO 2+00

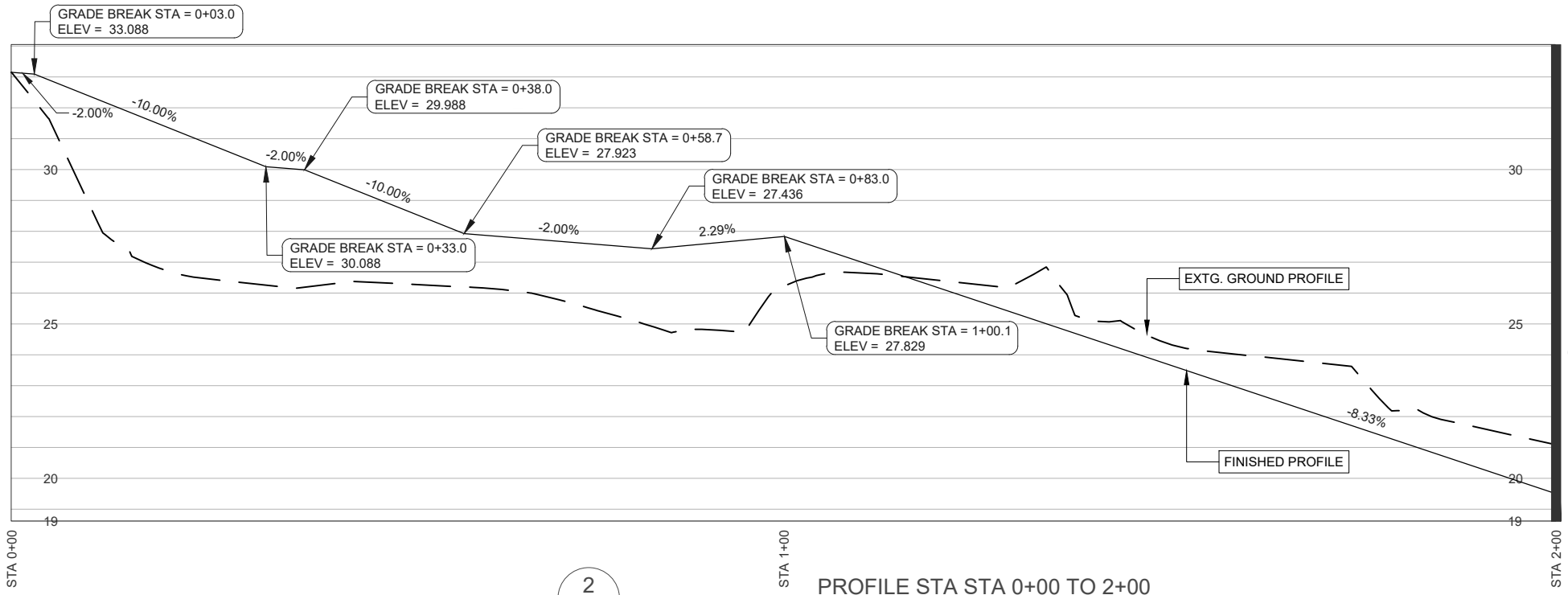
**NOTE:**  
FIELD ADJUSTMENTS TO ALIGNMENT AND PROFILE OF PATH WILL BE REQUIRED AND MUST BE COORDINATED WITH THE CITY OR THEIR REPRESENTATIVE(S). NO SEPARATE PAYMENT SHALL BE MADE.

**IMPROVEMENT NOTES:**

- ① REMOVE EXTG. TREE. SEE SHEET NOTES
- ② 12" PVC STORM DRAIN PIPE INSTALL 5 CY OF 6" D50 RIPRAP
- ③ CUT SLOPES ARE SHOWN AS 1:1. IF STABILIZATION MATERIAL IS NEEDED TO STABILIZE SLOPES THE CITY WILL PROVIDE MATERIAL.
- ④ INSTALL REMOVABLE & LOCKABLE BOLLARD

LINE TABLE		
Line #	Direction	Length
L1	S85° 31' 33.59"E	9.484
L2	N08° 34' 54.12"E	35.394
L3	S33° 36' 45.11"E	22.837
L4	S70° 59' 25.59"E	22.470
L5	N77° 03' 30.86"E	27.389

CURVE TABLE					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	9.994	14.982	N51° 31' 40.27"E	(3973522.84,860345.76)	(3973533.51,860354.24)
C2	20.000	48.103	N77° 29' 04.50"E	(3973538.79,860389.23)	(3973575.22,860397.32)
C3	35.000	22.833	S52° 18' 05.35"E	(3973587.86,860378.30)	(3973605.61,860364.58)
C4	16.227	9.049	S86° 57' 57.37"E	(3973626.85,860357.27)	(3973635.77,860356.79)



PROFILE STA STA 0+00 TO 2+00  
SCALE HORZ 1"=20'  
VERT 1"=5'

**SHEET NOTES:**

1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
2. CLEARING HEIGHT SHALL BE 8' ALONG TRAIL ALIGNMENT
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITTING REQUIRED BY THE CITY OF FLORENCE
4. CLEARING AND GRUBBING WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL CITY, COUNTY, STATE AND FEDERAL LAWS AND REQUIREMENTS PERTAINING TO CLEARING, DISPOSAL, EROSION CONTROL, AND OTHER RELATED OPERATIONS.
5. ALL DISTURBED AREAS SHALL BE RESTORED TO A CONDITION AT LEAST EQUIVALENT TO THE CONDITION PRIOR TO THE CONTRACTOR'S WORK.
6. TREES MUST BE REMOVED WITHOUT DAMAGING ANYTHING ELSE IN THE VICINITY. AFTER THE TREE IS REMOVED, THE STUMP AND ROOTS MUST BE GROUND SUFFICIENTLY AS APPROVED BY THE ENGINEER AND BACKFILLED WITH A SUITABLE BACKFILL AS APPROVED BY THE ENGINEER. ANY DAMAGE CAUSED BY THE REMOVAL OF THE TREE OR AS A PART OF THE TREE REMOVAL PROCESS WILL BE REPLACED, RESTORED OR FIXED AT THE CONTRACTOR'S EXPENSE
7. GRUBBING SHALL BE PERFORMED WITHIN ALL CLEARING AREA LIMITS, AS SPECIFIED ABOVE, TO A DEPTH OF SIX-INCHES (6") BELOW THE GROUND SURFACE, OR SUBGRADE, WHICHEVER IS DEEPER
8. PROTECT AND PRESERVE ALL VEGETATION OUTSIDE THE CUT/FILL SLOPES OF THE EVENT CENTER TRAIL.
9. NOTIFY CITY BEFORE REMOVAL OF ANY VEGETATION
10. ALL CONSTRUCTION ACTIVITY SHALL STAY REMOVED FROM WETLAND AND MUDFLAT DESIGNATED AREAS.
11. RESEED ALL CUT/FILL SLOPES WITH NATIVE SEED MIX.
12. MINIMIZE IMPORTED FILL MATERIAL BY USING NATIVE CUT SLOPE SOILS FOR FILL MATERIAL.
13. MHHW ELEVATION IS EQUAL TO NAVD88 7.21 FT. FINISHED ELEVATIONS OF EVENT CENTER TRAIL SHALL BE ELEVATED ABOVE MHHW.
14. MHT ELEVATION IS EQUAL TO NAVD88 6.5 FT. IF THIS CONTOUR IS NOT SHOWN, IT IS OUTSIDE THE LIMITS OF THE VIEWPORT OR SURVEY.
15. CUT & FILL LIMITS SHALL BE FLAGGED & PHOTOGRAPHED PRIOR TO CONSTRUCTION
16. ALL VEGETATION REMOVED SHALL BE REPLACED WITH LIKE VEGETATION.



REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

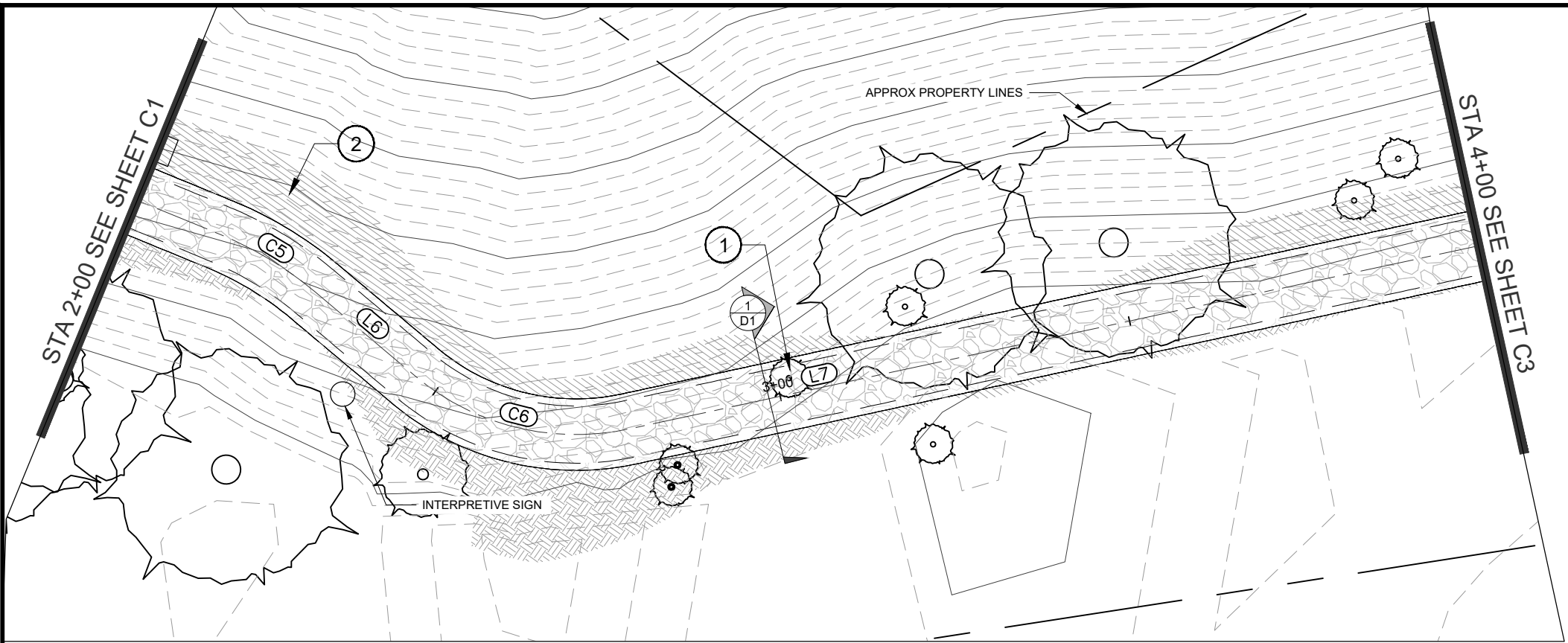
CITY OF FLORENCE  
LANE COUNTY

SUJSLAW ESTUARY TRAIL

STA 0+00 TO 2+00

Sheet No: **C1**  
Date: **JUNE 2024**

DATE: 6/5/24 FILE: Z:\CV\Project Archives\1503 Florence\1503-022 Florence - Event Center Trail Improvements\04 Final Design\Drawings\Design Working\Spruce Street Modify.dwg



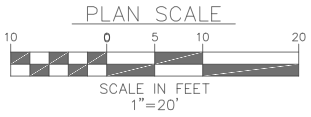
**IMPROVEMENT NOTES:**

- ① REMOVE EXTG. TREE. SEE SHEET NOTES
- ② CUT SLOPES ARE SHOWN AS 1:1. IF STABILIZATION MATERIAL IS NEEDED TO STABILIZE SLOPES THE CITY WILL PROVIDE MATERIAL.

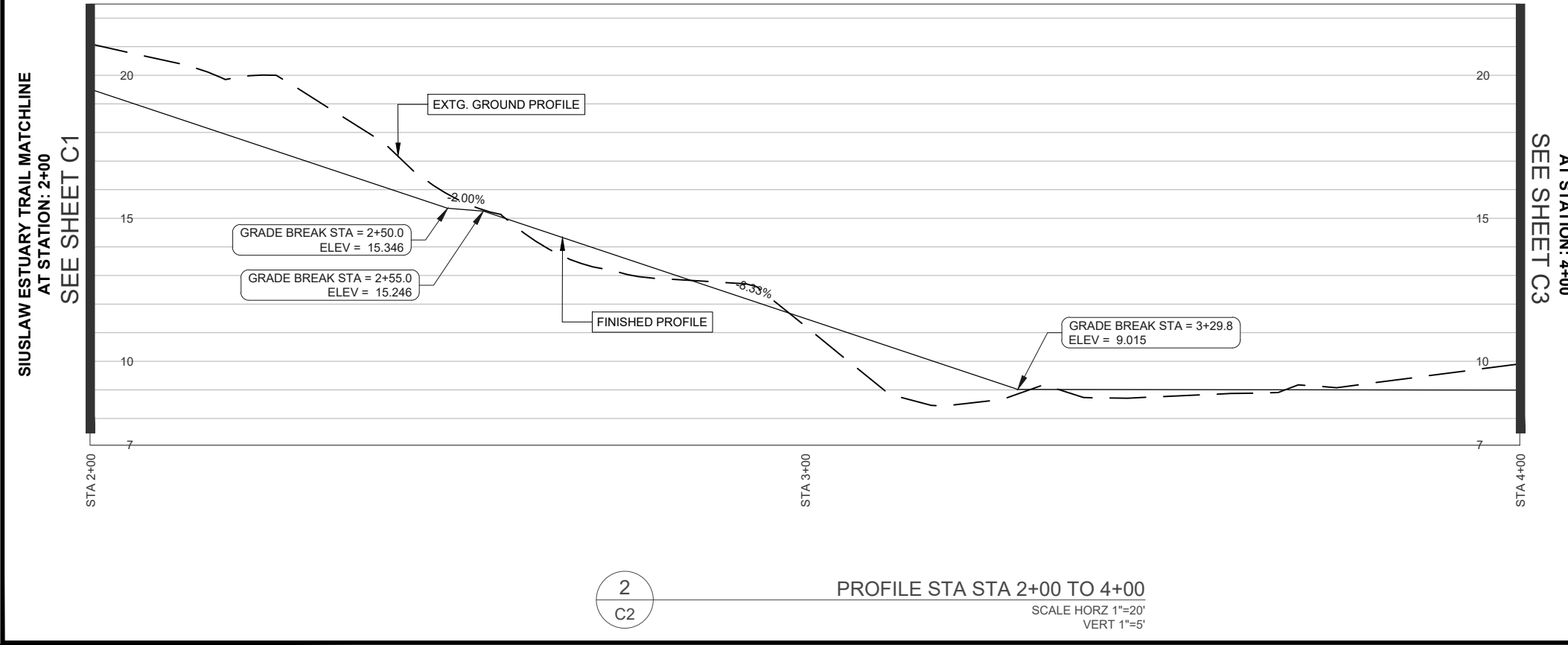
LINE TABLE		
Line #	Direction	Length
L6	S85° 10' 10.54"E	18.393
L7	N42° 35' 55.57"E	55.317

CURVE TABLE					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C5	50.000	15.489	N85° 55' 59.53"E	(3973662.47,860362.93)	(3973677.85,860364.02)
C6	35.000	31.906	N68° 42' 52.51"E	(3973696.18,860362.47)	(3973724.89,860373.66)

**NOTE:**  
FIELD ADJUSTMENTS TO ALIGNMENT AND PROFILE OF PATH WILL BE REQUIRED AND MUST BE COORDINATED WITH THE CITY OR THEIR REPRESENTATIVE(S). NO SEPARATE PAYMENT SHALL BE MADE.



PLAN STA 2+00 TO 4+00



**SHEET NOTES:**

1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
2. CLEARING HEIGHT SHALL BE 8' ALONG TRAIL ALIGNMENT
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REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE  
LANE COUNTY

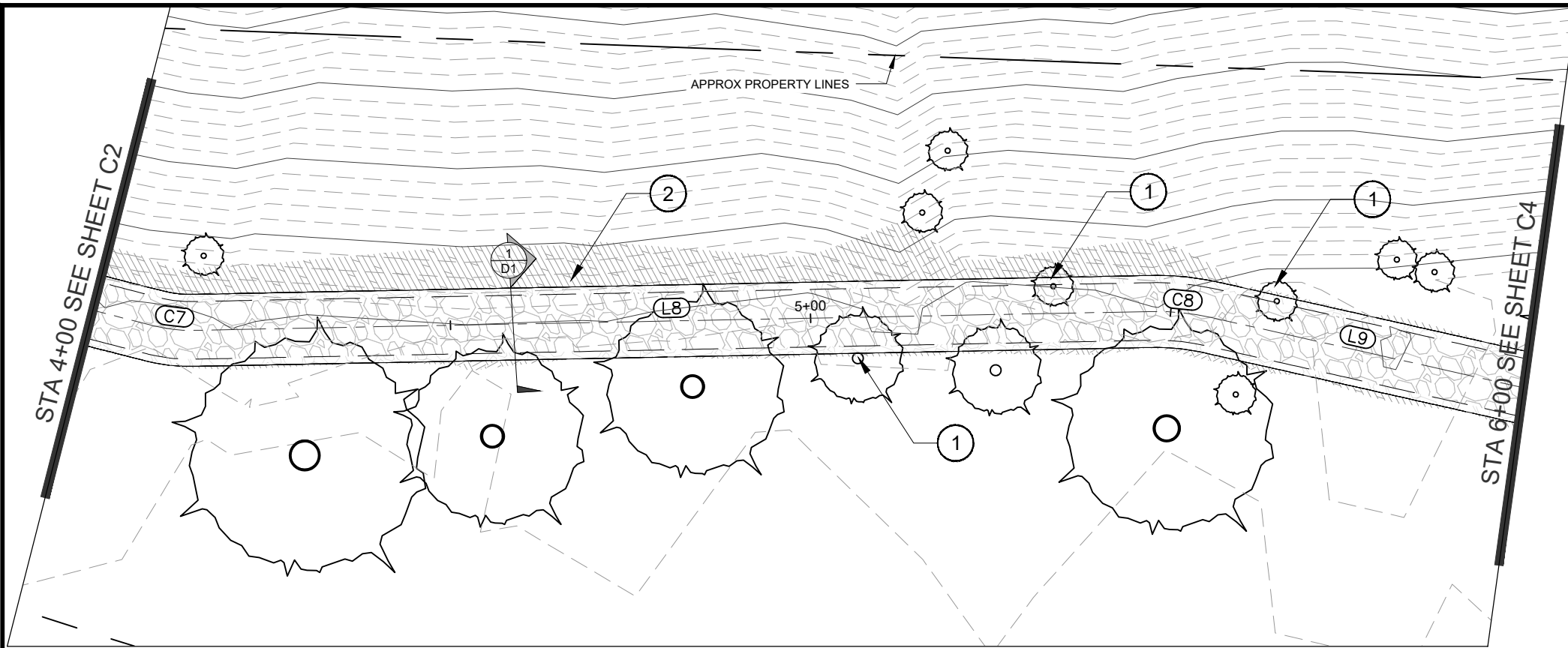
SIUSLAW ESTUARY TRAIL

STA 2+00 TO 4+00

Sheet No: **C2**  
Date: **JUNE 2024**



DATE: 6/5/24 FILE: Z:\CV\Project\_Archives\1503-Florence\1503-022-Florence - Event Center Trail Improvements\04-Final Design\Drawings\Design Working-Spruce Street\_Modify.dwg



**IMPROVEMENT NOTES:**

- ① REMOVE EXTG. TREE. SEE SHEET NOTES
- ② CUT SLOPES ARE SHOWN AS 1:1. IF STABILIZATION MATERIAL IS NEEDED TO STABILIZE SLOPES THE CITY WILL PROVIDE MATERIAL.

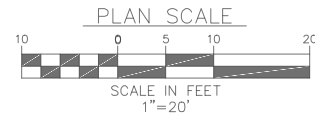
LINE TABLE		
Line #	Direction	Length
L8	N27° 08' 50.85"E	133.110
L9	N40° 57' 12.66"E	51.642

CURVE TABLE					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C7	20.000	5.394	N34° 52' 23.21"E	(3973813.22,860469.71)	(3973816.29,860474.12)
C8	35.000	8.434	N34° 03' 01.76"E	(3973877.03,860592.57)	(3973881.74,860599.54)

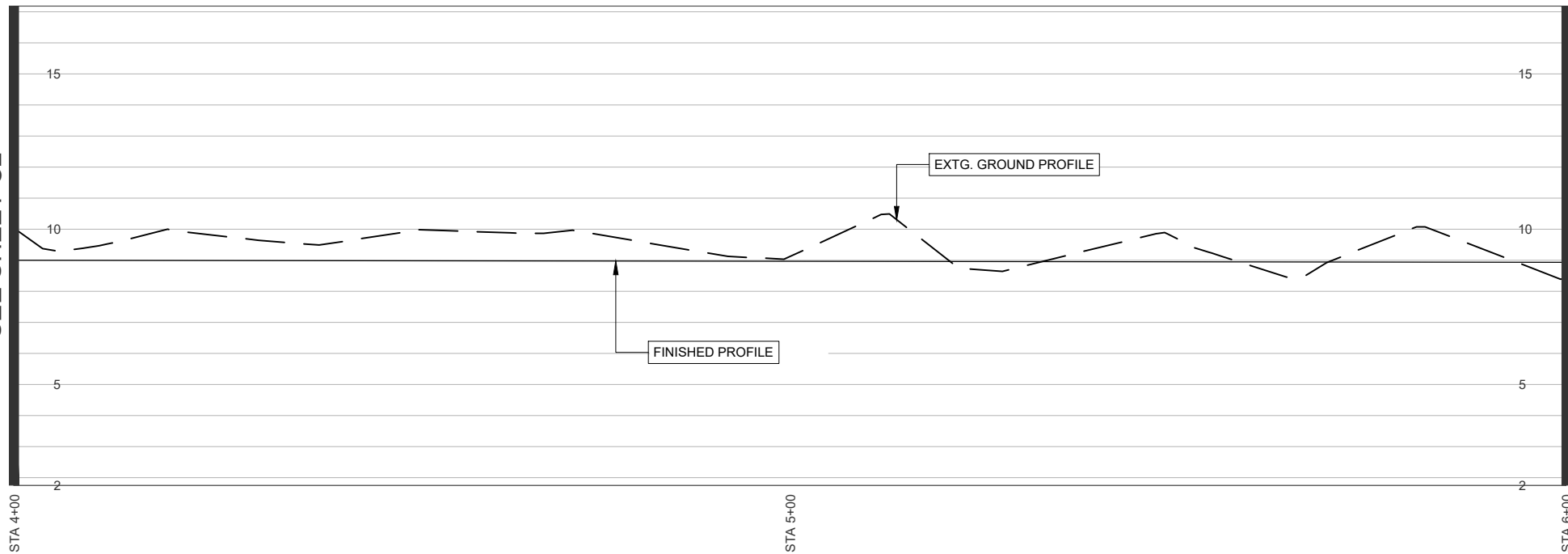
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①  
C3



PLAN STA 4+00 TO 6+00



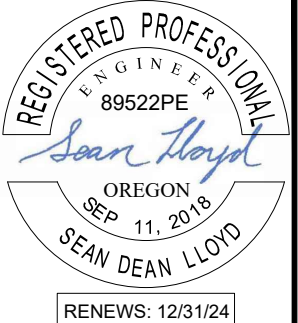
②  
C3

PROFILE STA STA 4+00 TO 6+00

SCALE HORZ 1"=20"  
VERT 1"=5"

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**Civil West**  
Engineering Services, Inc.  
486 E ST.  
COOS BAY, OR 97420  
541-266-8601  
www.civilwest.com

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

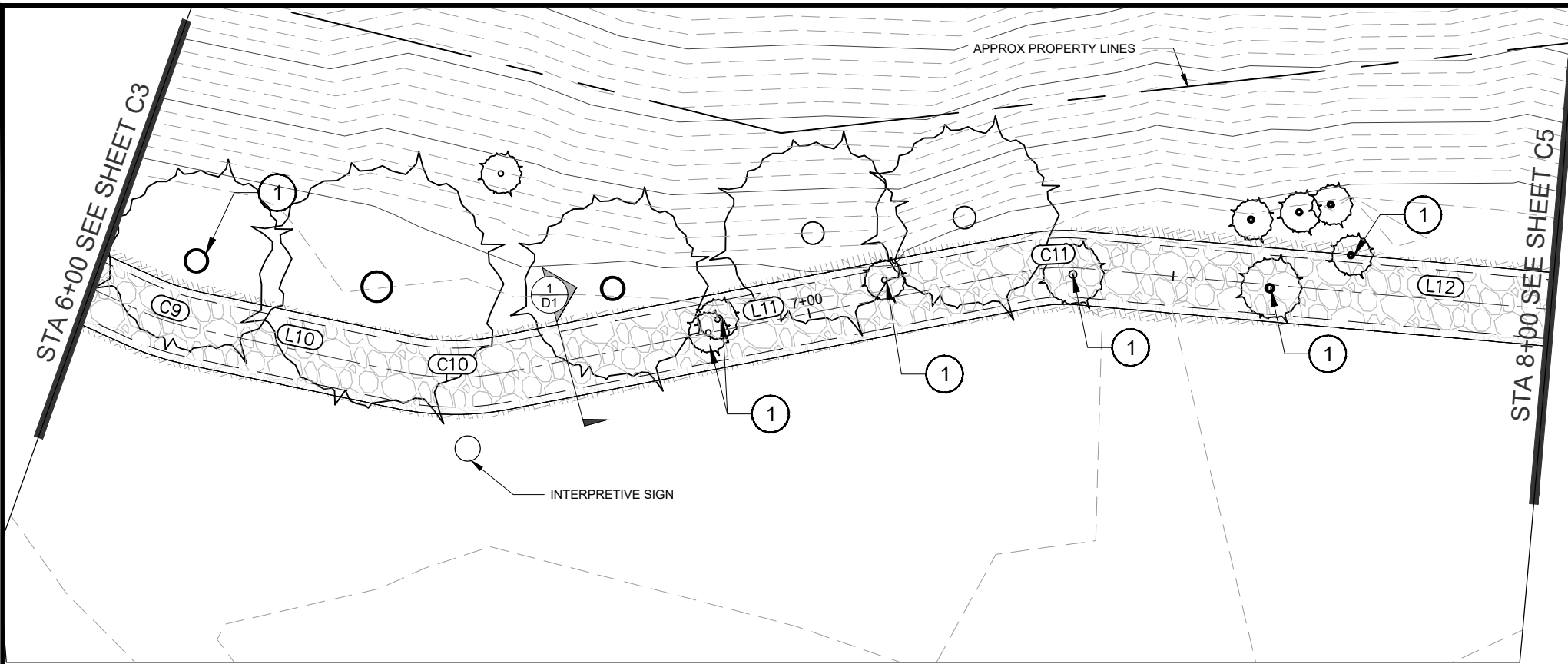
CITY OF FLORENCE  
LANE COUNTY

SIUSLAW ESTUARY TRAIL

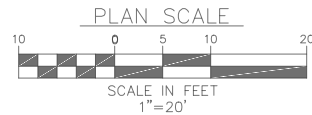
STA 4+00 TO 6+00

Sheet No. **C3**  
Date **JUNE 2024**

DATE: 6/5/24, FILE: Z:\CV\Project Archives\1503 Florence\1503-022 Florence - Event Center Trail Improvements\04 Final Design\Drawings\Design Working\Spruce Street, Modify.dwg



PLAN STA STA 6+00 TO 8+00



**NOTE:**  
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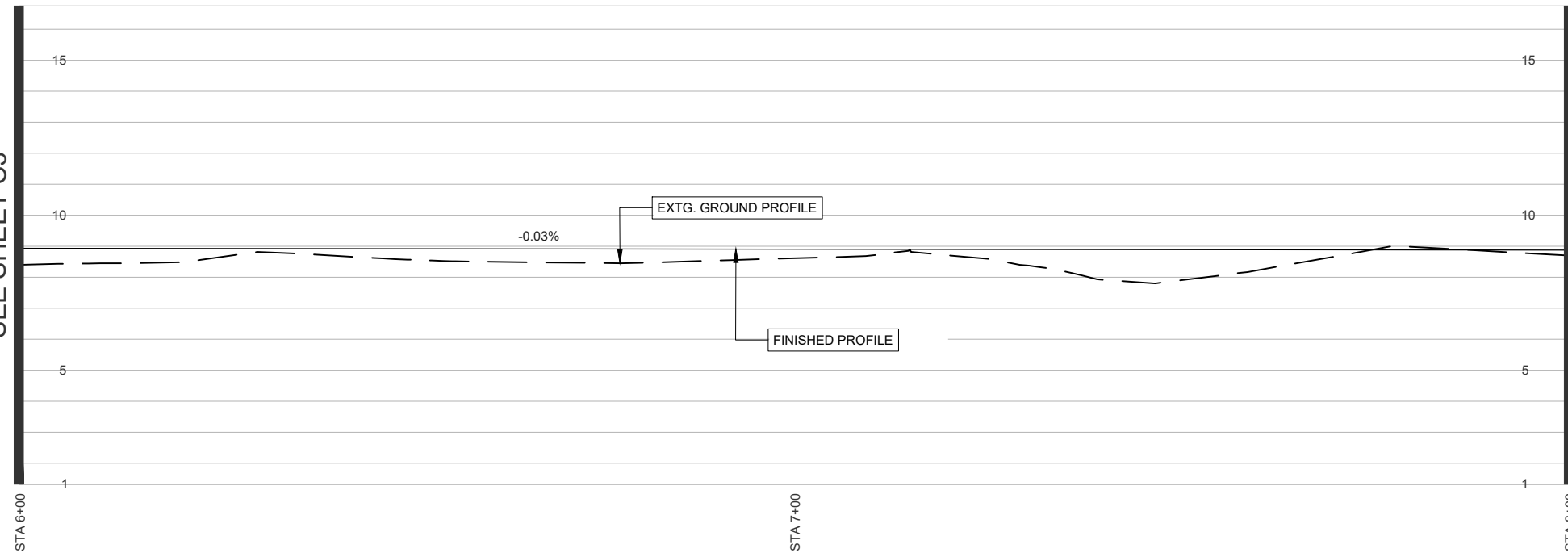


**IMPROVEMENT NOTES:**

- 1 REMOVE EXTG. TREE. SEE SHEET NOTES

LINE TABLE		
Line #	Direction	Length
L10	N28° 26' 28.46"E	28.806
L11	N05° 33' 48.00"E	72.464
L12	N21° 34' 40.37"E	97.961

CURVE TABLE					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C9	35.000	7.643	N34° 41' 50.56"E	(3973915.59,860638.54)	(3973919.93,860644.81)
C10	35.000	13.975	N17° 00' 08.23"E	(3973933.65,860670.14)	(3973937.71,860683.42)
C11	25.000	6.988	N13° 34' 14.19"E	(3973944.73,860755.54)	(3973946.37,860762.31)



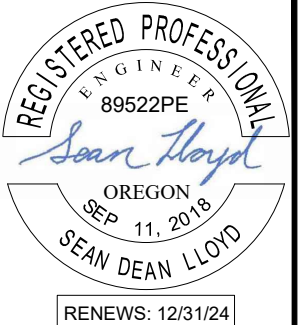
PROFILE STA STA 6+00 TO 8+00

SCALE HORZ 1"=20'  
VERT 1"=5'



**SHEET NOTES:**

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REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE  
LANE COUNTY

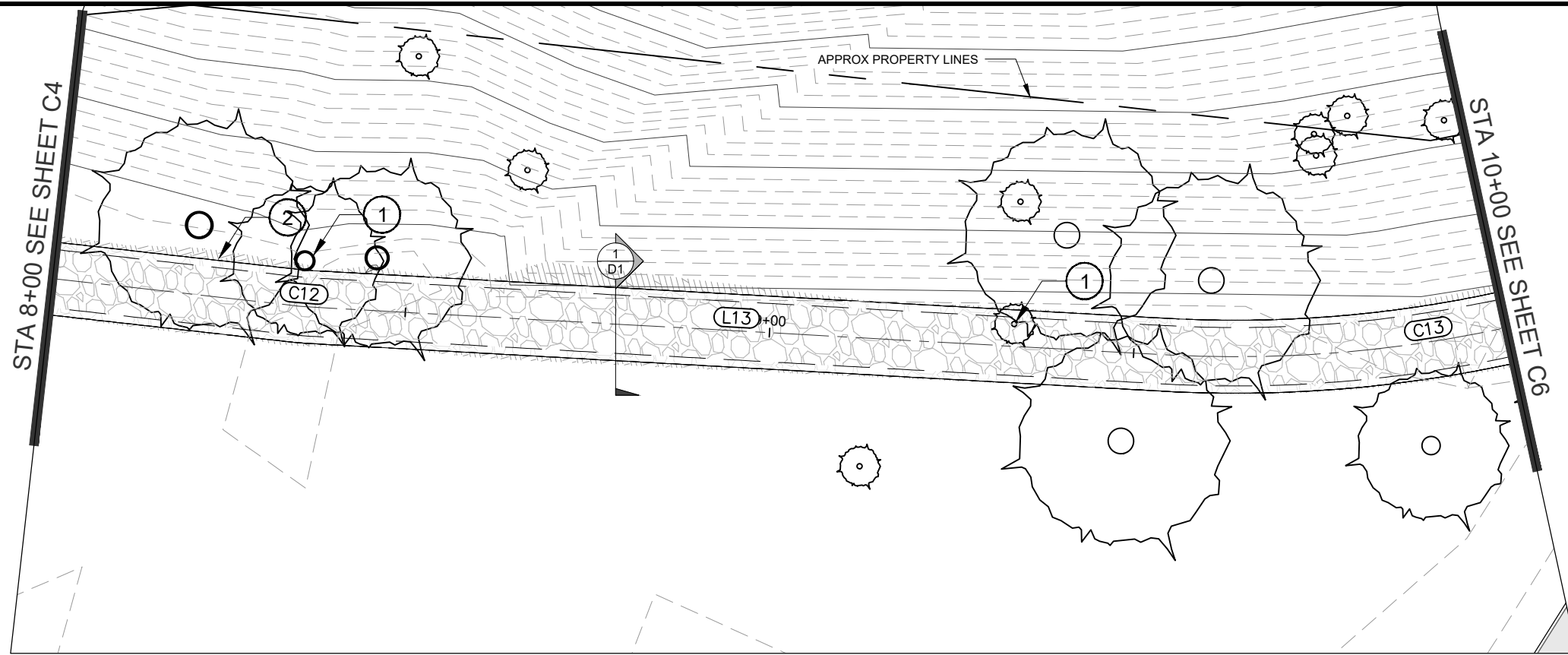
SIUSLAW ESTUARY TRAIL

STA 6+00 TO 8+00

Sheet No. **C4**  
Date **JUNE 2024**



DATE: 6/5/24 FILE: Z:\CV\Project Archives\1503 Florence\1503-022 Florence - Event Center Trail Improvements\04 Final Design\Drawings\Design Working\Spruce Street Modify.dwg



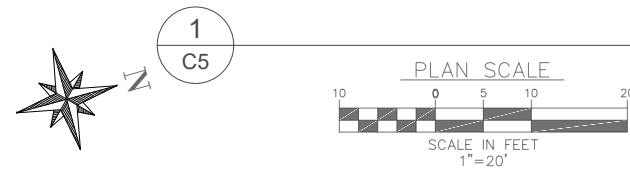
**IMPROVEMENT NOTES:**

- ① REMOVE EXTG. TREE. SEE SHEET NOTES
- ② CUT SLOPES ARE SHOWN AS 1:1. IF STABILIZATION MATERIAL IS NEEDED TO STABILIZE SLOPES THE CITY WILL PROVIDE MATERIAL.

LINE TABLE		
Line #	Direction	Length
L13	N18° 22' 47.17"E	117.549

CURVE TABLE					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C9	35.000	7.643	N34° 41' 50.56"E	(3973915.59,860638.54)	(3973919.93,860644.81)
C10	35.000	13.975	N17° 00' 08.23"E	(3973933.65,860670.14)	(3973937.71,860683.42)
C11	25.000	6.988	N13° 34' 14.19"E	(3973944.73,860755.54)	(3973946.37,860762.31)

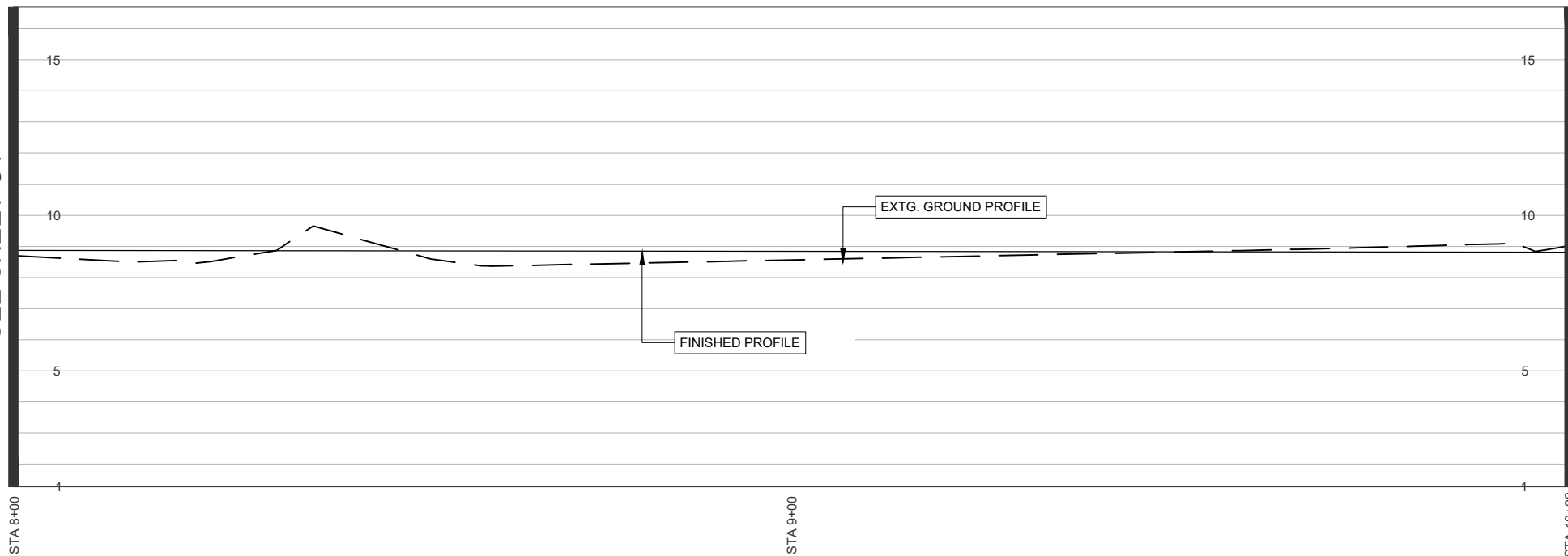
**NOTE:**  
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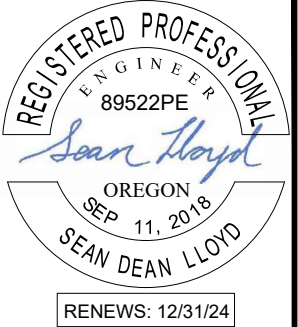
PLAN STA 8+00 TO 10+00

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PROFILE STA STA 8+00 TO 10+00  
SCALE HORZ 1"=20'  
VERT 1"=5'



REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

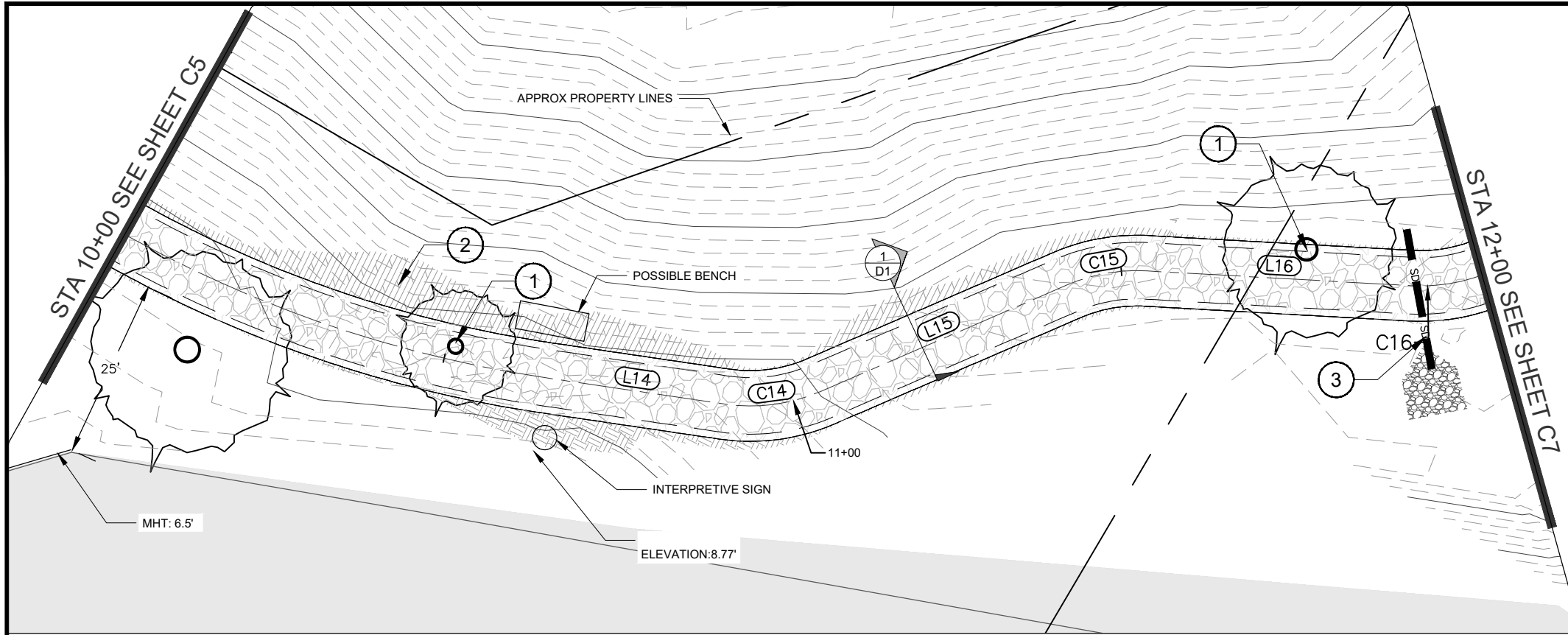
CITY OF FLORENCE  
LANE COUNTY

SIUSLAW ESTUARY TRAIL

STA 8+00 TO 10+00

Sheet No. **C5**  
Date **JUNE 2024**

DATE: 6/5/24 FILE: Z:\CW\_Project\_Archives\1503\_Florence\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design Working\Spruce Street\_Match.dwg



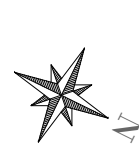
**IMPROVEMENT NOTES:**

- ① REMOVE EXTG. TREE. SEE SHEET NOTES
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- ③ 12" PVC STORM DRAIN PIPE INSTALL 5 CY OF 6" D50 RIPRAP

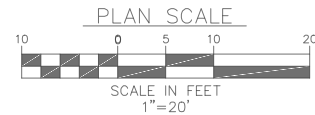
LINE TABLE		
Line #	Direction	Length
L14	N17° 49' 33.60"W	25.438
L15	N49° 33' 33.65"W	37.952
L16	N23° 00' 23.09"W	37.406

CURVE TABLE					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C14	25.000	13.846	N33° 41' 33.63"W	(3974012.67,861099.24)	(3974005.09,861110.62)
C15	25.000	11.586	N36° 16' 58.37"W	(3973976.20,861135.23)	(3973969.41,861144.49)
C16	25.000	28.328	N55° 28' 06.15"W	(3973954.79,861178.92)	(3973932.68,861194.13)

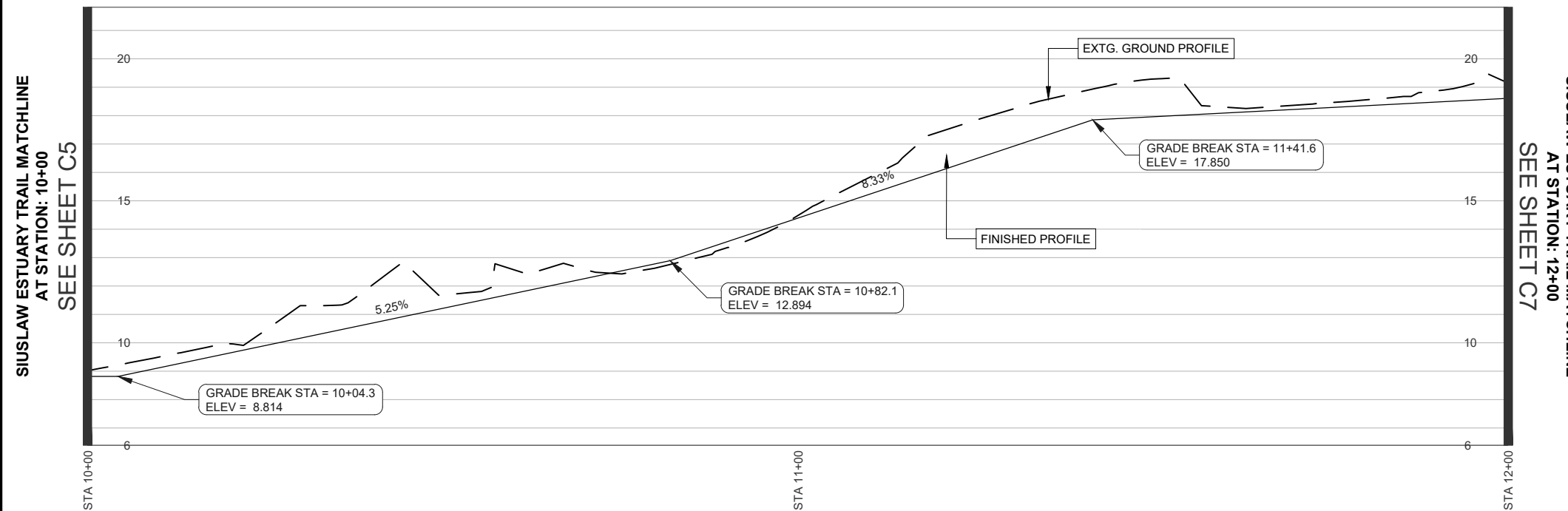
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1  
C6



PLAN STA 10+00 TO 12+00



2  
C6

PROFILE STA STA 10+00 TO 12+00

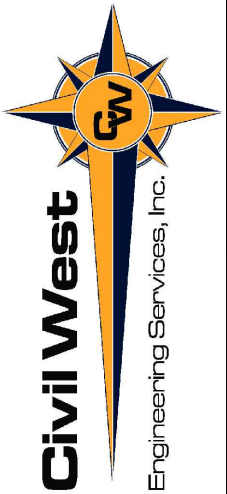
SCALE HORZ 1"=20"  
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RENEWS: 12/31/24



Engineering Services, Inc.  
486 E. ST.  
COOS BAY, OR 97420  
541-266-8601  
www.civilwest.com

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

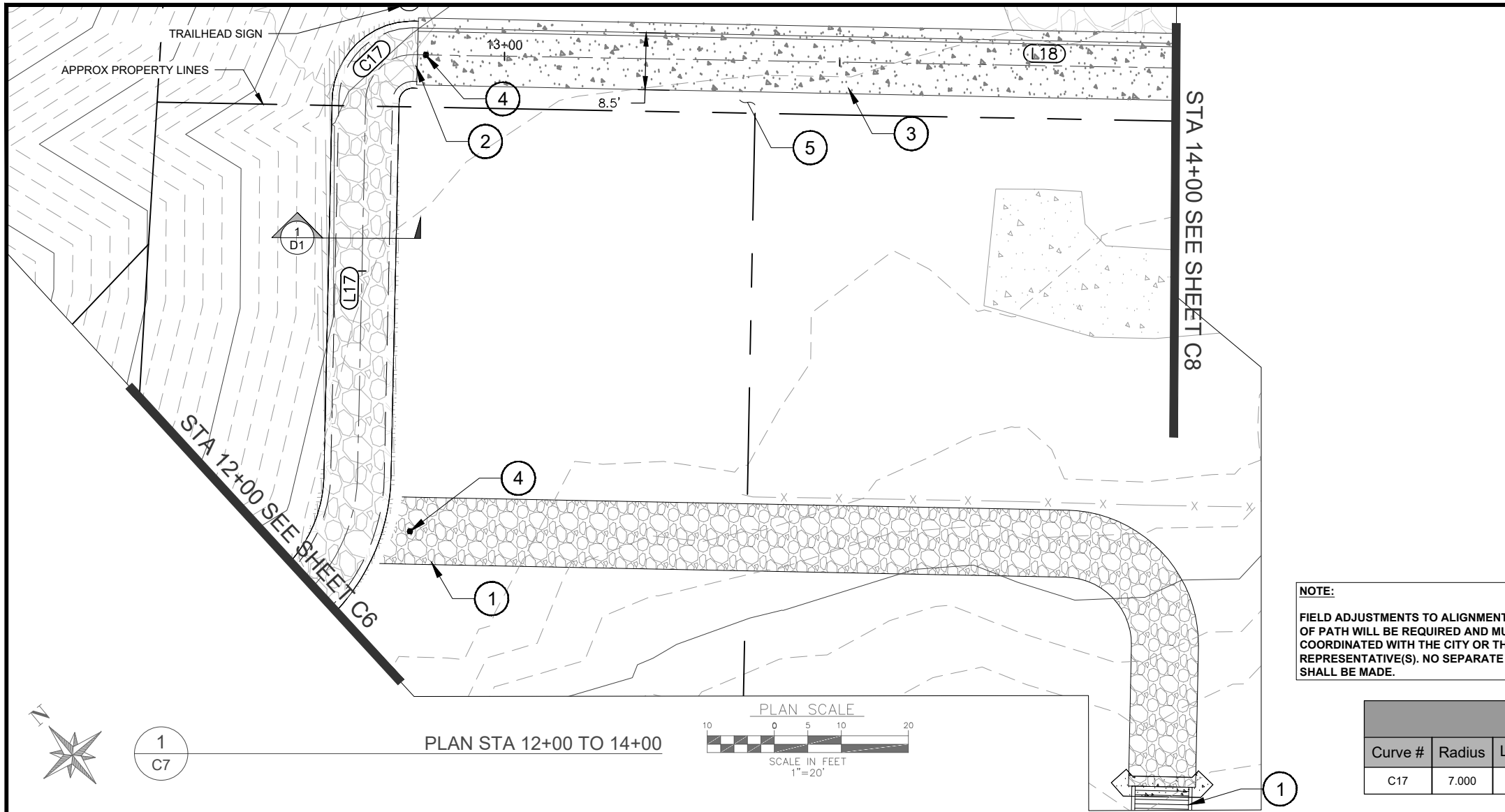
CITY OF FLORENCE  
LANE COUNTY

SIUSLAW ESTUARY TRAIL

STA 10+00 TO 12+00

Sheet No: **C6**  
Date: **JUNE 2024**

DATE: 6/5/24 FILE: Z:\CV\Project Archives\1503 Florence\1503-022 Florence - Event Center Trail Improvements\04 Final Design\Drawings\Design Working\Spruce Street Modif.dwg



**IMPROVEMENT NOTES:**

- FUTURE FOOT BRIDGE AND ASSOCIATED PATHWAY. NOT INCLUDED IN PROJECT SCOPE
- STA 12+87 BEGIN TYP. SIDEWALK. TRANSITION TO 5' WIDTH. TRANSITION LENGTH IS 10'.
- TYP. SIDEWALK SECTION W/ STANDARD CURB & GUTTER. SEE SHEET D3
- INSTALL REMOVABLE & LOCKABLE BOLLARD
- REMOVE EXISTING ASPHALT, CONCRETE, FENCE, AND OTHER DEBRIS AS REQ'D TO FACILITATE CONSTRUCTION

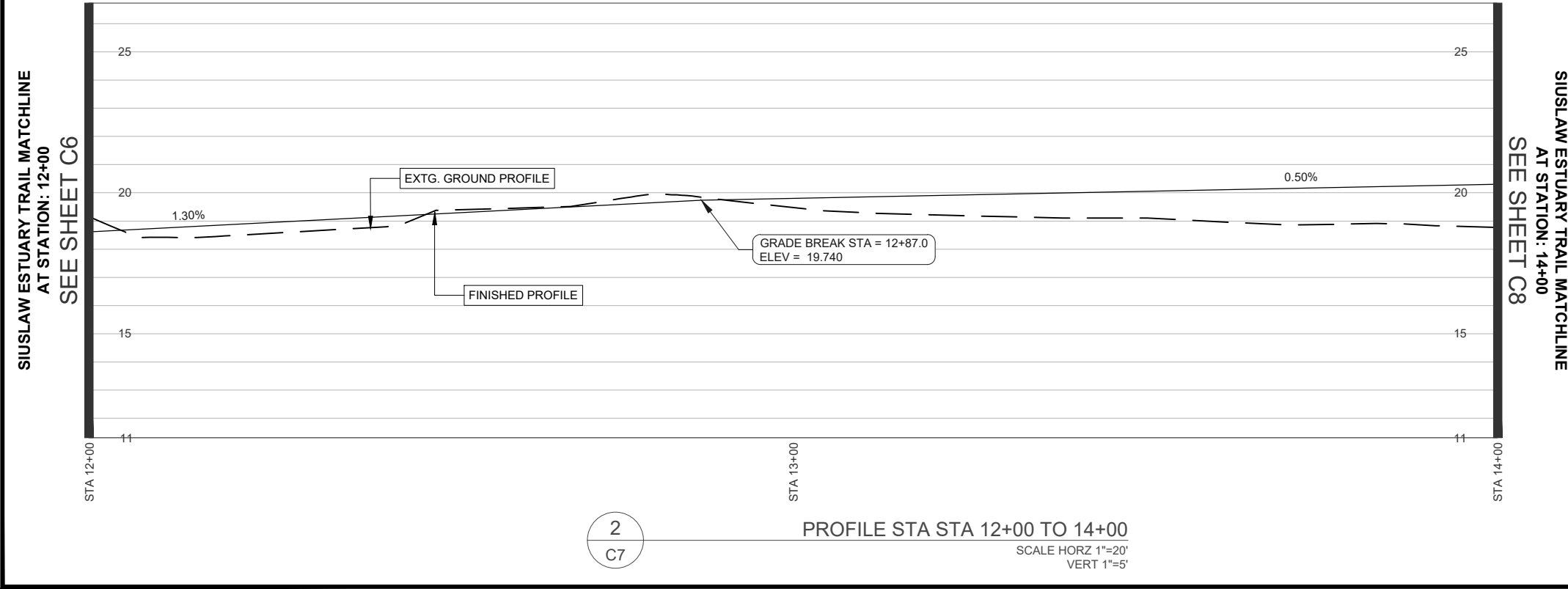
**NOTE:**  
FIELD ADJUSTMENTS TO ALIGNMENT AND PROFILE OF PATH WILL BE REQUIRED AND MUST BE COORDINATED WITH THE CITY OR THEIR REPRESENTATIVE(S). NO SEPARATE PAYMENT SHALL BE MADE.

**LINE TABLE**

Line #	Direction	Length
L17	N87° 55' 49.20"W	56.119
L18	N01° 49' 16.21"E	188.185

**CURVE TABLE**

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C17	7.000	10.981	N42° 59' 21.76"W	(3973876.60,861196.16)	(3973869.86,861203.39)




**SHEET NOTES:**

- CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
- CLEARING HEIGHT SHALL BE 8' ALONG TRAIL ALIGNMENT
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITTING REQUIRED BY THE CITY OF FLORENCE
- CLEARING AND GRUBBING WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL CITY, COUNTY, STATE AND FEDERAL LAWS AND REQUIREMENTS PERTAINING TO CLEARING, DISPOSAL, EROSION CONTROL, AND OTHER RELATED OPERATIONS.
- ALL DISTURBED AREAS SHALL BE RESTORED TO A CONDITION AT LEAST EQUIVALENT TO THE CONDITION PRIOR TO THE CONTRACTOR'S WORK.
- TREES MUST BE REMOVED WITHOUT DAMAGING ANYTHING ELSE IN THE VICINITY. AFTER THE TREE IS REMOVED, THE STUMP AND ROOTS MUST BE GROUND SUFFICIENTLY AS APPROVED BY THE ENGINEER AND BACKFILLED WITH A SUITABLE BACKFILL AS APPROVED BY THE ENGINEER. ANY DAMAGE CAUSED BY THE REMOVAL OF THE TREE OR AS A PART OF THE TREE REMOVAL PROCESS WILL BE REPLACED, RESTORED OR FIXED AT THE CONTRACTOR'S EXPENSE
- GRUBBING SHALL BE PERFORMED WITHIN ALL CLEARING AREA LIMITS, AS SPECIFIED ABOVE, TO A DEPTH OF SIX-INCHES (6") BELOW THE GROUND SURFACE, OR SUBGRADE, WHICHEVER IS DEEPER
- PROTECT AND PRESERVE ALL VEGETATION OUTSIDE THE CUT/FILL SLOPES OF THE EVENT CENTER TRAIL.
- NOTIFY CITY BEFORE REMOVAL OF ANY VEGETATION
- ALL CONSTRUCTION ACTIVITY SHALL STAY REMOVED FROM WETLAND AND MUDFLAT DESIGNATED AREAS.
- RESEED ALL CUT/FILL SLOPES WITH NATIVE SEED MIX.
- MINIMIZE IMPORTED FILL MATERIAL BY USING NATIVE CUT SLOPE SOILS FOR FILL MATERIAL.
- MHHW ELEVATION IS EQUAL TO NAVD88 7.21 FT. FINISHED ELEVATIONS OF EVENT CENTER TRAIL SHALL BE ELEVATED ABOVE MHHW.
- MHT ELEVATION IS EQUAL TO NAVD88 6.5 FT. IF THIS CONTOUR IS NOT SHOWN, IT IS OUTSIDE THE LIMITS OF THE VIEWPORT OR SURVEY.
- CUT & FILL LIMITS SHALL BE FLAGGED & PHOTOGRAPHED PRIOR TO CONSTRUCTION
- ALL VEGETATION REMOVED SHALL BE REPLACED WITH LIKE VEGETATION.

**REGISTERED PROFESSIONAL ENGINEER**  
89522PE  
*Sean Lloyd*  
OREGON  
SEP 11, 2018  
**SEAN DEAN LLOYD**

RENEWS: 12/31/24



**Civil West**  
Engineering Services, Inc.

541-266-8601  
www.civilwest.com

486 E. ST.  
COOS BAY, OR 97420

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE  
LANE COUNTY

SIUSLAW ESTUARY TRAIL

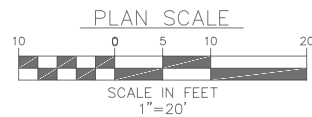
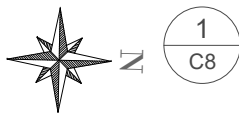
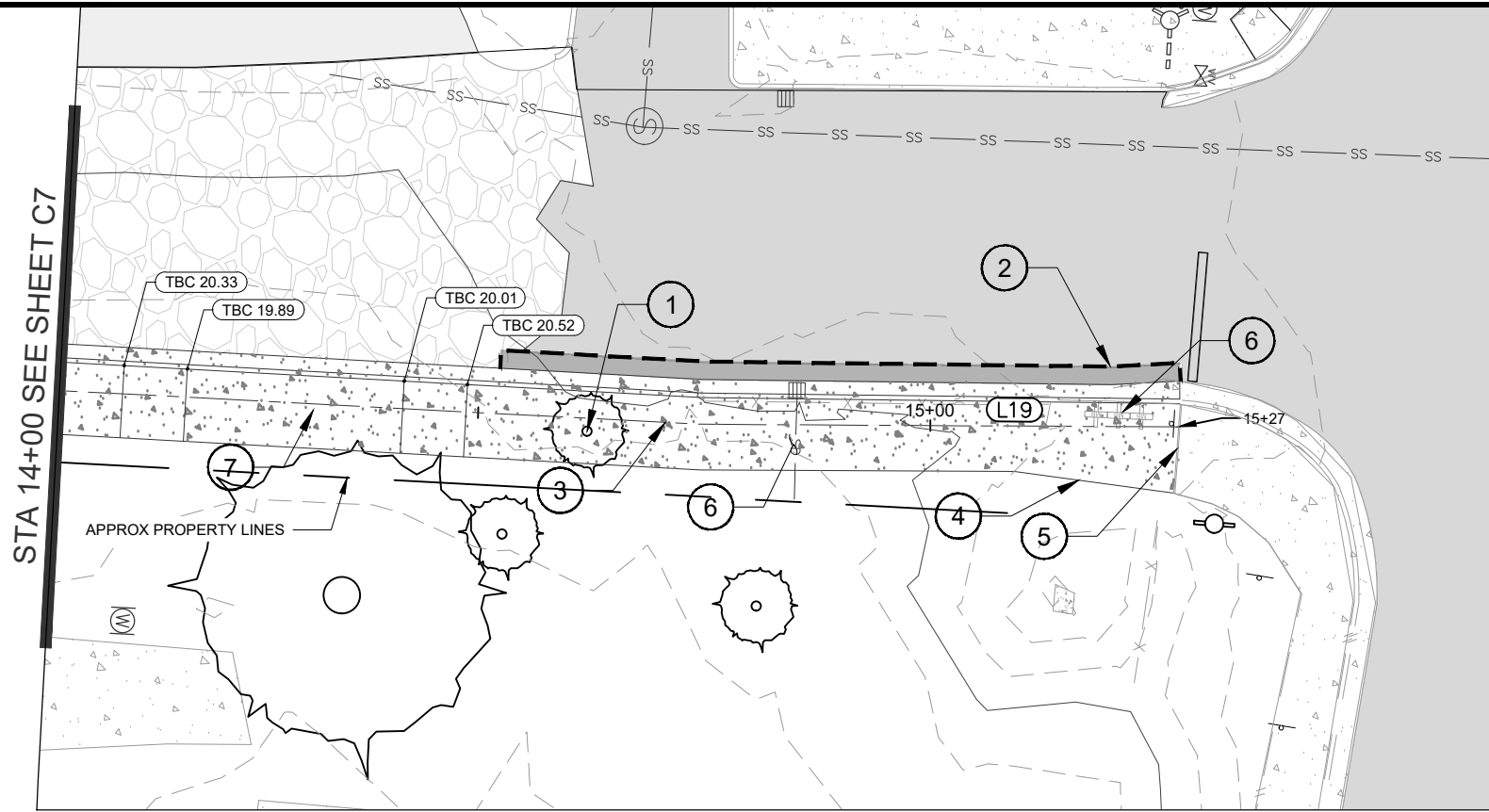
STA 12+00 TO 14+00

Sheet No. **C7**

Date **JUNE 2024**



DATE: 6/5/24 FILE: Z:\CV\Project\_Archives\1503\_Florence\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\DWG\Design\_Working\Spruce Street\_Modify.dwg



PLAN STA 14+00 TO 15+25

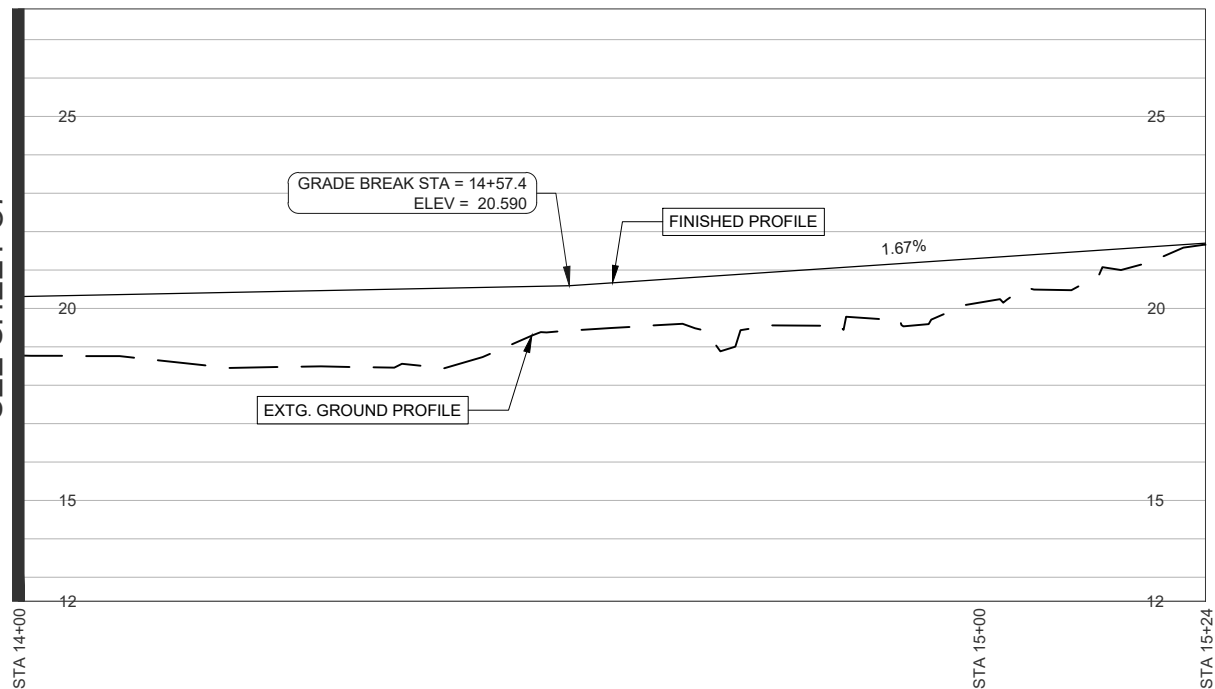
**NOTE:**  
FIELD ADJUSTMENTS TO ALIGNMENT AND PROFILE OF PATH WILL BE REQUIRED AND MUST BE COORDINATED WITH THE CITY OR THEIR REPRESENTATIVE(S). NO SEPARATE PAYMENT SHALL BE MADE.

LINE TABLE		
Line #	Direction	Length
L19	N00° 52' 13.37"W	52.753

**IMPROVEMENT NOTES:**

- ① REMOVE EXTG. TREE
- ② MAILBOXES. PROTECT IN PLACE
- ③ TYP. SIDEWALK SECTION W/ STANDARD CURB & GUTTER. SEE SHEET D3
- ④ TRANSITION SIDEWALK WIDTH TO MATCH EXT'G. 15' TRANSITION LENGTH.
- ⑤ CONNECT NEW SIDEWALK TO EXT'G
- ⑥ REMOVE EXISTING ASPHALT, CONCRETE, FENCE, AND OTHER DEBRIS AS REQ'D TO FACILITATE CONSTRUCTION
- ⑦ NEW DRIVEWAY - SEE D5

SIUSLAW ESTUARY TRAIL MATCHLINE  
AT STATION: 14+00  
SEE SHEET C7



PROFILE STA STA 14+00 TO 15+25

SCALE HORZ 1"=20'  
VERT 1"=5'

**SHEET NOTES:**

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
- 2. CLEARING HEIGHT SHALL BE 8' ALONG TRAIL ALIGNMENT
- 3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITTING REQUIRED BY THE CITY OF FLORENCE
- 4. CLEARING AND GRUBBING WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL CITY, COUNTY, STATE AND FEDERAL LAWS AND REQUIREMENTS PERTAINING TO CLEARING, DISPOSAL, EROSION CONTROL, AND OTHER RELATED OPERATIONS.
- 5. ALL DISTURBED AREAS SHALL BE RESTORED TO A CONDITION AT LEAST EQUIVALENT TO THE CONDITION PRIOR TO THE CONTRACTOR'S WORK.
- 6. TREES MUST BE REMOVED WITHOUT DAMAGING ANYTHING ELSE IN THE VICINITY. AFTER THE TREE IS REMOVED, THE STUMP AND ROOTS MUST BE GROUND SUFFICIENTLY AS APPROVED BY THE ENGINEER AND BACKFILLED WITH A SUITABLE BACKFILL AS APPROVED BY THE ENGINEER. ANY DAMAGE CAUSED BY THE REMOVAL OF THE TREE OR AS A PART OF THE TREE REMOVAL PROCESS WILL BE REPLACED, RESTORED OR FIXED AT THE CONTRACTOR'S EXPENSE
- 7. GRUBBING SHALL BE PERFORMED WITHIN ALL CLEARING AREA LIMITS, AS SPECIFIED ABOVE, TO A DEPTH OF SIX-INCHES (6") BELOW THE GROUND SURFACE, OR SUBGRADE, WHICHEVER IS DEEPER
- 8. PROTECT AND PRESERVE ALL VEGETATION OUTSIDE THE CUT/FILL SLOPES OF THE EVENT CENTER TRAIL.
- 9. NOTIFY CITY BEFORE REMOVAL OF ANY VEGETATION
- 10. MHHW ELEVATION IS EQUAL TO NAVD88 7.21 FT. FINISHED ELEVATIONS OF EVENT CENTER TRAIL SHALL BE ELEVATED ABOVE MHHW.
- 11. MHT ELEVATION IS EQUAL TO NAVD88 6.5 FT. IF THIS CONTOUR IS NOT SHOWN, IT IS OUTSIDE THE LIMITS OF THE VIEWPORT OR SURVEY.
- 12. CUT & FILL LIMITS SHALL BE FLAGGED & PHOTOGRAPHED PRIOR TO CONSTRUCTION
- 13. ALL VEGETATION REMOVED SHALL BE REPLACED WITH LIKE VEGETATION.



REV.	DATE	DESCRIPTION	BY

CHECKED BY: SDL  
DRAWN BY: JRP  
DESIGNED BY: JRP  
PROJECT NO: 1503-022

CITY OF FLORENCE  
LANE COUNTY

SIUSLAW ESTUARY TRAIL

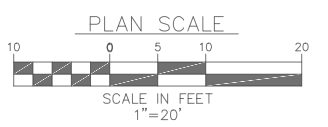
STA 14+00 TO 15+25

Sheet No. **C8**  
Date **JUNE 2024**

DATE: 6/6/24 FILE: Z:\CV\Project\_Archives\1503-Florence-Event Center Trail Improvements\04-Final Design\Drawings\Design Working-Spruce Street Modif.dwg

HWY. 126

NEW PARKING LOT SITE PLAN



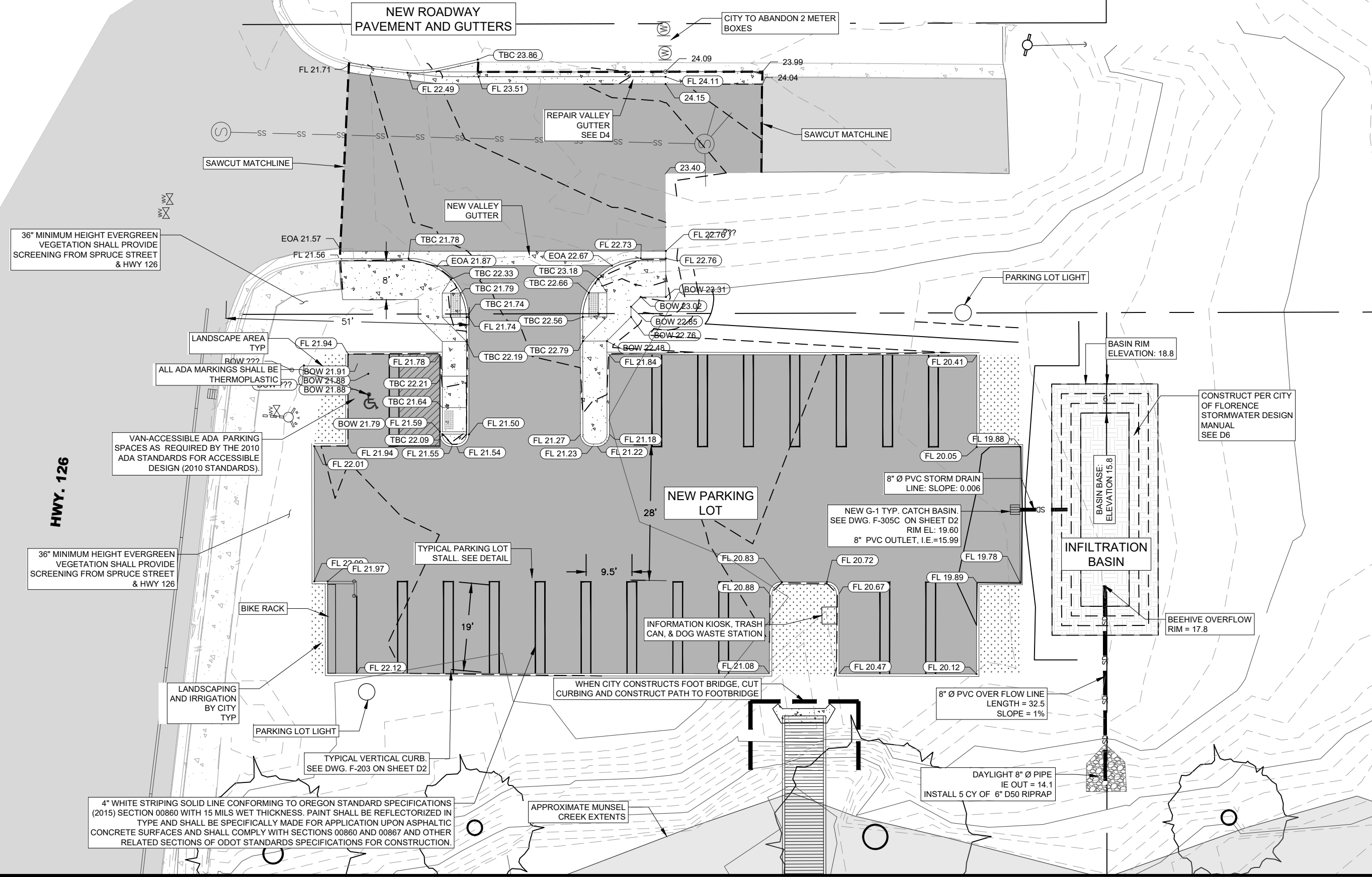
REGISTERED PROFESSIONAL ENGINEER  
89522PE  
*Sean Lloyd*  
OREGON  
SEP 11, 2018  
SEAN DEAN LLOYD  
RENEWS: 12/31/24

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www.civilwest.com

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE  
LANE COUNTY  
SIUSLAW ESTUARY TRAIL  
PARKING LOT IMPROVEMENT AND DEMOLITION PLAN  
C9  
JUNE 2024



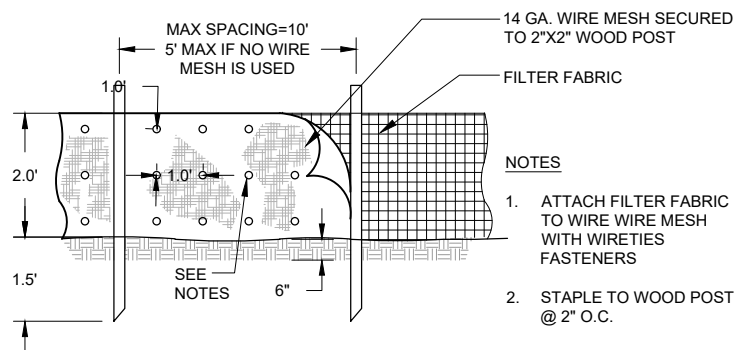


**GENERAL NOTES: EROSION CONTROL**

1. EROSION CONTROL FACILITIES AS SHOWN ARE OF MINIMUM REQUIREMENT AND SHOWN FOR CLARITY ONLY. CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION, CONSTRUCTION AND MAINTENANCE OF THIS OR ANY ADDITIONAL EROSION CONTROL AS MAY BE REQUIRED THROUGHOUT THE COURSE OF THE PROJECT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING DRAINAGE AND EROSION CONTROL FACILITIES AS REQUIRED DURING THE COURSE OF THE PROJECT.
3. EROSION CONTROL STRUCTURES BELOW SODDEN AREAS MAY BE REMOVED ONCE SOD AND FINAL LANDSCAPING IS IN PLACE. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS ESTABLISHED A MATURE COVERING OF HEALTHY VEGETATION.
4. INLET PROTECTION DEVICES SHALL BE INSTALLED IMMEDIATELY UPON INDIVIDUAL INLETS BECOMING FUNCTIONAL FOR NEW AND PRIOR TO START OF CONSTRUCTION ON EXISTING INLETS.
5. MAINTAIN ON THE SITE OR HAVE READILY AVAILABLE SUFFICIENT OIL AND GREASE ABSORBING MATERIALS TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS AND LEAKS.
6. FUGITIVE DUST BLOWING FROM THE SITE SHALL BE CONTROLLED BY SPRAYING WATER AND DUST CONTROL POLYMERS, AS NEEDED, ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS ABSOLUTELY PROHIBITED.
7. NO RUBBISH, TRASH, GARBAGE OR OTHER SUCH MATERIALS SHALL BE DISCHARGED INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
8. IF SOIL STOCKPILING IS EMPLOYED ON THE SITE, FILTER FENCES SHALL BE USED TO HELP CONTAIN THE SEDIMENT TO THE STOCKPILE AREA.
9. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS AFTER FINAL STABILIZATION. FINAL STABILIZATION HAS OCCURRED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN EMPLOYED.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES ( SILT FENCES, STRAW BALES, ETC.) DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT.
11. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT, AND SHOULD BE CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING.
  - A. INLET PROTECTION DEVICES AND BARRIERS SHALL BE FIXED OR REPLACED IF THEY SHOW SIGNS OF CLOGGING.
  - B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, RESEEDED, AND WATERED AS NEEDED.
  - C. FILTER FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD TO ONE-HALF THE HEIGHT OF THE SILT FENCE.
  - D. ANY TEMPORARY PARKING AND STORAGE AREAS SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE TOP DRESSING OF THE TEMPORARY PARKING AREAS AS CONDITIONS DEMAND.
  - E. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT IN THE SEDIMENTATION BASINS SHALL NOT EXCEED THE SEDIMENTATION CLEANOUT LEVEL.

**EROSION + SEDIMENT CONTROL NOTES**

1. PLACE SWALE TYPE SEDIMENT BARRIERS ON GENTLY SLOPING BANK SEGMENTS. WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN "GEOTEXTILE" FABRIC, ARE FILLED WITH GRAVEL LAYERS PACKED TIGHTLY.
3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR THE OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FORM THE TRAVELED WAY IMMEDIATELY.
5. SEDIMENT BARRIERS TO REMAIN IN PLACE AND MAINTAINED BY CONTRACTOR UNTIL ALL DISTURBED SOILS HAVE BEEN STABILIZED.
6. REFER TO LANDSCAPE PLANS FOR FINAL VEGETATIVE COVER.



**1 STAKED SILT FENCE DETAIL (ELEVATION)**  
C10 N.T.S.

**LEGEND:**

SILT FENCE

TRAILHEAD SIGN

POSSIBLE BENCH

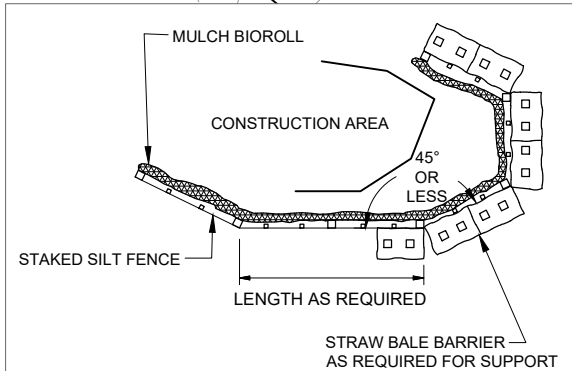
CLOSEST POINT TO MHT

MHT: 6.5'

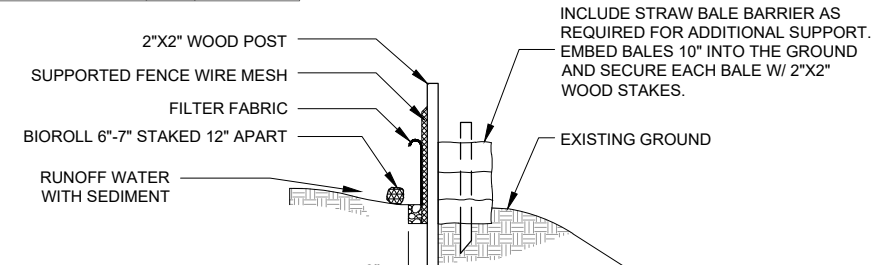
INFORMATION KIOSK, TRASH CAN, & DOG WASTE STATION

PARKING LOT LIGHT

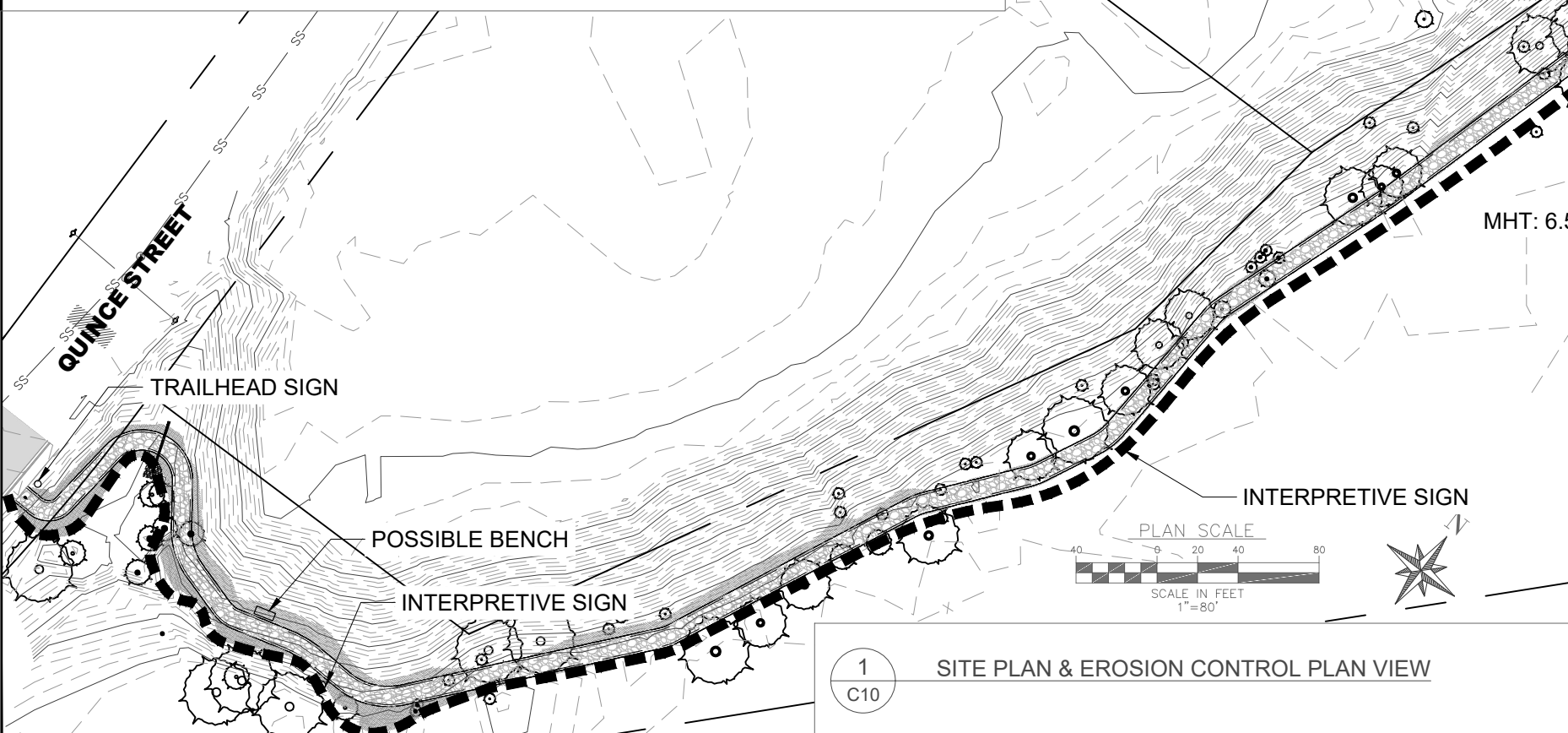
INTERPRETIVE SIGN



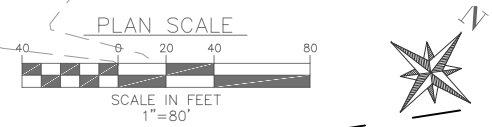
**2 STAKED SILT FENCE DETAIL (PLAN)**  
C10 N.T.S.



**3 STAKED SILT FENCE DETAIL (SECTION)**  
C10 N.T.S.



**1 SITE PLAN & EROSION CONTROL PLAN VIEW**  
C10



REGISTERED PROFESSIONAL ENGINEER  
89522PE  
*Sean Lloyd*  
OREGON  
SEP 11, 2018  
SEAN DEAN LLOYD  
RENEWS: 12/31/24

**Civil West**  
Engineering Services, Inc.  
486 E. ST.  
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REV.	DATE	DESCRIPTION	BY

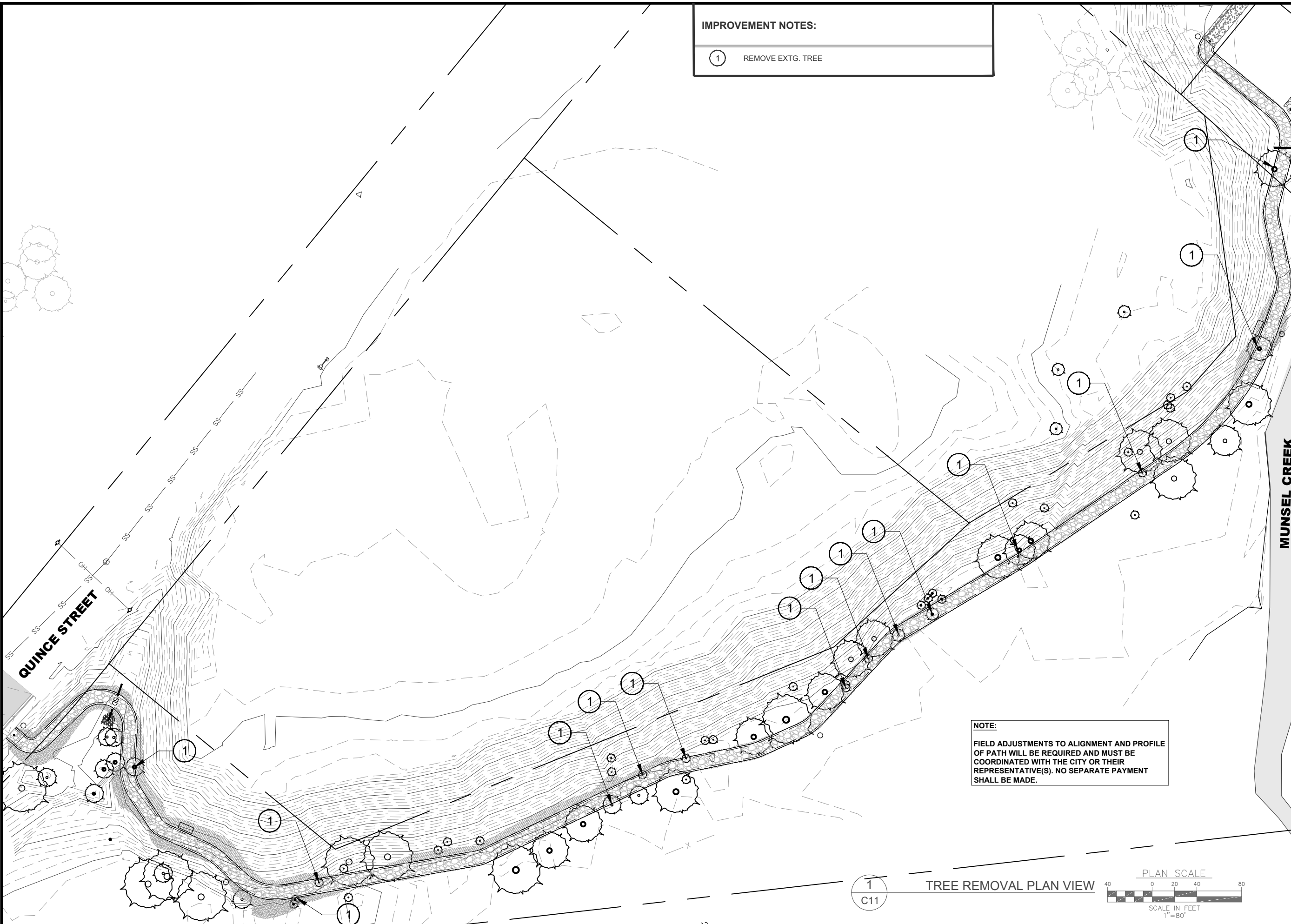
DESIGNED BY: JRP	DRAWN BY: JRP	CHECKED BY: SDL
PROJECT NO: 1503-022		

CITY OF FLORENCE  
LANE COUNTY  
SIUSLAW ESTUARY TRAIL  
OVERALL SITE PLAN + EROSION CONTROL PLAN  
C10  
JUNE 2024

DATE: 6/5/24, FILE: Z:\CW\_Project\_Archives\1503-Florence-Event-Center-Trail-Improvements\04-Final-Design\Drawings\Design-Working-Spruce-Street-Modify.dwg



DATE: 6/5/24 FILE: Z:\CV\Project\_Archives\1503\_Florence\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design\_Working\Spruce Street\_Modify.dwg



**IMPROVEMENT NOTES:**

① REMOVE EXTG. TREE

REGISTERED PROFESSIONAL  
ENGINEER  
89522PE  
*Sean Lloyd*  
OREGON  
SEP 11, 2018  
SEAN DEAN LLOYD

RENEWS: 12/31/24



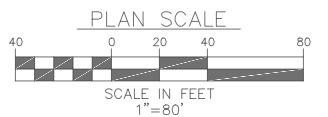
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REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE LANE COUNTY	CITY OF FLORENCE LANE COUNTY
SIUSLAW ESTUARY TRAIL	SIUSLAW ESTUARY TRAIL
TREE REMOVAL PLAN	TREE REMOVAL PLAN
Sheet No: <b>C11</b>	Date: <b>JUNE 2024</b>

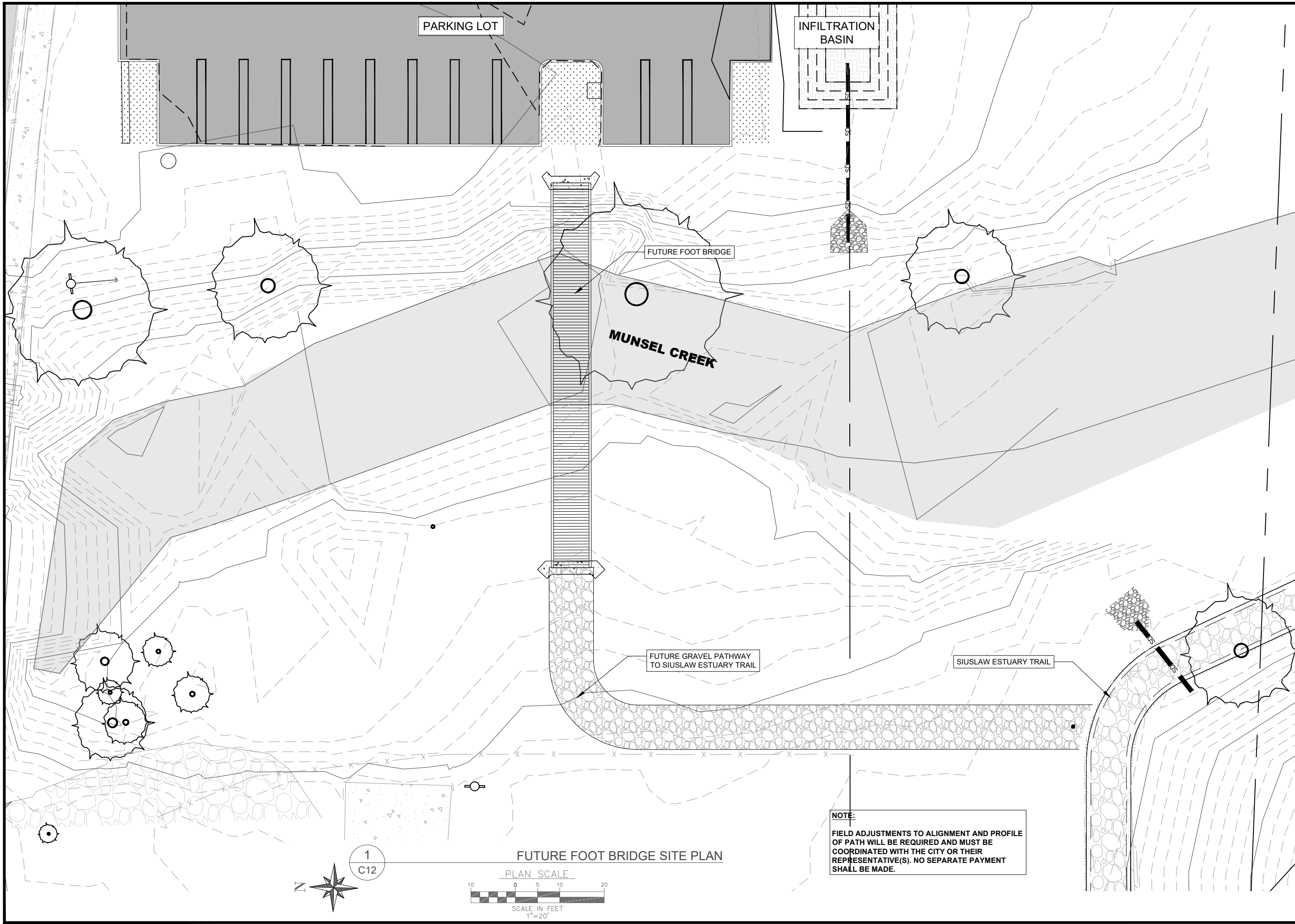
**NOTE:**  
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①  
C11

TREE REMOVAL PLAN VIEW

DATE: 6/5/24 FILE: Z:\CW\_Project\_Archives\1503\_Florence\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design Working-Spruce Street\_Modify.dwg



PARKING LOT

INFILTRATION  
BASIN

FUTURE FOOT BRIDGE

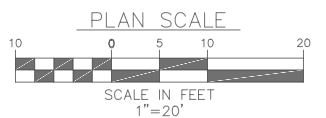
MUNSEL CREEK

FUTURE GRAVEL PATHWAY  
TO SIUSLAW ESTUARY TRAIL

SIUSLAW ESTUARY TRAIL

1  
C12

FUTURE FOOT BRIDGE SITE PLAN



**NOTE:**  
FIELD ADJUSTMENTS TO ALIGNMENT AND PROFILE  
OF PATH WILL BE REQUIRED AND MUST BE  
COORDINATED WITH THE CITY OR THEIR  
REPRESENTATIVE(S). NO SEPARATE PAYMENT  
SHALL BE MADE.

REGISTERED PROFESSIONAL  
ENGINEER  
89522PE  
*Sean Lloyd*  
OREGON  
SEP 11, 2018  
SEAN DEAN LLOYD  
RENEWS: 12/31/24

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DESIGNED BY: JRP  
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CHECKED BY: SDL  
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CITY OF FLORENCE  
LANE COUNTY

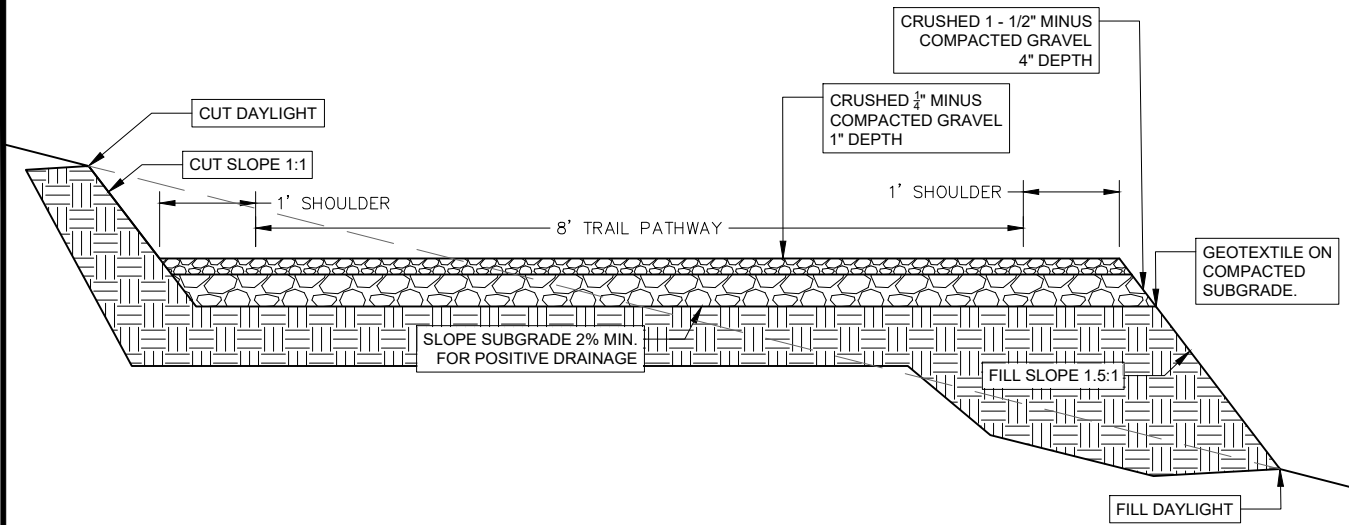
SIUSLAW ESTUARY TRAIL

FUTURE FOOT BRIDGE LOCATION

Date: Sheet No. **C12**  
JUNE 2024

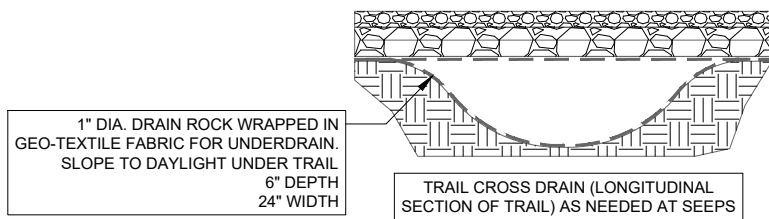


DATE: 6/5/24 FILE: Z:\CV\Project\_Archives\1503\_Florence\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design\_Working\Spruce Street\_Modify.dwg

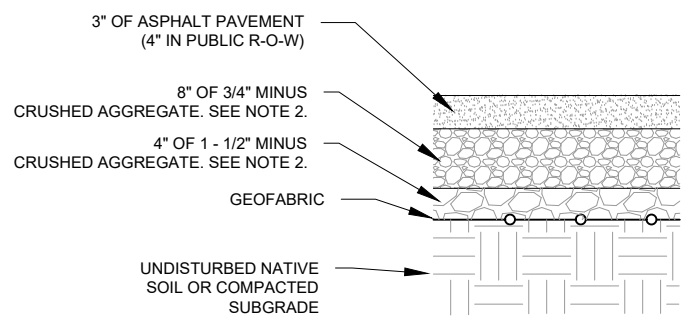


**NOTES:**

- 1 EXCESS CUT TO BE DISTRIBUTED TO SIDES OF TRAIL IF NOT NEEDED FOR FILL TO REVEGETATE NATURALLY, RE-SEED AS NEEDED
- 2 WET AREAS TO DRAIN UNDER GEOTEXTILE IN 6" X 24" TRENCH OF ROUND ROCK ENCLOSED IN FILTER
- 3 PEA GRAVEL IS NOT AN ACCEPTABLE SUBSTITUTE. ITS ROUND SHAPE ROLLS AND WILL NOT COMPACT.



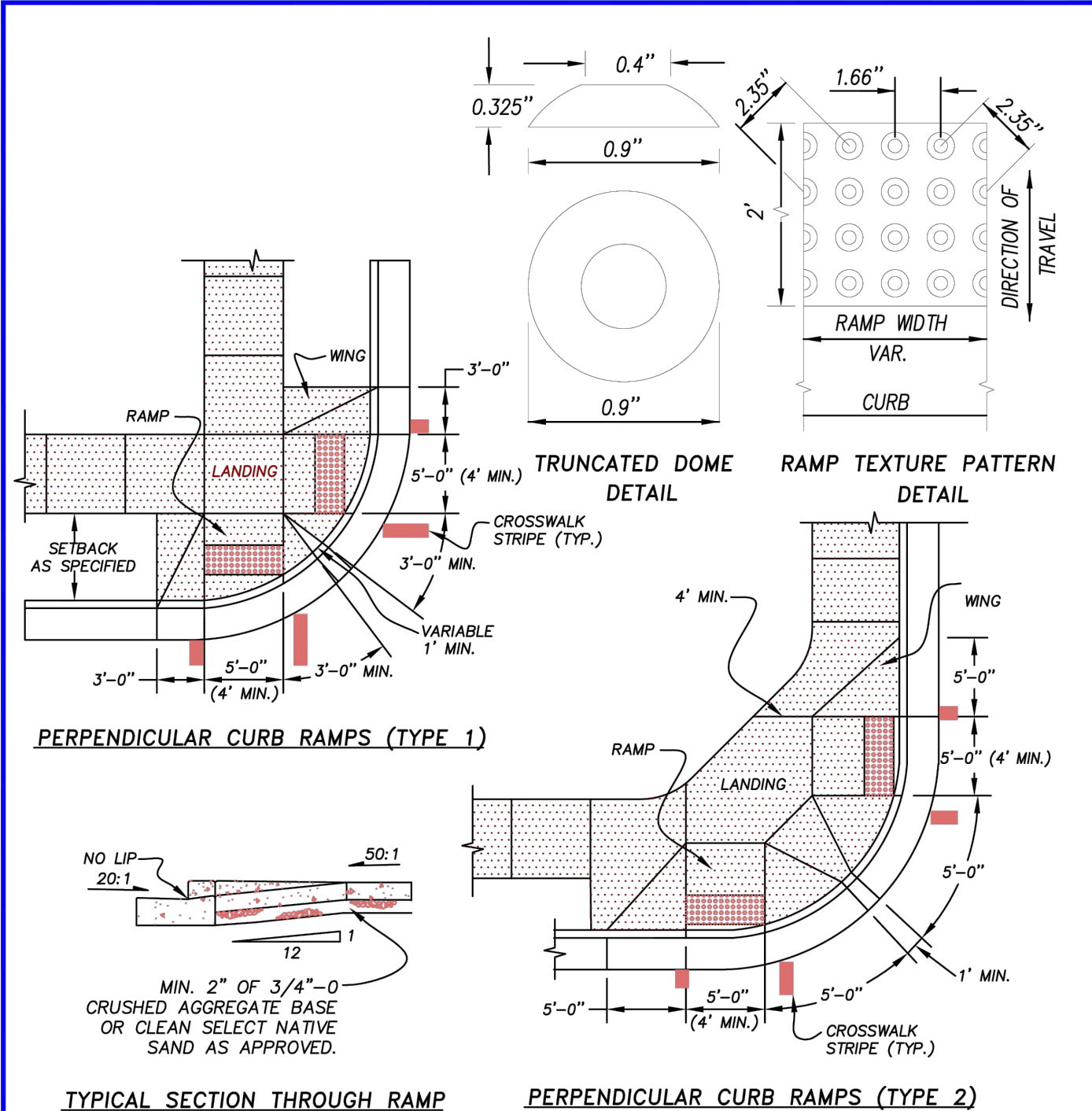
**1**  
D1 TRAIL PATHWAY TYPICAL CROSS SECTION



**NOTES:**

1. CONTRACTOR TO PROVIDE SMOOTH TRANSITION FROM NEW AC PAVEMENT TO EXISTING PAVEMENT AND ADJACENT GRAVEL SURFACE.
2. SALVAGE EXISTING AGGREGATE BASE LAYER FROM EXISTING AC PAVEMENT (AS APPROVED BY CITY OR ENGINEER) AND INSTALL ADDITIONAL AGGREGATE AS NECESSARY TO COMPLETE SPECIFIED DEPTHS.

**2**  
D1 AC TYPICAL CROSS SECTION



**PERPENDICULAR CURB RAMPS (TYPE 1)**

**TYPICAL SECTION THROUGH RAMP**

**PERPENDICULAR CURB RAMPS (TYPE 2)**

**NOTES:**

1. THE "AMERICANS WITH DISABILITIES ACT" (ADA) REQUIRES THAT ACCESS RAMPS TO SIDEWALKS CONFORM TO ALL FEDERAL GUIDELINES. EXCEPTIONS TO THE REQUIREMENTS IN THIS DRAWING MUST BE APPROVED BY THE ENGINEER AND MUST COMPLY WITH A.D.A.
2. NO ABOVE GROUND UTILITIES ARE PERMITTED WITHIN RAMP AREA.
3. LANDINGS SHALL BE PLACED AT THE TOPS OF RAMPS. LANDING SLOPE SHALL NOT EXCEED 50:1 IN ANY DIRECTION. THE SLOPE OF THE SURFACING AT THE BOTTOM OF THE RAMPS SHALL NOT EXCEED 20:1 FOR A DISTANCE OF 2' (SEE TYPICAL SECTION ABOVE).
4. MINIMUM LANDING DIMENSIONS SHALL BE 4' X 4'.
5. RAMP SURFACE SHALL BE TEXTURED WITH RAISED TRUNCATED DOME TEXTURE. TEXTURING SHALL BE DONE WITH AN EXPANDED METAL GRATE STAMPED INTO THE CONCRETE OR O.D.O.T. YELLOW PLASTIC TRUNCATED DOME.
6. CONCRETE STRENGTH SHALL BE 3300 PSI MIN.

**CITY OF FLORENCE  
STANDARD DRAWING**

**SIDEWALK  
ACCESS RAMP**

DATE: MARCH 2007 DRAWING NO: F-206

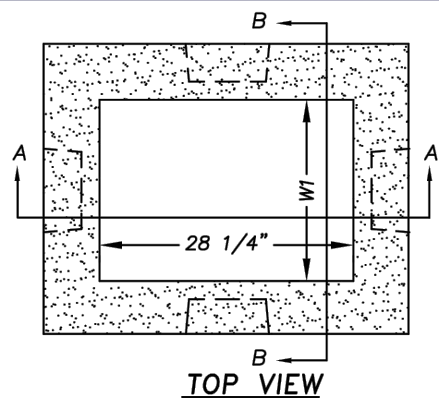


REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP CHECKED BY: SDL  
DRAWN BY: JRP  
PROJECT NO: 1503-022

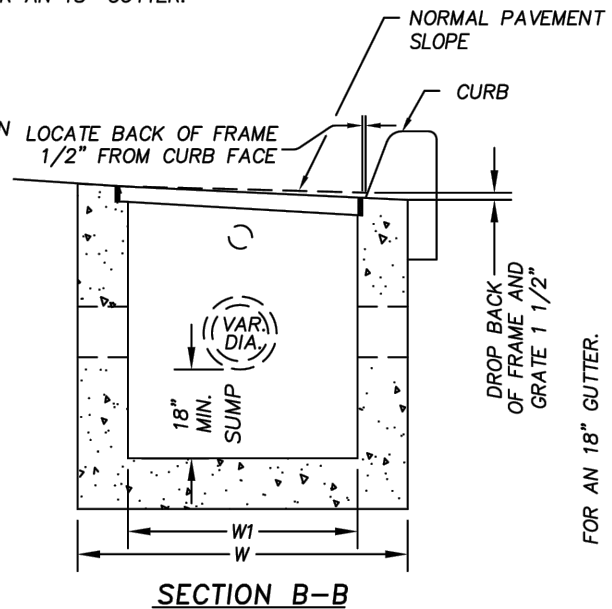
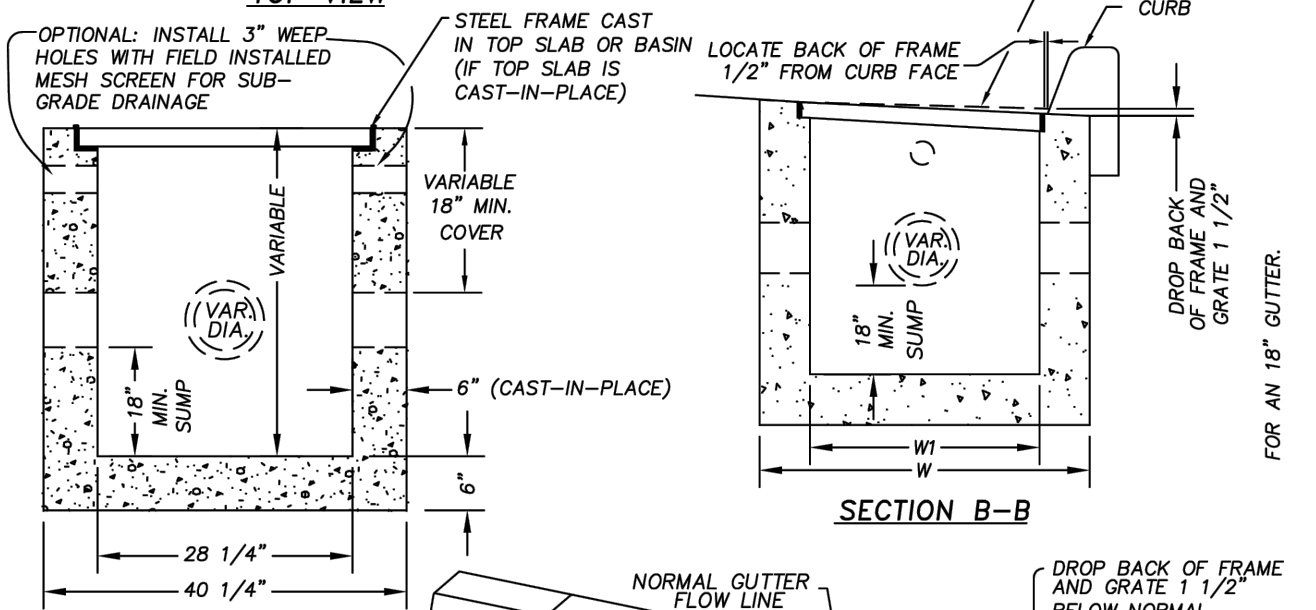
CITY OF FLORENCE LANE COUNTY	SIUSLAW ESTUARY TRAIL	TRAIL CROSS SECTION AND DRIVEWAY DETAIL
Sheet No: D1	Date: JUNE 2024	

DATE: 6/5/24 FILE: Z:\CW\_Project\_Archives\1503-022 Florence - Event Center Trail Improvements\04 Final Design\Drawings\Design Working\Spruce Street Modif.dwg

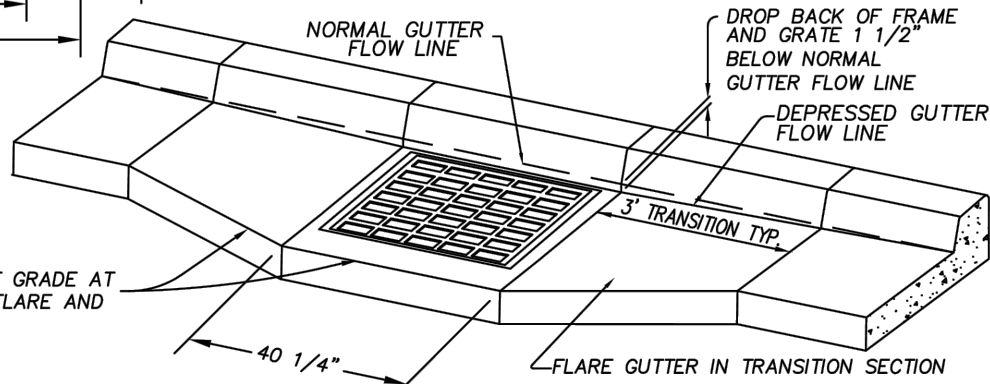


INLET TYPE	W	W <sub>1</sub>	X
G-1	2'-8 7/8"	1'-8 7/8"	10 9/16"
G-2	3'-3 3/8"	2' 3 3/8"	16 9/16"

- NOTES:**
1. CONCRETE STRENGTH SHALL BE 3000 PSI.
  2. PRECAST BASE WALLS SHALL BE A MINIMUM 4" THICK. CAST-IN-PLACE BASE WALLS SHALL BE 6" THICK.
  3. "X" DIMENSION ASSUMES A 24" GUTTER. ADD 6" FOR AN 18" GUTTER.

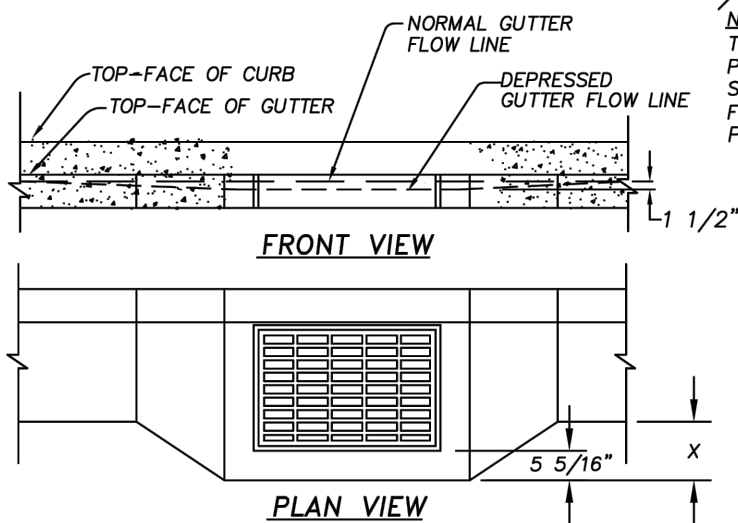


FOR AN 18" GUTTER.



MATCH NORMAL PAVEMENT GRADE AT FRONT EDGE OF GUTTER FLARE AND CATCH BASIN TOP SLAB

**NOTE:** PRECAST TOP SLAB SHOWN WITH GUTTER TRANSITION FLARE IF THE TOP SLAB IS CAST-IN-PLACE, NO FLARE IS REQUIRED IN THE TRANSITION SECTION: MATCH THE TOP FRONT EDGE OF THE FRAME AND THE TOP FRONT EDGE OF THE CAST-IN-PLACE TOP SLAB TO THE NORMAL PAVEMENT GRADE.

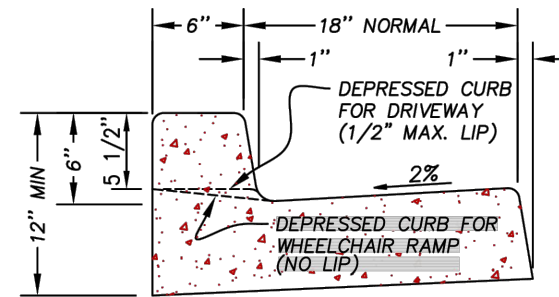


**CITY OF FLORENCE STANDARD DRAWING**

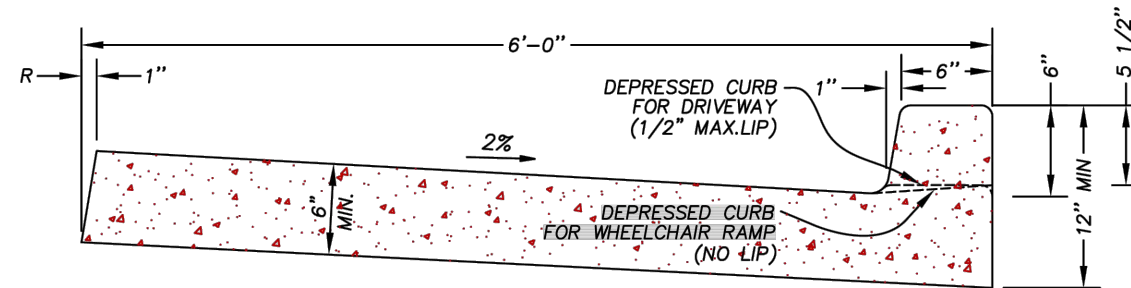
**TYPE G-1, G-2 CATCH BASIN WITH SUMP**

DATE: MARCH 2007 DRAWING NO. F-305c

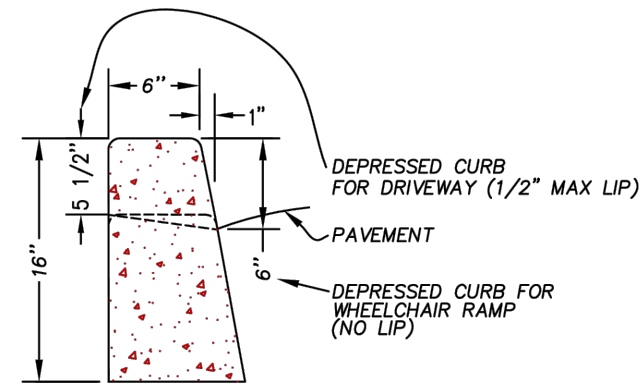
FILENAME: F-305c.DWG



TYPICAL STANDARD CURB & GUTTER



TYPICAL WIDE CURB & GUTTER



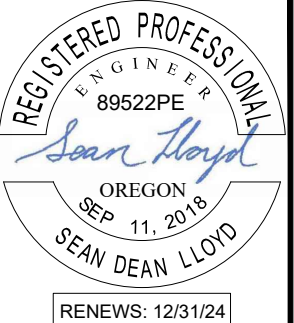
TYPICAL VERTICAL (STRAIGHT) CURB

**CITY OF FLORENCE STANDARD DRAWING**

**CURB AND GUTTER**

DATE: REV-10-25-12 DRAWING NO. F-203

FILENAME: F-203.DWG



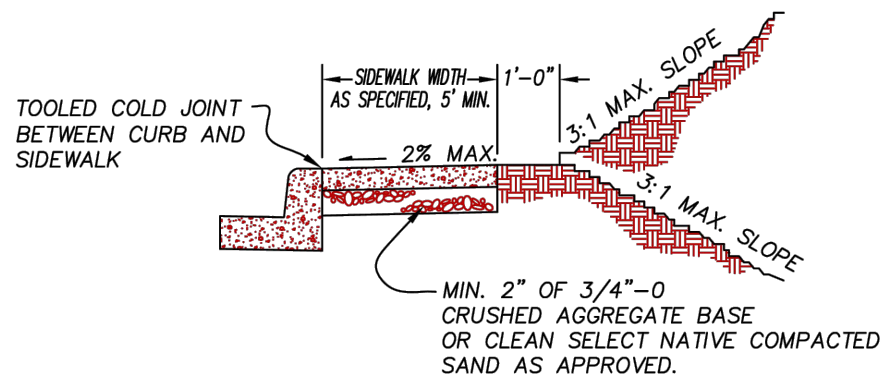
REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP DRAWN BY: JRP CHECKED BY: SDL PROJECT NO: 1503-022

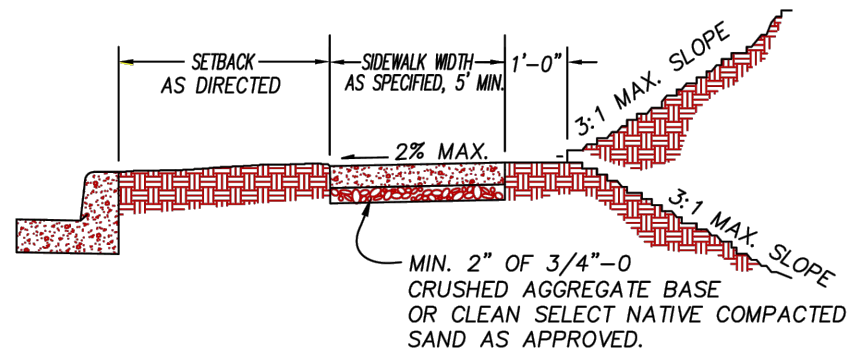
CITY OF FLORENCE  
LANE COUNTY  
SIUSLAW ESTUARY TRAIL  
CATCH BASIN AND CURB DETAILS



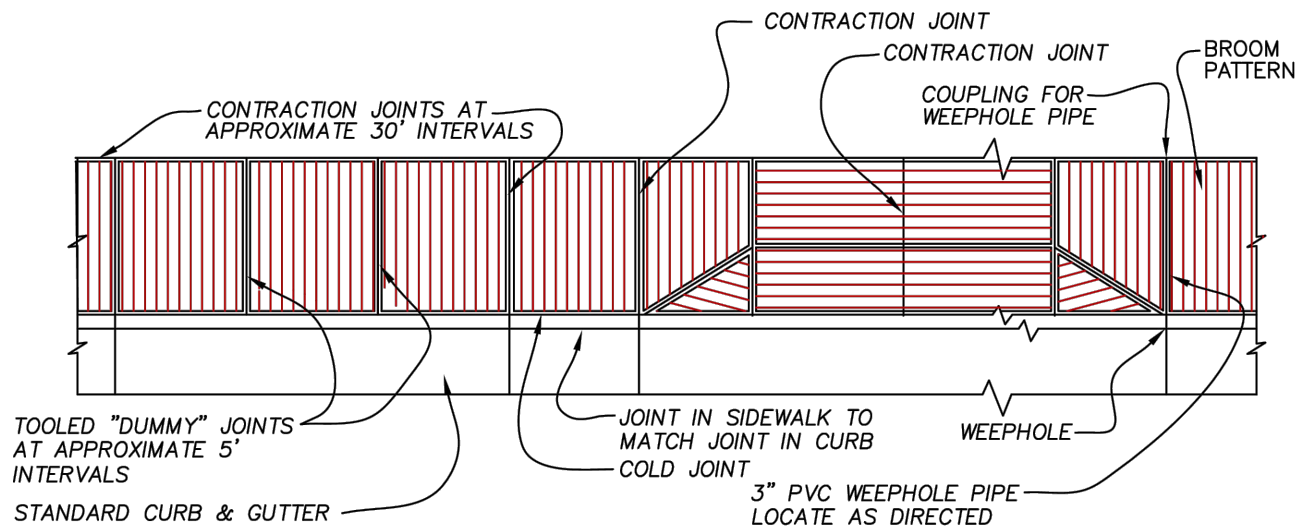
DATE: 6/5/24 FILE: Z:\CV\Project\_Archives\1503-Florence\1503-022-Florence - Event Center Trail Improvements\04 Final Design\Drawings\Design Working-Spruce Street\_Modify.dwg



TYPICAL CURBSIDE CROSS SECTION



TYPICAL SETBACK CROSS SECTION



TYPICAL PLAN VIEW

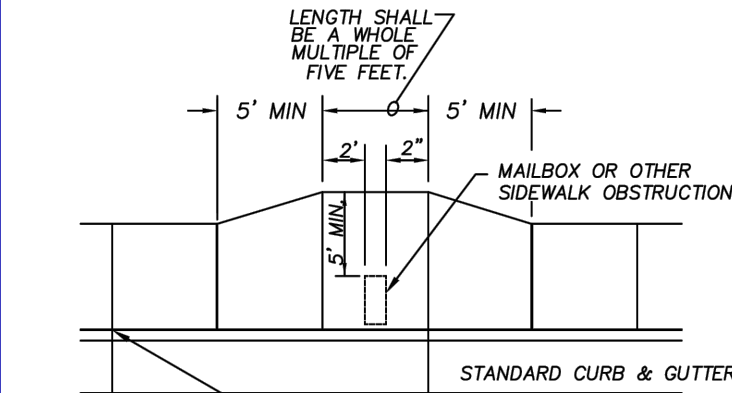
- NOTE:**
- SIDEWALKS 8 FEET AND WIDER SHALL HAVE A LONGITUDINAL CONTRACTION JOINT AT THE MIDPOINT.
  - CONCRETE DEPTH FOR STANDARD SIDEWALKS SHALL BE NOMINAL 4" MIN.; THICKNESS IN DRIVEWAY SHALL MATCH EXISTING DRIVEWAY.
  - CONCRETE STRENGTH SHALL BE 3300 PSI MIN.

**CITY OF FLORENCE  
STANDARD DRAWING**

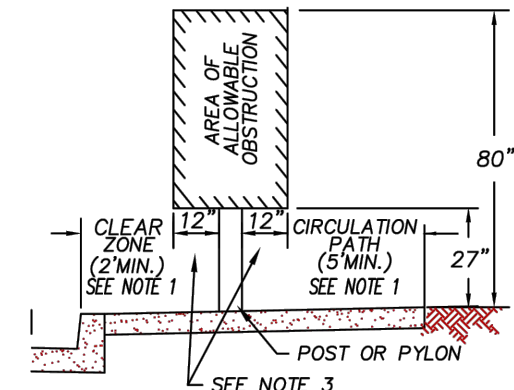
SIDEWALK

DATE: REV-10-25-12 DRAWING NO. F-205

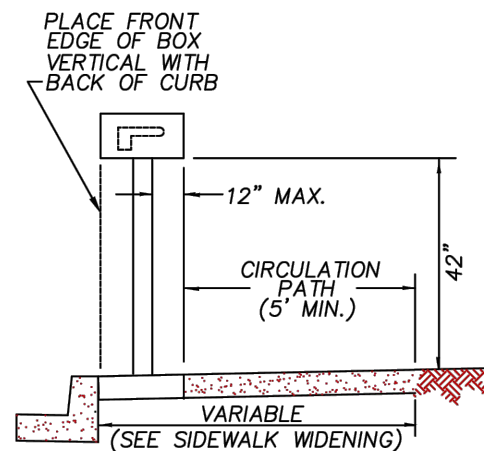
FILENAME: F-205.DWG



REQUIRED SIDEWALK WIDENING AROUND OBSTRUCTIONS



POST MOUNTED OBSTRUCTION WITHIN SIDEWALK

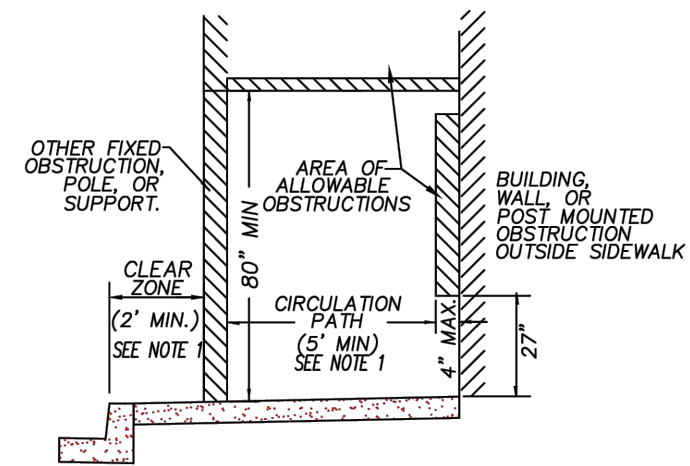


TYPICAL MAILBOX INSTALLATION

**NOTE:**

- CLEAR ZONE AND THE CIRCULATION PATH MAY BE COMBINED PROVIDING A 5 FOOT MINIMUM SIDEWALK WIDTH IS MAINTAINED.
- DEFLECT SIDEWALK AROUND AREA OF OBSTRUCTION WHEN OVERHANGS EXCEED ALLOWABLE LIMITS.
- WHEN OBSTRUCTIONS ARE LOCATED WITHIN THE SIDEWALK AREA THE DIMENSION APPLIES IN ALL DIRECTIONS.
- INSTALL FULL DEPTH EXPANSION JOINT AROUND ALL OBSTRUCTIONS PENETRATING SIDEWALK SURFACE.
- ON CUL-DE-SACS, PLACE FRONT EDGE OF MAILBOX 6 INCHES BEHIND BACK OF CURB.
- EXCEPTIONS TO THE REQUIREMENTS IN THIS DRAWING MUST BE APPROVED BY THE ENGINEER AND MUST COMPLY WITH 'AMERICANS WITH DISABILITY ACT.'
- CONCRETE STRENGTH SHALL BE 3300 PSI.
- MAIL BOX SHALL BE LOCATED 25' FROM CURVE RETURN OF INTERSECTION.

FILENAME: F-205a.DWG

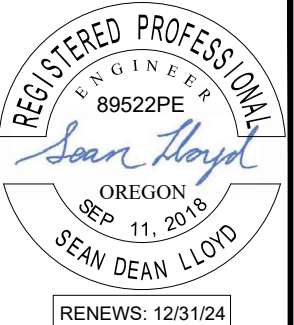


PROTRUDING OBJECTS AND OTHER OBSTRUCTIONS

**CITY OF FLORENCE  
STANDARD DRAWING**

SIDEWALK DETAILS:  
OBSTRUCTIONS  
AND  
PROTRUDING OBJECTS

DATE: REV-10-25-12 DRAWING NO. F-205a



REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP  
DRAWN BY: JRP  
CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE LANE COUNTY	SIUSLAW ESTUARY TRAIL	SIDEWALK DETAILS

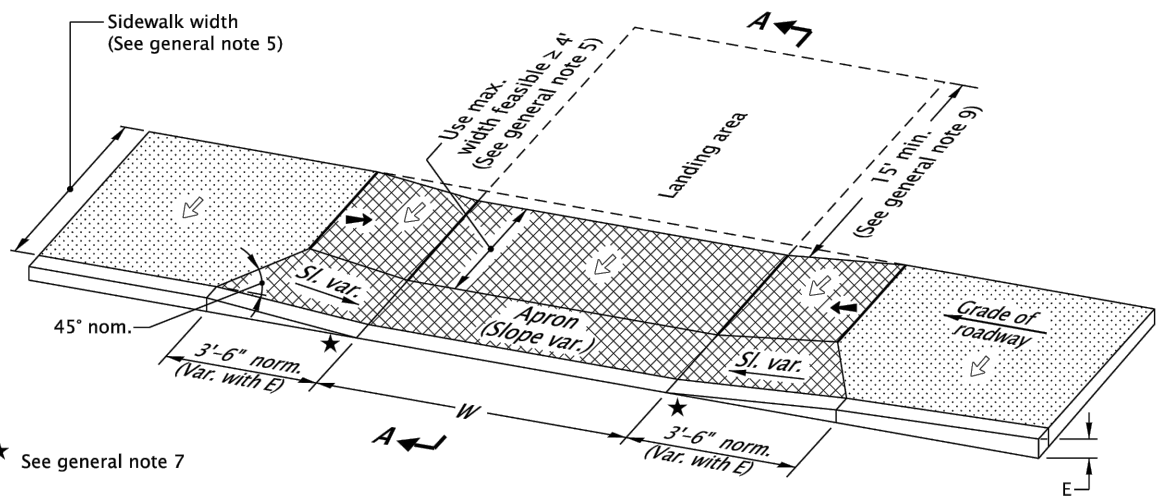
Sheet No. D3  
Date: JUNE 2024



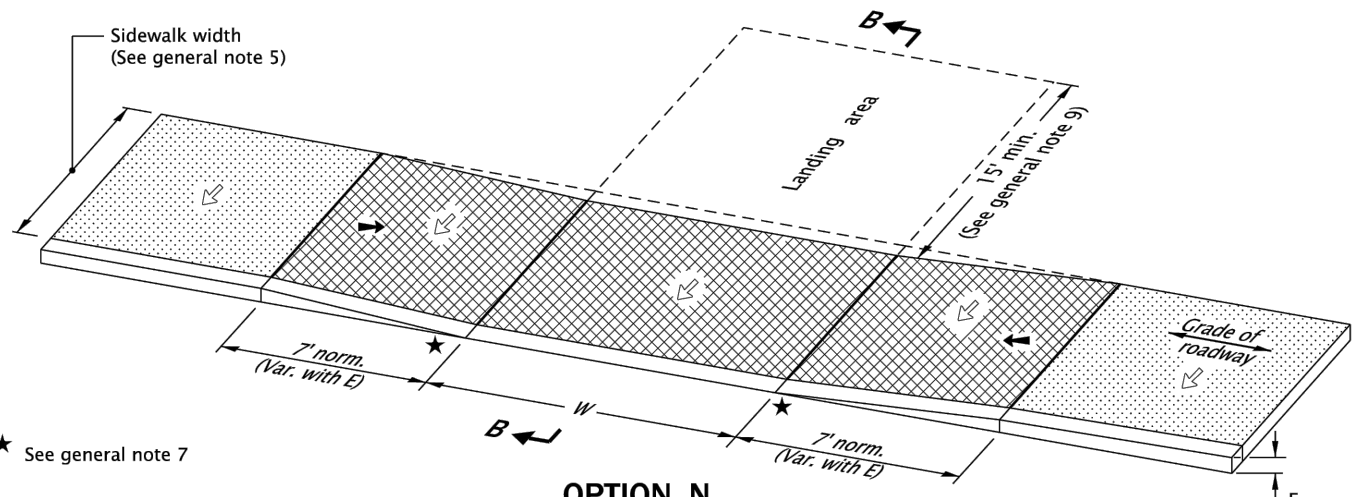




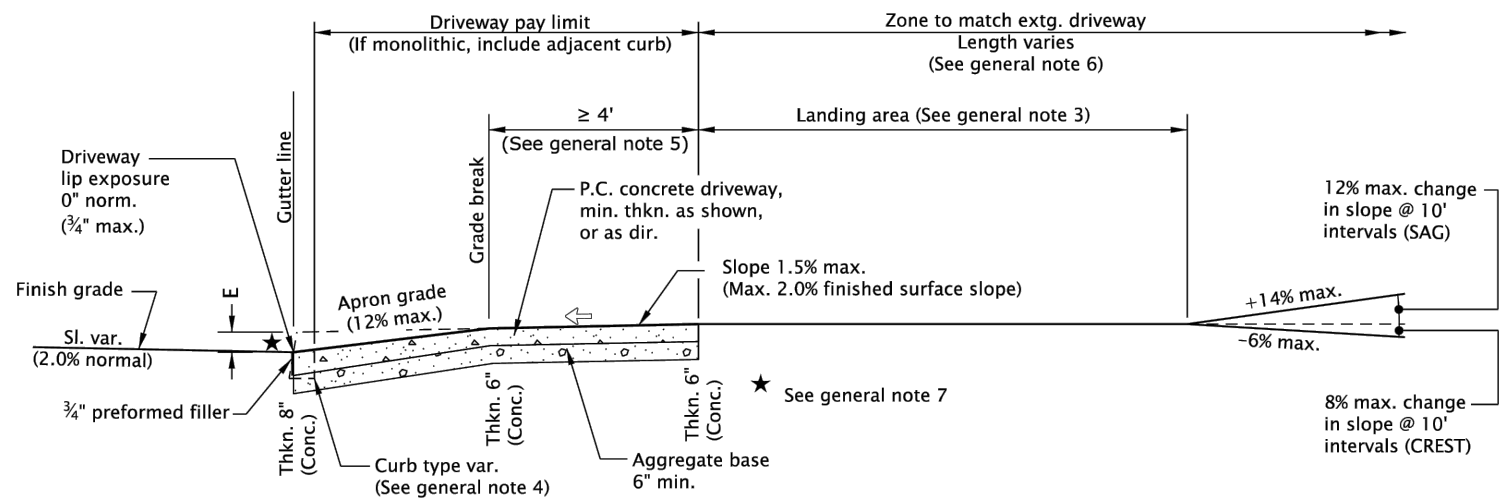
RENEWS: 12/31/24



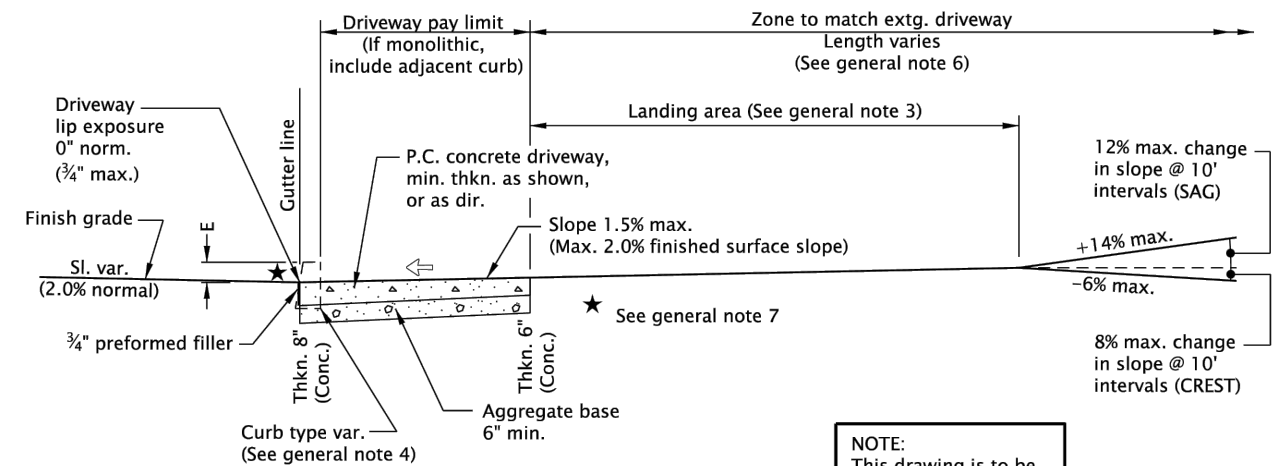
**OPTION M  
PARTIALLY LOWERED SIDEWALK**



**OPTION N  
FULLY LOWERED SIDEWALK**



**SECTION A-A**



**SECTION B-B**

**NOTE:**  
This drawing is to be used by local agencies to assist them in the design of driveways on their facilities.

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

1. Details are based on applicable ODOT Standards.
2. Only use details allowed by jurisdiction.
3. The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, curb exposure, driveway lip exposure, landing area length and width. See project plans for details not shown.
4. Curb, gutter, and sidewalk types varies, see plans. See Std. Dwg. RD700 & RD701 for curb details. See Std. Dwg. RD720 for sidewalk details. See Std. Dwg. RD722 for joint details.
5. A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
6. Where existing driveway is in good condition, and meets slope requirements, construct only as much landing area as required for satisfactory connection with new work.
7. Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
8. Construct a full depth expansion joints with 1#2" (ln) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
9. 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
10. Monolithic curb & sidewalk shall retain thickened edge through lowered profile, to accommodate driveway use. See Std. Dwg. RD720 for details.
11. Any dimensions except those of general note 5 may be amended by local agencies for their use.

**LEGEND:**

- Sidewalk
- Driveway pay limit (If monolithic, include adjacent curb) (See project plans for details not shown)
- Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope 7.5% max. (Max. 8.3% finished surface slope)
- W** Width of driveway
- E** Curb exposure

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.*

All materials shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS  
CURB LINE SIDEWALK DRIVEWAYS  
OR ALLEYS (OPTIONS M & N)  
LOCAL JURISDICTIONS**

2024

DATE	REVISION	DESCRIPTION

CALC. BOOK NO. N/A SDR DATE: 20-JUL-2020 **RD750**

Effective Date: December 1, 2023 – May 31, 2024

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP CHECKED BY: SDL  
DRAWN BY: JRP  
PROJECT NO.: 1503-022

CITY OF FLORENCE  
LANE COUNTY

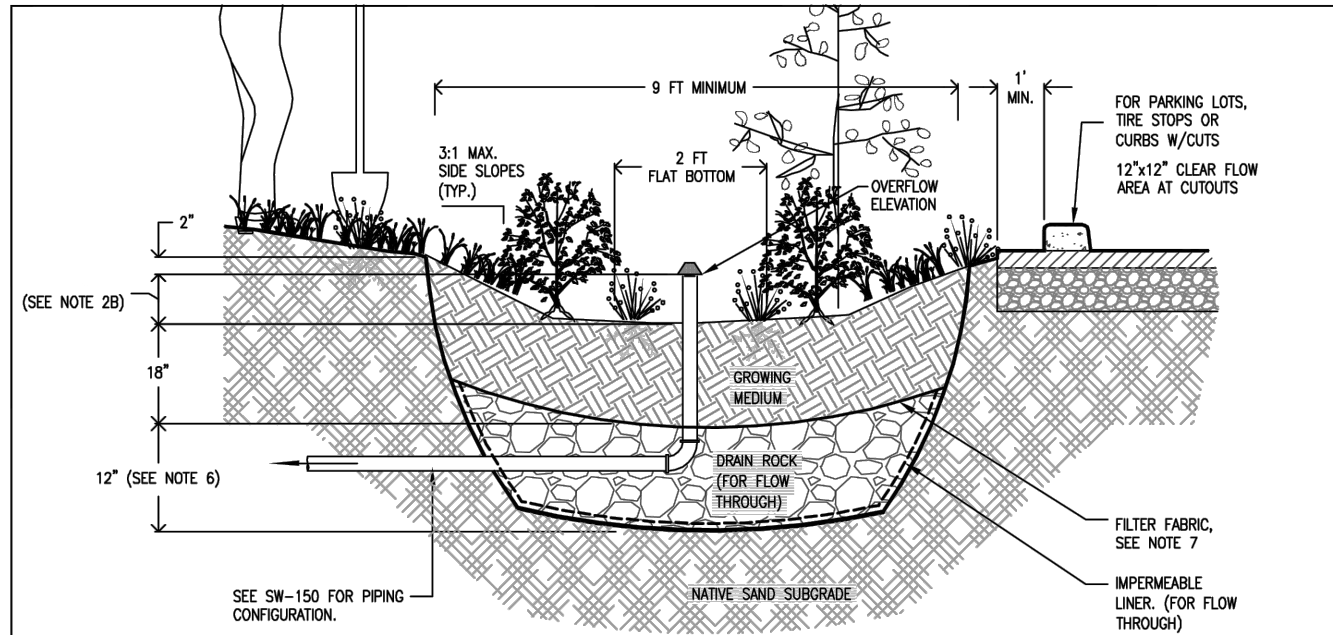
SIUSLAW ESTUARY TRAIL

DRIVEWAY DETAIL

Sheet No. **D5**  
Date **JUNE 2024**

DATE: 6/5/24, FILE: Z:\CW\_Project\_Archives\1503\_Florence\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design Working-Spacus Street\_Modify.dwg





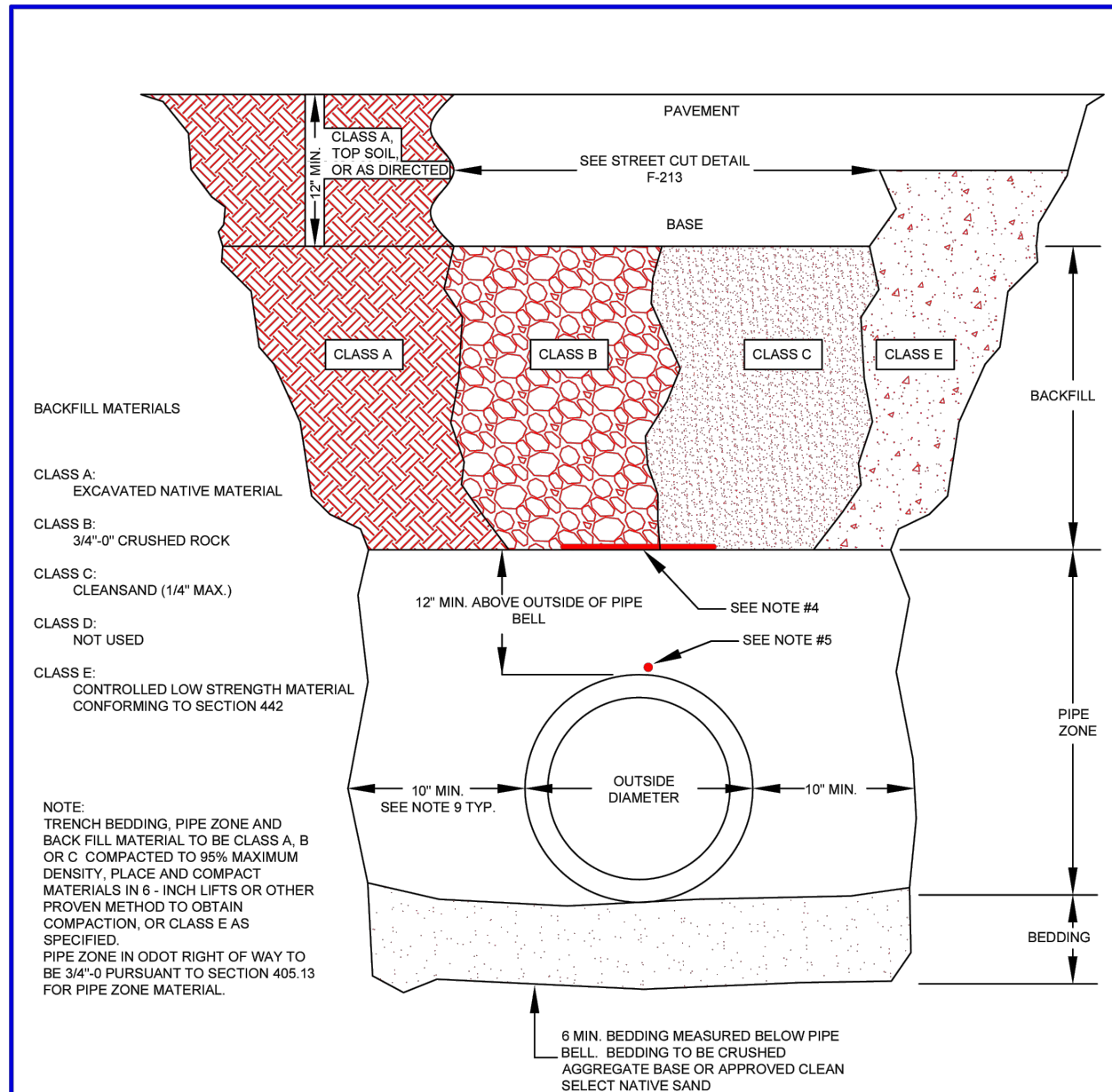
- Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
- Dimensions:
  - Width of basin: 9' minimum.
  - Depth of basin (from top of growing medium to overflow elevation); Simplified: 12", Presumptive: 9"-18". INCREASED TO 24"
  - Flat bottom width: 2' min.
  - Side slopes of basin: 3:1 maximum.
- Setbacks (from midpoint of facility):
  - Infiltration basins must be 10' from foundations and 5' from property lines.
  - Flow-through swales must be lined with connection to approved discharge point according to SWDM Section 2.1.
- Overflow:
  - Overflow required for Simplified Approach.
  - Inlet elevation must allow for 2" of freeboard, minimum.
  - Protect from debris and sediment with strainer or grate.
- Piping: shall be ABS Sch.40, cast iron, or PVC Sch.40. 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping must have 1% grade and follow the Uniform Plumbing Code.
- Drain rock:
  - None required for infiltration basin
  - Size for flow-through basin: 3/4" washed
- Separation between drain rock and growing medium: Use filter fabric (see SWDM Exhibit 2-5).
- Growing medium:
  - 18" minimum
  - See Appendix B for specification.
- Vegetation: Follow landscape plans otherwise refer to plant list in SWDM Appendix G. Minimum container size is 1 gallon. # of plantings per 100sf of facility area):
  - Zone A (wet): 115 herbaceous plants OR 100 herbaceous plants and 4 shrubs
  - Zone B (moderate to dry): 1 tree AND 3 large shrubs AND 4 medium to small shrubs.

The delineation between Zone A and B shall be either at the outlet elevation or the check dam elevation, whichever is lowest.
- Install washed pea gravel or river rock to transition from inlets and splash pad to growing medium.
- Inspections: Call City of Florence Public Works (541) 997-4106 to schedule appropriate inspections.

- DRAWING NOT TO SCALE -

STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS

	<b>CITY OF FLORENCE</b> PUBLIC WORKS DEPARTMENT 989 Spruce Street Florence, OR 97439 Phone: 541-997-4106	- Simplified / Presumptive Design Approach -	NUMBER
	DATE: 11-30-10	Rain Garden	SW-140



NOTES:

- SURFACING OF PAVED AREAS SHALL COMPLY WITH STREET CUT STANDARD DRAWING F-213.
- CENTER PIPE LINE IN TRENCH.
- PLACE FULL LENGTH OF PVC PIPE ON FIRM, UNIFORM, COMPACTED SUBGRADE AND EXCAVATE FOR PIPE BELLS.
- PLACE DETECTION TAPE ABOVE PIPE BETWEEN SUBGRADE AND BASE.
- PLACE TRACER WIRE ON TOP OF PIPE AND HOLD IN PLACE WITH DUCT TAPE AT 10' INTERVALS OR WRAP WIRE AROUND PIPE. DETECTABLE MARKING WIRE SHALL BE NO 12 AWG, MINIMUM, SOLID COPPER WITH COLORED POLYETHYLENE INSULATION - BLUE FOR WATER AND GREEN FOR SEWER (TYP.).
- SUBMIT DETECTION WIRE CONTINUITY AND ISOLATION TESTS, PRESSURE TESTS, AND BACTERIOLOGICAL TESTS TO ENGINEER. SUBMIT TESTS PRIOR TO SURFACE RESTORATION WORK WHEN POSSIBLE.
- EXCEPT AS NOTED ALL WORK TO CONFORM TO OREGON 2008 STANDARD SPECIFICATIONS.
- IN HIGH GROUND WATER AREAS OR AS REQUIRED, PROVIDE 3/4"-0 CRUSHED ROCK TO THE DEPTH NEEDED TO STABILIZE THE PIPE BEDDING SO AS TO PROVIDE A FIRM UNYIELDING SUBGRADE SUITABLE FOR LAYING PIPE.
- SEE ODOT DRAWING RD300 TABLE A FOR WORK IN HIGHWAY RIGHT OF WAY.

**CITY OF FLORENCE  
STANDARD DRAWING**

**UTILITY  
TRENCH**

REV: 03-04-13

DATE: 12-22-11      DRAWING NO. F-301



**Civil West**  
Engineering Services, Inc.

541-266-8601  
www.civilwest.com

486 E. ST.  
COOS BAY, OR 97420

REV.	DATE	DESCRIPTION	BY
DESIGNED BY:	JRP	DRAWN BY:	JRP
CHECKED BY:	SDL	PROJECT NO.:	1503-022

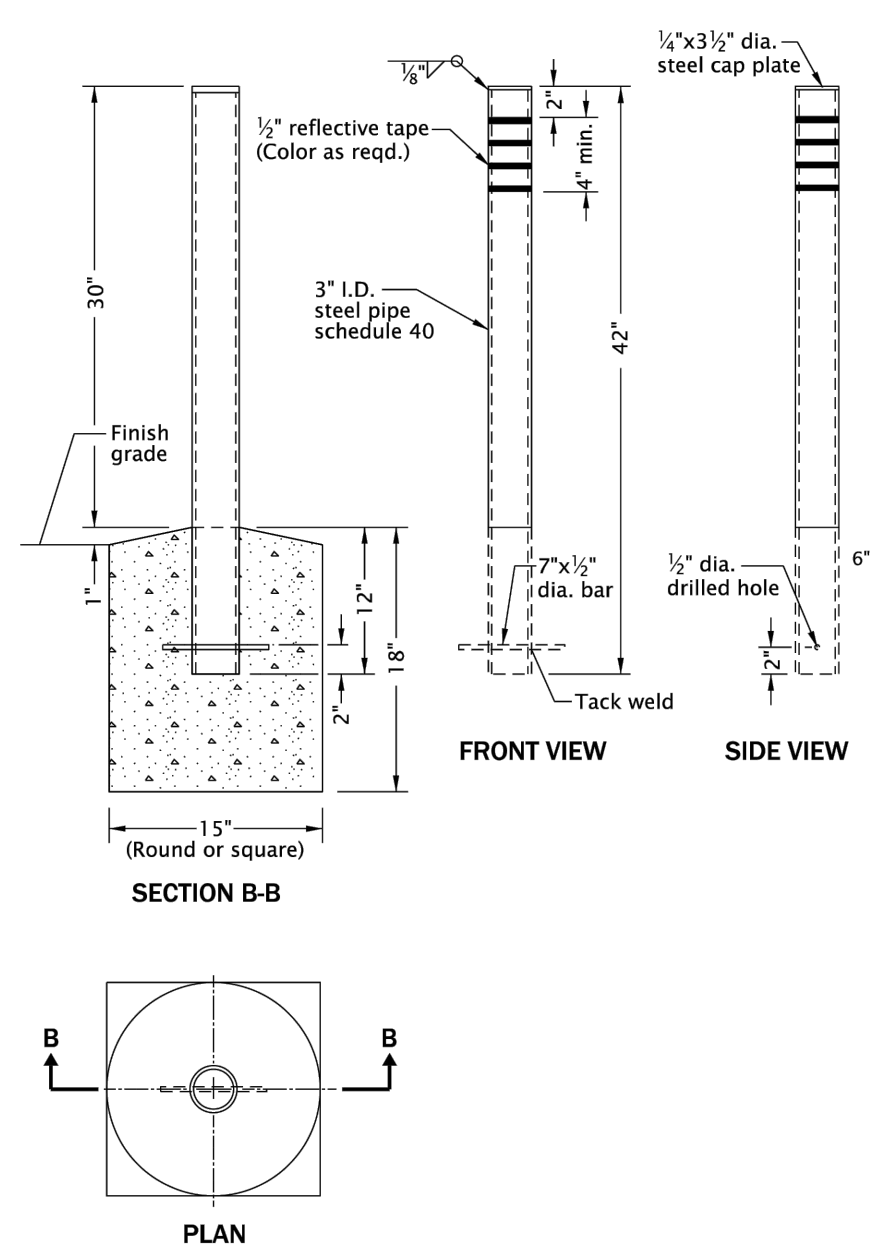
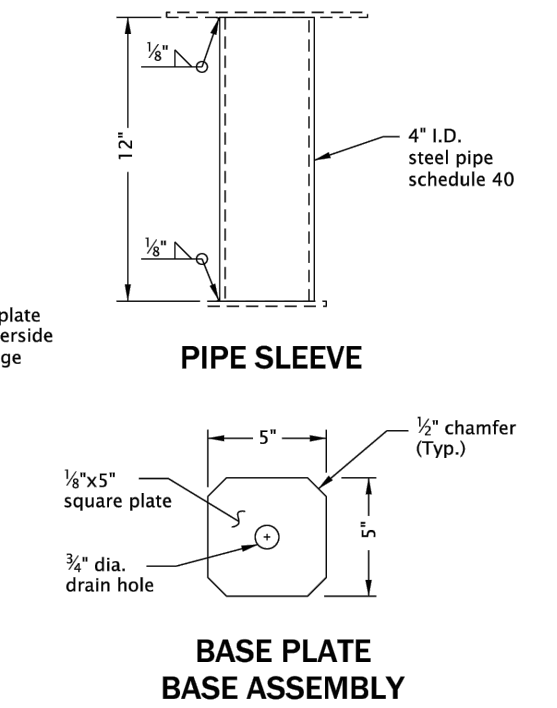
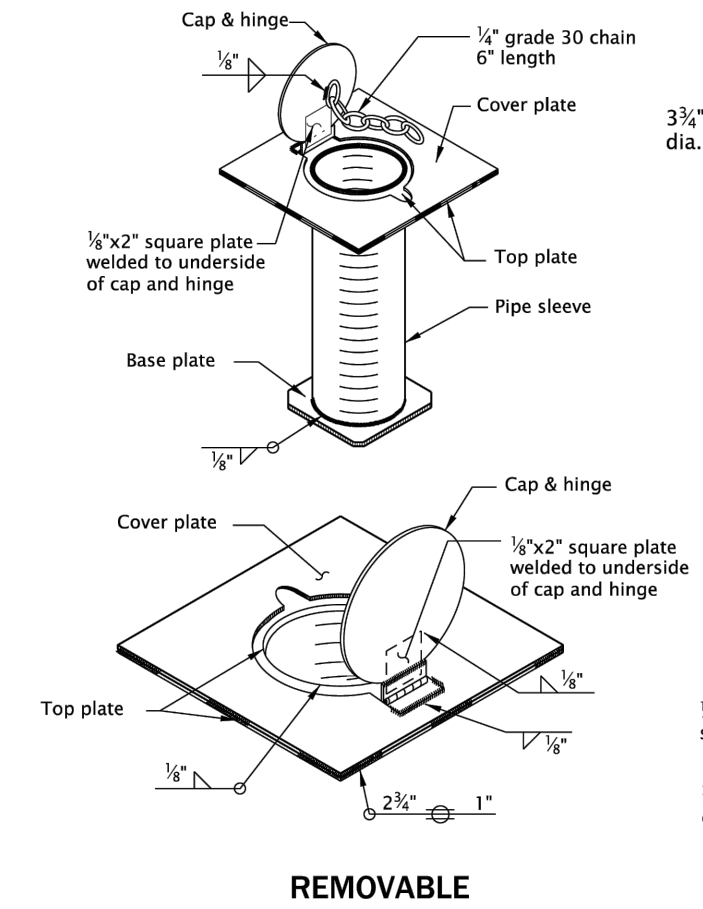
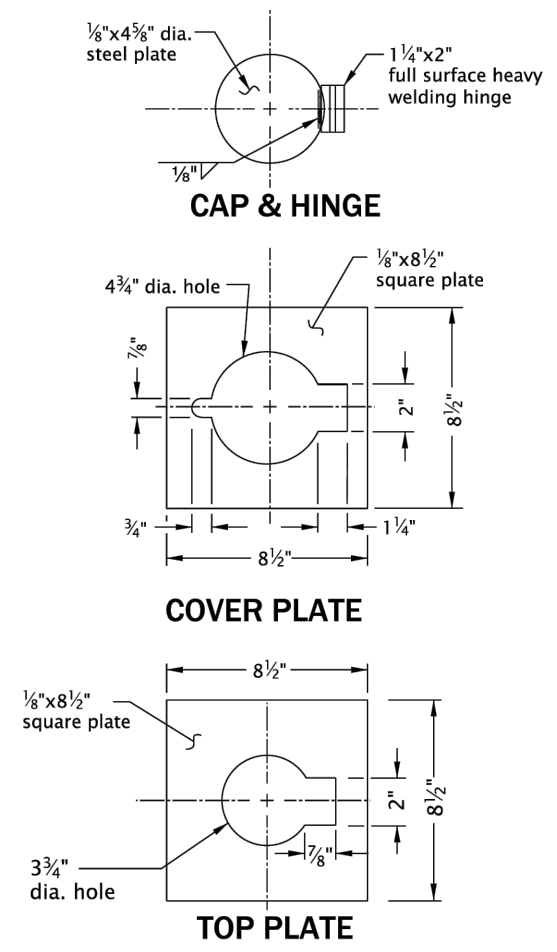
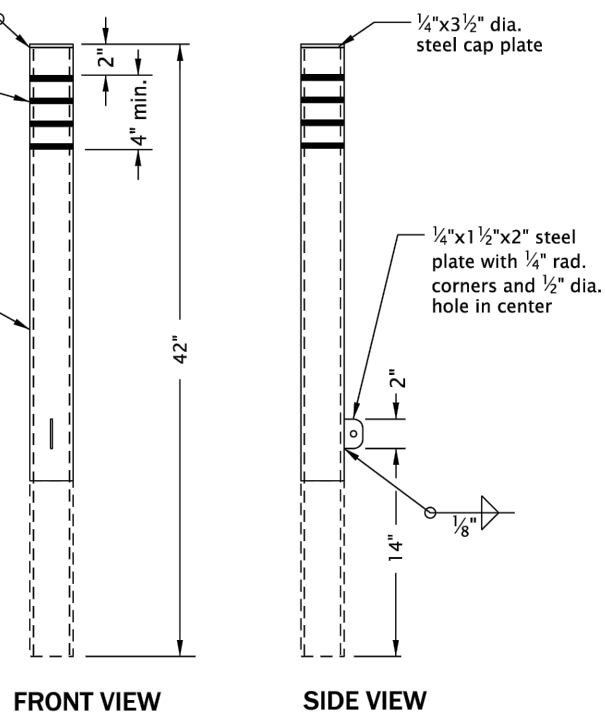
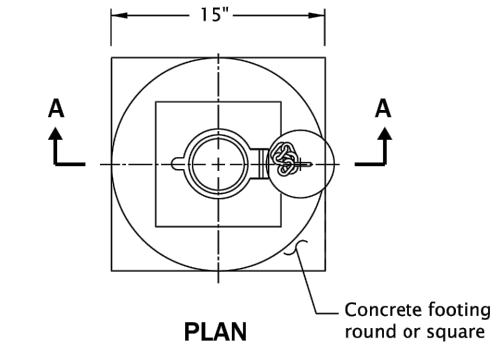
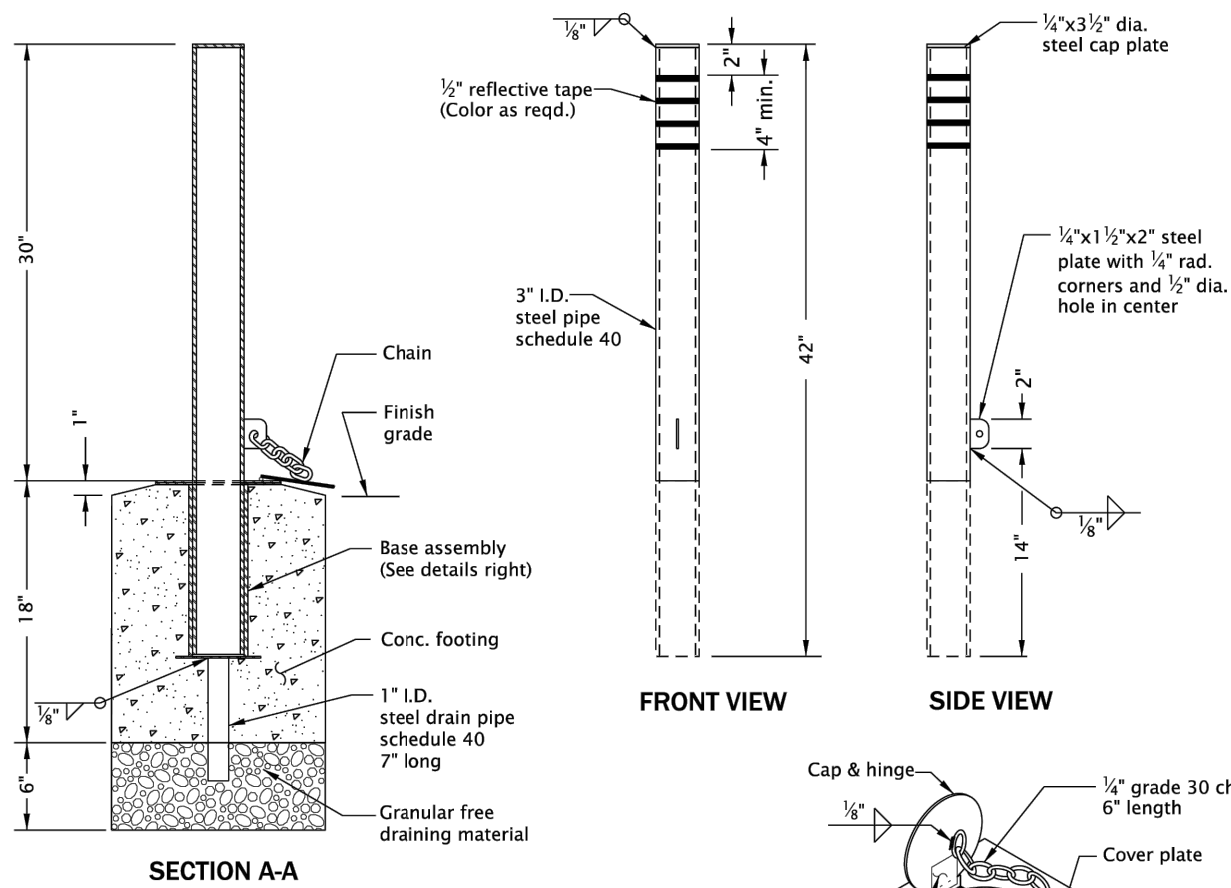
CITY OF FLORENCE  
LANE COUNTY

SIUSLAW ESTUARY TRAIL

INFILTRATION BASIN + TRENCH  
DETAILS

DATE: 6/5/24, FILE: Z:\CW\Project\_Archives\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design Working\Spruce Street\_Modify.dwg

DATE: 6/5/24, FILE: Z:\CV\Project\_Archives\1503-022\_Florence - Event Center Trail Improvements\04\_Final Design\Drawings\Design\_Working\Spruce Street\_Modify.dwg



- GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**
1. Grind all edges smooth.
  2. Prime and paint bollard safety yellow after fabrication.
  3. Hot-dip galvanize base assembly after fabrication.
  4. All concrete shall be commercial grade concrete.
  5. Orient lock assembly parallel with pedestrian traffic.
  6. Provide lock, if required.
  7. See project plans for details not shown.

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.*

All materials shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS**

**BOLLARDS**

2024

DATE	REVISION	DESCRIPTION

CALC. BOOK NO. N/A SDR DATE: 25-JUL-2017 **RD130**

Effective Date: December 1, 2023 – May 31, 2024

REGISTERED PROFESSIONAL  
ENGINEER  
89522PE  
*Sean Lloyd*  
OREGON  
SEP 11, 2018  
SEAN DEAN LLOYD  
RENEWS: 12/31/24

**Civil West**  
Engineering Services, Inc.  
486 E. ST.  
COOS BAY, OR 97420  
541-266-8601  
www.civilwest.com

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: JRP DRAWN BY: JRP CHECKED BY: SDL  
PROJECT NO: 1503-022

CITY OF FLORENCE  
LANE COUNTY  
SIUSLAW ESTUARY TRAIL  
CONCRETE BOLLARD DETAIL

**D7**  
JUNE 2024