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JACKSON COUNTY
SUPPLEMENTAL
STANDARD SPECIFICATIONS

FOREWORD

The Standard Specifications which are applicable to the work on this project are the 2018 edition of the Oregon Standard Specifications for Construction (“Standard Specifications”), as modified by these Jackson County Supplemental Standard Specifications (“Supplemental Standard Specifications”).

All number references in the Supplemental Standard Specifications refer to the section and subsection of the Standard Specifications. These Supplemental Standard Specifications modify the Standard Specifications. The Special Provisions (if any) are the job-specific modifications to the Standard Specifications and Supplemental Standard Specifications. If there is a conflict and/or inconsistency between the documents comprising this Contract, the Standard General Conditions for Public Improvement Contracts Section A.3.1 shall control the order of precedence.

PART 00100 - GENERAL CONDITIONS

Section 00110 - Organization, Conventions, Abbreviations and Definitions

Comply with Section 00110 of the Standard Specifications supplemented and/or modified as follows:

00110.05(a) Grammar

Add the following bullet to the bullet list:

- For the purposes of this Contract, the terms “sidewalk ramp” and “sidewalk ramps” shall respectively refer to and shall be read to mean “curb ramp” and curb ramps”.

Replace the bullet that begins “Certain Subsections labeled “Payment” contain...” with the following bullet:

- Certain Subsections labeled “Payment” contain statements to the effect that the accepted quantities “will be paid at the Contract unit price, per unit of measurement, for the following items” (followed by a list of items). In such cases, the Agency will pay for only those Pay Items listed in the Schedule of Items.

00110.10 Abbreviations

Add the following abbreviation to the abbreviation list:

MWC – Medford Water Commission

00110.20 Definitions

Replace the sentence that begins “**Bid Booklet** – The version that can be...” with the following sentence:

Bid Booklet – The bound or electronic version that contains the information outlined in 00120.10.

Add the following definitions to the definition list:

Business Day - Monday through Friday, except for legal holidays.

Productive Work - Contractor actively pursuing Pay Item work or clean up. The process of flagging is not considered productive work.

Work Day - Any day in which work is allowed and performed. The work day begins at the time productive work begins, and ends when productive work ends.

Section 00120 - Bidding Requirements and Procedures

Comply with Section 00120 of the Standard Specifications supplemented and/or modified as follows:

00120.00 Prequalification of Bidders

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

Requirements for Prequalification are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.01 General Bidding Requirements

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

Requirements for bidding are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.05 Request for Plans, Special Provisions, and Bid Booklets

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

Requirements for Request of Plans, Special Provisions, and Bid Booklets are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.10 Bid Booklet

In the paragraph that begins “The Bid Section includes all pages after...”, add the following bullet to the bullet list:

- Certificate of nondiscrimination regarding ORS 279A.110 and certificate regarding policy and practice against sexual harassment, sexual assault and discrimination against employees who are members of a protected class as required by ORS 279A.122 (House Bill 3060, 2017)

00120.20 Interpretation of Quantities in Bid Schedule

Add the following to the end of this subsection:

It is expressly understood that all work called for on the plans and in the specifications shall be completed under the existing Pay Items, and all measurement and payment shall be based on English basis units.

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids

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

Requirements for submittal of bids are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.40 Preparation of Bids

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

Requirements for submittal of bids are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.45 Submittal of Bids

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

Requirements for submittal of bids are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.50 Submitting Bids for More than One Contract

Delete all references to electronic bids.

00120.60 Revision or Withdrawal of Bids

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

Requirements for submittal of bids are detailed in the Invitation to Bid and Instructions to Bidders of the Bid Documents.

00120.70 Rejection of Non-responsive Bids

Delete the bullet that begins “An electronic Bid is not...” in its entirety.

Delete the bullet that begins “The Bid is submitted on documents...” in its entirety.

Add the following bullet to the bullet list:

- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

Section 00130 - Award and Execution of Contract

Comply with Section 00130 of the Standard Specifications supplemented and/or modified as follows:

00130.10 Award of Contract

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

Intent to Award is detailed in the Instructions to Bidders of the Bid Documents.

00130.15 Right to Protest Award

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

Right to Protest is detailed in the Instructions to Bidders of the Bid Documents.

00130.40(b) Certificates of Insurance

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

Insurance Requirements are detailed in the Bidder Insurance Requirements of the Bid Documents.

00130.50 Execution of Contract and Bonds

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

Execution of Contract and Bonds are detailed in Bidder's Proposal and Construction Contract of the Bid Documents.

00130.60 Failure to Execute Contract and Bonds

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

Failure to Execute Contract and Bonds are detailed in Bidder's Proposal and Construction Contract of the Bid Documents.

00130.70 Release of Bid Guaranties

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

Release of Bid Guaranties are detailed in Instructions to Bidders of the Bid Documents.

00130.90 Notice to Proceed

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

"Notice to Proceed" will be issued within 15 calendar days of execution of the Contract by Jackson County.

Section 00140 - Scope of Work

Comply with Section 00140 of the Standard Specifications supplemented and/or modified as follows:

00140.00 Purpose of Contract

Add the following bullets to the bullet list:

- Work completed under this contract is limited to the Pay Items listed in the Contract Schedule of Items, plus authorized change orders, if any.

00140.90 Final Trimming and Cleanup

Add the following bullet to the bullet list:

- The Contractor shall dispose of construction survey materials, coordinate with Project Surveyor on survey materials to remain in-place. These Materials and debris become the property of the Contractor. The Contractor shall dispose of these Materials and debris immediately.

Before the last paragraph that begins "Unless the Contract..." add the following:

Attention is especially directed to the provisions of subsection 00140.90. In addition to those provisions, and as nearly as practicable, clean up shall accompany the work as it progresses, especially with regard to debris removal.

Section 00150 - Control of Work

Comply with Section 00150 of the Standard Specifications supplemented and/or modified as follows:

00150.10(a) Order of Precedence

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

Refer to Section A.3.1 of the Standard General Conditions for Order of Precedence.

00150.15(b) Agency Responsibilities

Add the following bullets to the bullet list:

- Set clearing and grubbing stakes prior to construction.
- Set slope stakes after clearing and grubbing is complete.

00150.40 Cooperation and Superintendence by the Contractor

Add the following paragraph to the end of this subsection:

Give notification for intent to perform work on weekends by 12:00 p.m. of the preceding Wednesday.

00150.50(c) Contractor's Responsibilities

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

The Contractor shall:

- Follow applicable rules adopted by the Oregon Utility Notification Center.
- Contact Utility owners during Bid preparation and after the Contract is awarded to verify all Utilities' involvement on the Project Site.
- Hold a Utility scheduling meeting and monthly Utility coordination meetings (see also 00180.42).
- Coordinate Project construction with the Utilities' planned adjustments, take all precautions necessary to prevent disruption of Utility service, and perform its Work in the manner that results in the least inconvenience to the Utility owners.
- Include all Utility adjustment work, whether to be performed by the Contractor or the Utilities, on the Contractor's Project Work schedule submitted under 00180.41.
- Protect from damage or disturbance any Utility that remains within the area in which Work is being performed. Maintain and re-establish location marks according to OAR 952-001-0090(20)(a). Coordinate re-establishment of the location marks with the associated Utility.
- Not disturb an existing Utility if it requires an unanticipated adjustment, but shall protect the Utility from damage or disturbance and promptly notify the Engineer.
- Determine the exact location before excavating within the reasonable accuracy zone according to OAR 952-001-0090(2)(c).
- Backfill any exposed Utilities as recommended and approved by the Utility representative. Obtain Utility locate warning tape from the Utility and replace damaged or removed warning tape. Utility locate warning tape may not be present at all existing Utilities.
- Stake, place warning tape, and maintain no work limits around critical Utility facilities as shown or directed by the Engineer and the Utility.
- In addition to the notification required in OAR 952-001-0090(5), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of 2 weeks to relocate or resolve the previously unknown Utility issues.
- Report to the Engineer any Utility owner who fails to cooperate or fails to follow the planned Utility adjustment.
- After receiving Notice to Proceed, the Contractor shall be responsible for making arrangements to have utilities adjust or relocated.

Refer to the Special Provisions for a list of utilities with facilities located within the project limits.

Adjustment of valve boxes and manhole lids to finish grade will be completed under existing Pay Items, unless modified in the Special Provisions.

Scheduling and cooperation is recommended between the Contractor and the utility companies to avoid unnecessary delay. In case utility conflicts are encountered, it shall be the Contractor's responsibility to coordinate or adjust any such facilities as directed by the Engineer. Prior to the underground installations, the Contractor shall pothole all potential grade conflicts and notify the Engineer of any conflicts before start of work. The Contractor shall be responsible for safeguarding all utilities within the project limits for the duration of the contract. Contractor will be responsible for calling the designated contact person as identified in the Special Provisions for affected utilities.

The Contractor shall hold monthly utility coordination meetings with utility companies and Agency representatives (both in the office and in the field if necessary) to coordinate project activities with utilities and on-going utility relocation work. The coordination meetings shall include detailed discussions of, but not be limited to, existing and abandoned utilities, service lines, critical locations for pot holing of utilities, project activities, and on-going utility relocations in upcoming project activity areas. The Contractor shall obtain utility base map drawings from each utility at these meetings and will be required to fully understand the scope, extent, locations, and significance of all utility facilities prior to starting work in a new activity area. The Contractor shall furnish utility agencies updated project schedules in conjunction with the Agency.

Prior to starting any work on-site, the Contractor shall submit a written Utility Coordination Report. The Utility Coordination Report shall identify the specific utility coordination accomplished to date by the Contractor for all existing in-service and abandoned facilities. The report shall include contact names, numbers, dates, and utility base map drawings that the Contractor has obtained. In addition, the report shall contain documents showing that the Contractor had accomplished utility locates, and that utility locates along with applicable construction activities including traffic control plans have been reviewed and discussed with utility representatives on-site. The Utility Coordination Report shall be submitted to the Project Manager for review and approval 7 days before scheduling the Pre-Construction Conference and may be submitted for the project as a whole, or for specific areas within the project.

Plan and schedule all utility adjustment operations well in advance of on-site work. As soon as the Contractor becomes aware of any previously unknown utility conflicts or issues, the applicable utilities shall be notified immediately. Allow utilities a minimum of 2 weeks to relocate or resolve the previously unknown utility issues.

Prior to the start of work, review utility locates with a representative of each utility on-site to ensure that all in-service utilities, including service laterals, and known abandoned facilities are correctly identified in the field. Similarly, where construction activities

extend onto private property (e.g. easements), coordinate and review service line locations, including service laterals, with the private property owners.

Earthwork activities (e.g., slope cuts/fills, ditch excavations, etc.) shall occur around existing below-grade and at-grade utilities. The Contractor shall coordinate with utilities when conducting operations in these locations and allow the utilities access to temporarily support, brace, and otherwise protect their facilities during the work operations where applicable. Storm facilities cross over or under existing utilities, the plans do not always specifically identify whether new storm facilities cross over or under existing utilities. Lateral supports, adjacent supports, and minimizing the length of exposed utilities shall be required in these locations. Non-invasive excavation techniques shall be required when working within the reasonable accuracy zone of any utilities. Potholing for the purpose of exposing utilities prior to excavation shall be required when working within the reasonable accuracy zone of utilities. Backfill exposed utilities as recommended and approved by the utility representative. Telecommunication facility trenches shall be backfilled with concrete slurry. The Contractor shall save all utility locate and warning markers removed during construction activities, and reinstall them following the activities. Removal and replacement of the utility locate and warning markers shall be coordinated with the associated utility.

Utilities abandoned during the project and existing abandoned utilities exposed by the work shall be removed and disposed of according to the requirements of sections 00310 and 00330. Throughout the project limits, an extensive number of abandoned utilities, including numerous cables, conduits, pipes, manholes, and vaults, will be encountered during excavation activities. During these activities, coordinate with utility agencies and verify that abandoned utilities encountered are no longer in service prior to removal and disposal.

Subject to the Engineer's approval, the Contractor may adjust the Utilities by asking the Utility owners to move, remove, or alter their facilities in ways other than as shown on the Plans or in the Special Provisions. The Contractor shall conduct all negotiations, make all arrangements, and assume all costs that arise from such changes.

00150.50(d) Delays

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

If the Contractor has complied with 00150.50(c), and if Utility adjustments are completed later than the date specified in the Special Provisions, or unanticipated utilities are encountered during construction, thus causing Project completion to be delayed (provide notification under 00180.60), additional Contract Time will be considered under 00180.80. Monetary compensation for delay, remobilization, or insignificant changes as defined in 00195.20 shall not be considered. Where utility delays cause a significant change in the character of the work as defined in subsection 00195.20 compensation shall be considered, but only if the Contractor notifies Jackson

County in writing of the specific significant changes before the affected work is performed.

00150.91 Post-Construction Review

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

The Contractor shall attend a Post-Construction Review meeting to be held by the Agency prior to issuance of Third Notification but not earlier than 15 Days following the date of Second Notification. The time and place of this meeting will be announced by the Engineer at least 15 Days prior to the meeting date. The purpose of this meeting is to examine the Project for possible process improvements that may benefit future projects. The Contractor's attendance at the Post-Construction Review meeting is mandatory.

00150.97 Responsibility for Materials and Workmanship

Add the following to the end of this subsection:

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

Section 00160 - Source of Materials

Comply with Section 00160 of the Standard Specifications supplemented and/or modified as follows:

00160.00 Definitions

Add the following to the end of this subsection:

(c) **Blue Sheets** - Prequalified products and submittals for qualification of electrical equipment and materials.

(d) **Green Sheets** - Conditionally prequalified products and submittals for conditional qualification of controller equipment.

(e) **Red Sheets** - Statewide list of certification exempt traffic management systems components pursuant to ORS 479.540 and OAR 918-261-0037.

00160.05 Qualified Products List (QPL)

Add the following to the end of this subsection:

Slurry backfill shall meet Jackson County's trench backfill requirement for controlled low strength materials (CLSM). For information on CLSM see Section 00420, or go online to:

<https://jacksoncountyor.org/roads/Partners/Controlled-Low-Strength-Materials-Specification>

Add the following subsection:

00160.07 Electrical Equipment and Materials

The Blue Sheets and Green Sheets are a listing of manufactured products available on the market (shelf items) that ODOT has evaluated and found suitable for use as electrical and controller equipment and materials for highway construction. The Blue Sheets and Green Sheets are available on the ODOT Traffic-Standards website (see 00110.05(e)). The most current version of the Blue Sheets and Green Sheets on the date of Advertisement is the version in effect for the Project.

When the Contract specifies the use of the Blue Sheets and Green Sheets, unless specified as the subject of an exemption per ORS 279C.345, the Agency may approve for use a product qualified for inclusion in a later edition of the Blue Sheets and Green Sheets or other equivalent product that meets the requirements of the Blue Sheets, following the Blue Sheet Qualification/Specification Information, or the Green Sheets, following the ODOT Standard Specification for Microcomputer Signal Controller and errata information, if the Agency finds the product acceptable for use on the Project.

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

Section 00165 - Quality of Materials

Comply with Section 00165 of the Standard Specifications supplemented and/or modified as follows:

00165.30(c) Acceptance of Field-Tested Materials

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

The Engineer may sample and cause outside acceptance tests to be performed to assure that materials furnished meet contract specifications. The Contractor's quality control testing, acceptance tests, and Engineer's visual observation provide the basis for the Engineer's decision on acceptance of materials. The Engineer's decision is final, as described in subsection 00150.00.

00165.40(d) Pay Factor and Composite Pay Factor Computation

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

No pay factors or composite pay factors will be paid under this contract unless they are individually and specifically provided for in the Special Provisions.

Section 00170 - Legal Relations and Responsibilities

Comply with Section 00170 of the Standard Specifications supplemented and/or modified as follows:

00170.02 Permits, Licenses, and Taxes

Add the following bullets to the bullet list:

- The Contractor's attention is directed to ORS Chapter 541 which pertains to the permit requirements for removal materials from the bed or banks of any natural waterway in the State of Oregon and to ORS 517.750 through 517.990 which pertains to the permit requirements of the Mined Land Reclamation Act which became law on July 1, 1972.
- Comply with Jackson County's blanket permit #1200-CA from the Oregon Department of Environmental Quality (copy enclosed).
- A fill permit from the Jackson County Building Department may be required for disposal of excess excavated materials on off-site private properties.

00170.04 Patents, Copyrights, and Trademarks

Replace the paragraph that begins "Prior to use of designs, devices, materials, or processes..." with the following paragraph:

Prior to use of designs, devices, materials, or processes protected by patent, copyright, or trademark, the Contractor shall obtain from the Entity entitled to enforce the patent, copyright, or trademark all necessary evidence of Contractor's legal right to use such design, device, material, or process.

00170.62 Labor Nondiscrimination

Add the following sentence to the end of this subsection:

It is a material term of this Contract that the Contractor certifies by entering into this Contract that the Contractor has a written policy and practice that meets the requirements described in ORS 279A.112 (House Bill 3060, 2017) for preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class and that the Contractor shall maintain the policy and practice in force during the entire term of this Contract.

00170.65(a) General

Replace the paragraph that begins “As required by ORS 279C.520, compliance by the ...” with the following paragraphs:

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

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

00170.70 Insurance

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

Insurance Coverage is detailed in the Bidder Insurance Requirements of the Bid Documents. Additional Insured may be listed in the Special Provisions.

Section 00180 - Prosecution and Progress

Comply with Section 00180 of the Standard Specifications supplemented and/or modified as follows:

00180.05 Assignment/Delegation of Contract

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

Unless the Agency gives prior written consent, which will not be unreasonably withheld, the Contractor shall not assign, delegate, sell, or otherwise transfer or dispose of any rights or obligations under the Contract, whether voluntarily or involuntarily, and whether by merger, consolidation, dissolution, operation of law, or any other manner, including, without limitation:

- The power to execute or duty to perform the Contract; or
- Any of its right, title or interest in the Contract.

Any purported or attempted assignment, delegation, sale, transfer or disposition without prior Agency consent shall be voidable.

If written Agency consent is given to assign, delegate, sell, or otherwise transfer or dispose of any rights or obligations under the Contract, such consent shall not relieve the Contractor or its Surety of any part of their duties, obligations, responsibilities, or liabilities under or pursuant to the Contract.

00180.06 Assignment of Funds Due under the Contract

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

Assignment of funds due or to become due under the Contract to the Contractor will not be permitted unless:

- The assignment request is made on the form provided by the Agency;
- The Contractor secures the written consent of the Contractor's Surety to the assignment; and
- The Engineer gives prior written consent to the assignment, which will not be unreasonably withheld.

00180.20(b) Own Organization

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

The term "own organization", as used in Section 00180, includes only employees of the Contractor, Equipment owned or rented by the Contractor, Incidental rental of operated Equipment, truck hauling of Materials not included in or requiring a subcontract, and Materials and Equipment to be incorporated into the Work purchased or produced by the Contractor.

00180.20(c)(2) Limitations

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

The use of Equipment rented with operators is limited to performing minor, Incidental, short-duration work or services under the direct supervision of the Contractor or Subcontractor, with Equipment not customarily owned, rented, leased, or operated by a Contractor, or with Equipment that is temporarily unavailable to the Contractor.

00180.20(c)(3) Submittals

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

The Contractor shall provide the Engineer with a copy of the rental agreement or purchase order covering the work or service to be provided. The Contractor shall make certain that the provider of approved work or services submits payrolls required under Section 00170 and complies with applicable Contract provisions, including, without limitation, 00170.07. The work or service provider will not be considered a Subcontractor under the Contract, but the work or services will be considered to have been performed by the Contractor's own organization for the purposes of determining compliance with 00180.20(a).

00180.20(e) Trucking

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

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

00180.20(e)(2) Limitations

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

The approved trucking services agreements shall be used for all trucking services for hauling Materials not provided by trucks owned (or rented) and operated by the Contractor except for trucking services provided by committed DBEs that require a subcontract under 00180.21. The Contractor shall execute a trucking services agreement with every trucking services provider for hauling Materials prior to the trucking services provider doing any Work on the Project Site.

00180.20(e)(3) Submittals

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

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

- Attach a copy of the data required under 00170.65(b)(4) to the trucking services agreement; and

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

00180.21(d) Terms of Subcontracts

Replace the paragraph that begins “Subcontracts shall provide that work performed under...” with the following paragraph:

All subcontracts shall provide that work performed under the subcontract shall be conducted and performed according to, and shall include, the pertinent requirements, provisions, terms, and conditions of the Contract. Compliance with 00170.07 is required. All subcontracts, including Contractor's with the first-tier Subcontractors and those of the first-tier Subcontractors with their Subcontractors, and any other lower-tier subcontracts shall contain a clause or condition that if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract, the Entity may file a complaint with the Construction Contractors Board, unless payment is subject to a good-faith dispute as defined in ORS 279C.580. Additionally, according to the provisions of ORS 279C.580, subcontracts shall include:

Add the following subsection:

00180.40(c) Specific Limitations

Limitation of operations specified in these supplemental standard specifications include, but are not limited to the following:

<u>Limitations</u>	<u>Subsection</u>
Cooperation with Utilities	00150.50
Cooperation with Other Contractors	00150.55
Railways	00170.01(e)
On-Site Work	00180.40(b)
Contract Time	00180.50(h)
Right-of-Way and Access Delays	00180.65
Closed Lanes	00220.40(e)(1)
Special Events	00220.40(e)(2)(b)
Limited Duration Road Closure	00220.40(f)
Road Closure Using Rolling Slowdown Method	00220.40(g)
Regulated Work Areas	00290.34(a)
Noise Control	00290.32
Maintenance Under Traffic	00620.43
Opening Sections to Traffic	00744.51
Opening Section to Traffic	00745.51

Contractor shall be aware of and subject to all other agency schedules and operational limitations in the Standard Specifications not specifically listed in this subsection.

Add the following subsection:

00180.40(d) Holidays

No work shall be permitted on legal holidays as specified in ORS 279C.540, plus Martin Luther King's Birthday (3rd Monday in January), President's Day (3rd Monday in February), and Veteran's Day (November 11). In addition, all work on projects shall stop and be suspended for duration of holiday by 5:00 p.m. the day preceding a holiday or the Friday before a 3-day holiday weekend.

Add the following subsection:

00180.40(e) Weekends

The Contractor shall give notification for intent to perform work on weekends by 12:00 p.m. of the preceding Wednesday. Not all weekend work will be approved.

00180.42 Preconstruction Conference

Add the following to the end of this subsection:

The preconstruction conference shall not be scheduled until the Engineer has reviewed and approved:

- Initial Project Work Schedule
- Traffic Control Plan
- Erosion and Sediment Control Plan

The Contractor shall conduct a group Utilities scheduling meeting with representatives from the Utility companies involved with this Project and the Engineer before the preconstruction conference. The Contractor shall incorporate the Utilities time needs into the Contractor's schedule submitted at the preconstruction conference.

00180.50(a) General

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

The time allowed for the completion of the contract is listed in the Special Provisions. Once work commences, and with the exception of adverse weather delays as defined in the Standard General Conditions, the Contractor shall work continuously until the project is complete. For failure to complete the work by the specific time, the Contractor will be charged Liquidated Damages in accordance with 00180.85.

00180.50(c) Beginning of Contract Time

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

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

00180.50(g) End of Contract Time

Replace the paragraph that begins “The Contractor shall...” with the following paragraph:

If the Contractor does not complete these items within ten (10) Working Days or if defects in the work appear, the Second Notification will be revoked, and time charges will resume.

00180.70(b) Contractor’s Responsibility during and after Suspension

Replace the paragraph that begins “During periods of suspension of the Work...” with the following paragraph:

During periods of suspension of the Work, the Contractor shall continue to be responsible for protecting and repairing the Work according to 00170.80, and for ensuring that a single designated representative responsible for the Project remains available according to 00150.40.

00180.85(b) Liquidated Damages

Replace the paragraph that begins “Delays in the Contractor’s...” with the following paragraph:

The Agency will sustain damage if the Work is not completed within the specified Contract Time. However, in certain Agency projects it may be unduly burdensome and difficult to demonstrate the exact dollar value of such damages. In these projects, the Contractor agrees to pay to the Agency, not a penalty but as liquidated damages, the amount specified in the table below for each Calendar Day or Work Day the Contractor expends performing the Contract in excess of the Contract Time or adjusted Contract Time.

The following liquidated damages apply for failure to complete the work on time:

Original Amount of Contract		Per Diem Amount of Liquidated Damages	
For More Than	To And Including	Calendar Day*	Work Day
\$ 0	\$ 25,000	\$ 50	70
25,000	50,000	100	140
50,000	100,000	200	280

100,000	500,000	400	560
500,000	1,000,000	700	980
1,000,000	2,000,000	1,000	1,400
2,000,000	5,000,000	1,300	1,820
5,000,000	10,000,000	1,600	2,240
10,000,000	-----	2,000	2,800

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

Add the following subsection:

00180.85(c) Lane Closures and Rolling Slowdown Closures

Lane closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

Lane Closures - It is impractical to determine the actual damages the Agency will sustain in the event traffic lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e) or 00220.40(f). In addition to the liquidated damages, all added cost for traffic control measures, including flagging, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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

Add the following subsection:

00180.85(d) Rolling Slowdown Closures

Rolling slowdown closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event traffic lanes are closed by the Rolling Slowdown Method. Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 20 minutes, or for a portion of 20 minutes, per lane, for any lane closure beyond the 20-minute limit listed in 00220.40(g). In addition to the liquidated damages, any added cost for traffic control measures, including flagging or pilot cars, required to maintain the lane closures

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

The Engineer will determine when it is safe to reopen lanes to traffic. Assessment of liquidated damages will stop when all lanes have been safely reopened. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b), but not in addition to (1) above for closures of the same lanes.

Add the following subsection:

00180.85(e) Traffic Delays Beyond 20 Minutes

Stopping or holding vehicles beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event traffic is stopped or held longer than the 20-minute limit listed in 00220.02. Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 20 minutes, or for a portion of 20 minutes, for stopping or holding traffic longer than 20 minutes. In addition to the liquidated damages, any added cost for traffic control measures, including flagging, required to stop or hold traffic beyond the 20-minute time limit, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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

Section 00190 - Measurement of Pay Quantities

Comply with Section 00190 of the Standard Specifications supplemented and/or modified as follows:

00190.20(f)(2) Scale Without Automatic Printer

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

Scale without automatic printer will not be permitted.

00190.20(g) Agency-Provided Weigh Technician

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

All weighing of materials shall be done by Contractor provided Weigh Technician in accordance with the requirements of 00190.20(f).

Section 00195 - Payment

Comply with Section 00195 of the Standard Specifications supplemented and/or modified as follows:

00195.00(a) General

Add the following paragraph to the end of this subsection:

Fuel for operation of all equipment, trucking and manufacturing processes required for prosecution of the work is considered as an incidental cost to the Contractor. No additional payment or compensation shall be made for price fluctuations.

00195.10 Payment for Changes in Material Costs

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

Material Cost for such items as Asphalt Cement, Portland Cement and Steel will only be considered on items specifically listed in Special Provisions for consideration of a price escalation/de-escalation adjustment.

00195.20(b) Significant Changed Work

Add the following paragraphs to the end of this subsection:

When the final quantities of a major item of work, as defined in the following paragraph, is more than 125% or less than 75% of the original contract quantity, any allowance by the Engineer for an increase in quantity shall apply only to that portion in excess of 125% of original contract item quantity, or in case of a decrease below 75% to the actual amount of work performed.

A major item of work is any contract item, except lump sum items, having an original contract value greater than 10 percent of the total amount of the contract.

Section 00196 - Payment for Extra Work

Comply with Section 00196 of the Standard Specifications supplemented and/or modified as follows:

00196.00 General

Add the following to the beginning of this subsection:

Section 00196 of the 2018 Standard Specifications takes precedence over the Standard General Conditions for payment of extra work.

Section 00197 - Payment for Force Account Work

Comply with Section 00197 of the Standard Specifications supplemented and/or modified as follows:

00197.00 Scope

Add the following to the beginning of this subsection:

Section 00197 of the 2018 Standard Specifications takes precedence over the Standard General Conditions for payment of extra work.

Section 00199 - Disagreements, Protests, and Claims

Delete this subsection in its entirety.

PART 00200 – TEMPORARY FEATURES AND APPURTENANCES

Section 00210 – Mobilization

Comply with Section 00210 of the Standard Specifications supplemented and/or modified as follows:

00210.40 Mobilization

Add the following bullet to the bullet list:

- The Contractor is entirely responsible for all security and liability on any property used for staging purposes.

Section 00220 - Accommodations for Public Traffic

Comply with Section 00220 of the Standard Specifications supplemented and/or modified as follows:

Add the following subsection:

00220.01(d) Terminology

According to 00110.05(a), for the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

00220.02(a) General Requirements

Replace the bullet that begins “Locate stockpile material...” with the following bullet:

- Locate stockpile materials and park construction equipment and vehicles, with minimum 10 feet separation from active travel lanes whenever possible, or as directed.

Replace the bullet that begins “Do not use temporary steel...” with the following bullet:

- Provide jump plate locks on all temporary steel jump plates.

Add the following bullets to the bullet list:

- At the end of each Work Day a temporary asphaltic concrete ramp shall be constructed at residential or business entrances so that a reasonable ramp up or drop off is left at the entrances. Each ramp shall be constructed of suitable materials and a satisfactory length to permit convenient ingress-egress for vehicular traffic.
- Maintain posting of all regulatory, warning, and directional signage throughout the project duration. Any signs requiring removal for prosecution of the work shall be immediately relocated to a location satisfactory to the Engineer. Contractor is responsible for maintenance of all relocated signs, until Jackson County permanently relocates signs following project completion.
- During multiple lift paving operations, the Engineer may request the paving limits be extended by winging out paved driveway locations (excluding wearing course) to provide a ramp between the new asphalt and existing driveway surfaces.
- During adverse weather conditions, including fog, where visibility is reduced to 1,000 feet or less and/or other hazardous conditions exist, the Engineer may suspend all work on roadways and inside right-of-way until conditions are deemed safe to resume work.
- Contractor to develop Staging and Work Zone Traffic Control Plans to submit to the Engineer for approval, a minimum of 7 Calendar Days prior to scheduling the Pre-Construction Conference.
- At all times the Contractor shall limit lane closures to minimize the impact to the traveling public, and minimize impacts to the intersections and cross streets. In the project work zone, the maximum delay for multiple work zones with single lane closures shall not exceed 20 minutes collectively.
- Temporary single lane traffic control configurations shall provide traffic lane widths not less than 14 feet, whenever possible. Local cyclists and pedestrians will be permitted to share temporary lane widths with motorists where currently no sidewalks or paved shoulders exist. Where existing paved shoulder routes are not available, the width of any shared travel lane in or adjacent to the project area shall be minimum width of 14 feet clear of any and all traffic control measures, stored materials or equipment in order to provide for shared bike, pedestrian, and vehicular traffic. Lanes of less than 14 feet shall be specifically approved by the Engineer.

- Do not perform work which would restrict or interrupt traffic movement on opposite sides of the traveled way at the same time unless specifically approved by the Engineer. Multiple, concurrent, single lane closures in opposing directions must be separated by a minimum of 1,000 feet. Restore two-lane traffic in off periods on nights and weekends.
- Schedule Grinding/Paving operations so that the traveling public does not travel on grooved pavement or graveled surfaces for more than 21 Calendar Days before pre-leveling or base course paving is completed in travel lanes.
- During Grinding/Paving operations, temporary asphalt wedges shall be constructed and maintained at all driveways, approaches, and at any other vertical drop offs as directed by the Engineer, in order to protect from hazardous drop offs greater than 1-inch depth until top lift paving can be installed.
- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings. Modify the "Typical Abrupt Edge Delineation" configuration by replacing the tubular markers with temporary plastic drums on 40 foot maximum spacing along the abrupt edge.
- Do not fully close business accesses during business hours without alternate routes and prior 24-hour notice to business owners. Provide written notice (fliers) as directed by the Engineer, if required.
- Provide approved protection and delineation between each work area and active public travel lanes with barrels (not tubular markers), unless otherwise noted in the Contract Documents or on the County approved Traffic Control Plan. This shall supersede ODOT standard TM series drawings. Tubular marker may be used to delineate fog lines, driveways, or separate Local Traffic under road closure only.
- Delineate all business accesses with minimum 5 each per side, closely spaced, blue colored tubular markers on 10 foot maximum spacing. Mark the access with 36-by24 inch, blue colored, "BUSINESS ACCESS" (CG20-11) signs. Locate and install these signs as directed.
- Protect pedestrians in pole base excavation areas by placing approved covers over all pole base excavations. Place a minimum of two B(II)LR barricades adjacent to and on either side of the excavated area, facing pedestrian traffic, or place covers and barricades as directed.

00220.03(b) Closures

Replace the bullet that begins "**Roads** – A minimum..." with the following:

- **Roads** – A minimum of 14 Calendar Days before closure. Provide detailed scaled drawings based on aerial photos of subject area showing traffic control plan and signing proposed. No detour or road closure plan will be permitted until approved by the Engineer. After the plan is approved, notify all emergency agencies, school districts, US Postal Service, and other affected municipalities a minimum of 7 Calendar Days. Portable Changeable Message Signs shall be

placed bearing notice of closure, dates of the closure, and alternate routes a minimum of 5 Calendar Days prior to closure.

Add the following bullet to the bullet list:

- **On Street Parking** - A minimum of 14 Calendar Days prior to closing on-street parking. After receiving written approval, provide 48-hour public notification before limiting the on-street parking.

00220.40 General Requirements

Add the following before the sentence that begins “Provide the following...”:

Where existing paved shoulder routes are not available, the width of any temporary shared travel lane in or adjacent to the project area shall be a minimum width of 14 feet clear of any and all traffic control measures, stored material or equipment in order to provide for shared bike, pedestrian and vehicular traffic, unless otherwise approved by the Engineer.

00220.40(a) Traffic Nuisance Abatement

Add the following to the end of this subsection:

The use of water to clean roadway surfaces is not permitted unless mechanical cleaning methods have been used and the Engineer determines the use of water is necessary.

00220.40(c) Driveways

Add the following bullet to the bulleted list:

- Temporary driveway connections on gravel are permitted until paved driveway connections are finished. Schedule driveway paving operations such that final paving is completed within 21 Calendar Days after aggregate base placement and/or concrete surfacing is completed, and in all cases prior to top lift paving.

00220.40(e)(2)(a) Holidays

Add the following bullets to the bullet list:

- Martin Luther King’s Birthday (3rd Monday in January)
- President’s Day (3rd Monday in February)
- Veteran’s Day (November 11)

Add the following subsection:

00220.40(f) Maintenance of Road Surface

At any time during the earthwork stage of construction when wet weather conditions occur, the Engineer may require the Contractor to place a layer of aggregate base material on the grade to ensure the safe movement of traffic. No payment will be made for this work if surface is below design subgrade. Payment may be made under appropriate aggregate base Pay Item if material is placed on an approved grade and remains in suitable condition for incorporation in the structural road section.

At no time shall the Contractor leave the surface of the roadway in a condition that could cause damage to vehicles. Aggregate subbase shall be covered with aggregate base rock prior to opening the roadway to public access or by end of Work Day. If not to grade, Contractor shall place a layer of aggregate base over the aggregate subbase. Payment for furnishing and placing this aggregate base material shall be paid for under the aggregate subbase Pay Item.

During construction, the Contractor shall ensure that the road is always left in good condition. Damages to the existing road surface caused by Contractor's equipment shall be repaired by the Contractor at the Contractor's expense. At a minimum, repairs shall include, but not limited to, a course of aggregate base material that is graded and compacted to restore the road surface. In the event inclement weather increases damage to the road surface, the Engineer reserves the right to stop work on the project.

Add the following subsection:

00220.40(g) Maintain Traffic Flow

Contractor operations shall maintain two-way traffic whenever possible. Where lanes are closed, one-way traffic shall be flagger/pilot car controlled at all times. At the end of each Work Day, two-way traffic shall be restored.

The queue created by traffic control shall not at any time or for any duration extend into a signalized intersection unless specific permission has been granted by the Engineer. Coordinate with the Engineer for arrangements to turn off signals for temporary control of work zones. Such permission will require the signal to be turned off and the intersection be controlled by flaggers.

Maintain access to existing and/or temporary mailbox locations at all times. Coordinate with property owners/mail carriers prior to temporary displacements.

For any lane closures that would not allow a bus to stop for passengers on any normal schedule or route locations, one-week notice is required by bus operators to relocate stops and notify passengers. Bus operators require daily notice of all lane closures. Message boards are encouraged to facilitate communication regarding work zone delays for approaching motorists.

Jackson County welcomes traffic control proposals that will meet the intent of these requirements while facilitating the work. No such proposal shall be implemented until written approval is received from Jackson County.

Add the following subsection:

00220.40(h) Liquidated Damages

Lane closures and road closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain the event traffic lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay the Agency, not as a penalty, but as liquidated damages, \$500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e). In addition to the liquidated damages, all added cost for traffic control measures, including flagging, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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

00220.60(a)(1) Contractor Responsibility

Add the following bullets to the bullet list:

- Jump plates in travel lanes shall be removed from completed trenches within 10 days of set of cured slurry and replaced with temporary cold mix patching or similar cohesive material at grade.
- Provide jump plate locks on all temporary steel jump plates.
- Placement or storage of spoils from trench excavation is not permitted on hard surface streets within public right-of-way. Spoils stored in other right-of-way areas shall be covered to prevent erosion.

Section 00225 - Work Zone Traffic Control

Comply with Section 00225 of the Standard Specifications supplemented and/or modified as follows:

00225.01(b) Definitions

Add the following definition to the definition list:

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

Add the following subsection:

00225.01(d) Terminology

According to 00110.05(a), for the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

00225.02 General Requirements

Add the following to the end of this subsection:

Include standard ODOT TM drawings when referenced and clearly note which options are to be implemented and which are not.

Jackson County welcomes Traffic Control Plans that will meet the intent of these requirements and facilitate the work. No such plan shall be implemented until written approval is received from Jackson County.

The queue created by traffic control shall not at any time or for any duration extend into a signalized intersection unless specific permission has been granted by the Engineer. Such permission will require the signal be turned off and the intersection be controlled by flaggers.

Install a "bicycle" sign with "Share the Road" rider when Contractor operations warrant it.

When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings. Modify the "Typical Abrupt Edge Delineation" configuration by replacing the tubular markers with temporary plastic drums on 40 foot maximum spacing along the abrupt edge.

Barricades shall be installed to protect areas with drop-offs and areas of freshly placed concrete from vehicular and pedestrian traffic. The determination of what protective and directional measures are required shall be the responsibility of the Contractor, subject to concurrence by the Engineer.

Use portable changeable message signs when appropriate to provide work zone information to the public. Place signs and display messages as directed or approved. When signs are in use, protect them according to 00225.46(b).

00225.05 Traffic Control Plan

In the paragraph that begins “The Contractor will be allowed...”, Replace the sentence that begins “Submit the following...” with the following:

Develop and submit a Traffic Control Plan with detailed and dimensioned signage schematics and a written narrative to the Engineer for approval, a minimum of 7 Calendar Days prior to scheduling the Preconstruction Conference.

00225.05(b) Contractor Modified Traffic Control Plan

Add the following bullets to the bullet list:

- The TCP will show the use and placement of light plants and portable changeable message signs, if applicable.
- The TCP will show the locations of the blue and white “Business Access” signs, if applicable.
- The TCP will show bicycle routes, if applicable.

00225.13 Temporary Traffic Delineation

Add the following before the sentence that begins “Furnish temporary traffic...”:

For the purpose of lane taper and live traffic lane separation for temporary traffic control, plastic drums as described in 00225.13(d) will be the only accepted TCM, unless otherwise noted in the Contract Documents or on the County approved Traffic Control Plan. This shall supersede ODOT standard TM series drawings. Tubular marker may be used to delineate fog lines, driveways, or separate Local Traffic under road closure only.

00225.13(a) Tubular Markers

Add the following paragraphs to the end of this subsection:

Use blue plastic markers for temporary business accesses only. Use orange plastic markers for all other applications of Work Zone traffic control.

Blue plastic tubular markers shall be reflectorized with at least two blue, flexible reflective bands at least 3 inches wide, securely attached no more than 2 inches from the top with no more than 6 inches but not less than 1 inch between the bands.

00225.14(a) Flagger Station Lighting

Add the following to the end of this subsection:

In addition to the products listed on the QPL, tripod mounted or cart mounted flagger station lights that were purchased on or before January 1, 2014 and that were on the

QPL before January 1, 2014 may also be used. Provide proof of the original purchase date to the Engineer.

00225.32(a) Traffic Control Supervisor

Replace the paragraph that begins “In the event of a Work Zone...” with the following paragraph:

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

00225.32(b) Traffic Control Inspection Without TCS

Add the following bullet to the bullet list:

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

00225.81 Temporary Signing

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

No measurement of quantities will be made for this work.

00225.82 Temporary Barricades, Guardrail, Barrier, Attenuators, and Channelizing Devices

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

No measurement of quantities will be made for this work.

00225.83 Temporary Traffic Delineation

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

No measurement of quantities will be made for this work.

00225.84 Work Zone Lighting

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

No measurement of quantities will be made for this work.

00225.85 Traffic Signals

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

No measurement of quantities will be made for this work.

00225.86 Temporary Electrical Signs

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

No measurement of quantities will be made for this work, unless otherwise noted in the Contract Documents.

00225.87 Temporary Sidewalk Ramps

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

No measurement of quantities will be made for this work.

00225.88(a) Flaggers

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

Flaggers will be measured on the time basis, of the actual number of hours flagging stations are staffed.

No measurement will be made for flagging performed by the TCS if there is a separate TCS Pay Item and the TCS is specifically requested. If there is no TCS Pay Item, or on those days when the TCS is not specifically requested, flagging performed by the TCS will be measured for payment.

No measurement will be made for flagging performed during times in which no Productive Work is being performed. The only exception to this will be flagging performed during a meal break not to exceed 30 minutes in length. One meal break allowed per shift.

00225.88(b) Traffic Control Supervisor

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

The quantity for the TCS will be measured by the number of authorized 24-hour days regardless of the number of people used. An authorized 24-hour day will be any day or portion of a day authorized by the Engineer when any of the following is required:

- The complexity of construction operations require a TCS during normal working hours, and that level of supervision is directed by the Engineer.
- TCS performs routine inspection of TCD during non-work hours.
- TCS is called to respond to a traffic related issue during non-work hours.

00225.90(a)(1) Pay Quantities

Add the following bullet to the last bulleted list in this subsection:

- temporary illumination required for nighttime flagger operations.

00225.90(a)(2) Temporary Protection and Direction of Traffic

Replace the bullet that begins “Cleaning up and...” with the following:

- Cleaning up, removing and/or replacing devices destroyed or damaged by public traffic.

Add the following bullets to the bulleted list:

- There will be no separate payment for temporary flexible pavement markers, stripe removal, temporary signs, or any other required temporary control devices. These items are considered incidental to one or more of the Contract Schedule of Items.
- Payment for Temporary Protection and Direction of Traffic, Flaggers, Pilot Cars, and Traffic Control Supervisors will be per the Contract Schedule of Items. No separate payment shall be made for providing a qualified person, as defined in subsection 00225.31 and subsection 00225.32, to maintain traffic flows. When there is no TCS Pay Item, or when not specifically requested by Jackson County Roads, payment for providing this qualified person is incidental to Temporary Protection and Direction of Traffic or other Contract Schedule of Items work.
- Flagging station and temporary flagger station lighting.
- Providing temporary 36-inch orange mesh fencing for delineation of pedestrian routes, as directed.
- Temporary signs, including but not limited to “Business Access”, “Bicycles”, and “Share the Road”.

00225.91 Temporary Signing

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

Payment shall be included in the Pay Item, “Temporary Protection and Direction of Traffic”, if and only if, included in the Contract Schedule of Items.

00225.92 Temporary Barricades, Guardrail, Barrier, Attenuators, and Channelizing Devices

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

Payment shall be included in the Pay Item, “Temporary Protection and Direction of Traffic”, if and only if, included in the Contract Schedule of Items.

00225.93 Temporary Traffic Delineation

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

Payment shall be included in the Pay Item, "Temporary Protection and Direction of Traffic", if and only if, included in the Contract Schedule of Items.

No separate or additional payment will be made for mobilization to perform temporary striping, stripe removal, or durable stripe removal or for mobilization to place or remove temporary flexible pavement markers, if deemed by the Engineer to be for the Contractors convenience for more efficient staging of the Work. Payment is incidental and included in payment made for the appropriate Contract Schedule of Items.

00225.94 Work Zone Lighting

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

Payment shall be included in the Pay Item, "Temporary Protection and Direction of Traffic", if and only if, included in the Contract Schedule of Items.

00225.95 Traffic Signals

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

Payment shall be included in the Pay Item, "Temporary Protection and Direction of Traffic", if and only if, included in the Contract Schedule of Items.

00225.96 Temporary Electrical Signs

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

Payment shall be included in the Pay Item, "Temporary Protection and Direction of Traffic", if and only if, included in the Contract Schedule of Items.

00225.97 Temporary Sidewalk Ramps

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

Payment shall be included in the Pay Item, "Temporary Protection and Direction of Traffic", if and only if, included in the Contract Schedule of Items.

00225.98 Flaggers and Traffic Control Supervisors

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

The accepted quantities of “Flaggers” will be paid for at the Contract unit price, per unit of measurement.

The Pay Item “Flaggers” includes all necessary equipment, special apparel, flagging equipment, two-way radios, and illumination for night use.

Workers performing flagging duties who are not properly equipped or attired will not be considered to be flaggers and will not be eligible for payment under this Pay Item.

Flaggers performing work other than flagging will not be considered flaggers and will not be eligible for payment under this Pay Item.

Payment for item “Flaggers” performed beyond the quantity shown in the Contract Schedule of Items will be made at the Contract unit price if the Engineer determines that the Contract unit price does not exceed the value of the work as determined on the basis of rates given in Section 00197. If the Engineer determines that the Contract unit price exceeds the value of the work, payment for the additional work will be made according to Section 00196.

No separate payment will be made for temporary illumination required for nighttime flagger operations.

No separate payment or additional payment will be made for back-up generator or other power source unit in event it is used or not.

The Pay Item “Traffic Control Supervisor (per 24-hour day)” will be paid for at the Contract unit price, limited to a count of 1 each per Calendar Day, or 24-hour period, regardless of the number of personnel, or shifts, or overtime assigned by the Contractor. If a Pay Item exists on the Contract Schedule of Items and if payment is authorized in advance by the Engineer and documented by a TP and DT Daily Report form (ODOT Form 734-2474) submitted by the end of the next working day, then payment for each 24-hour day will be recorded for measurement and payment as a count of one at the unit price bid amount. Payment includes TCS vehicle and equipment.

Section 00240 – Temporary Drainage Facilities

Comply with Section 00240 of the Standard Specifications supplemented and/or modified as follows:

00240.00 Scope

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

This work consists of furnishing, installing, and removing temporary drainage facilities, including cofferdam features.

Section 00280 - Erosion and Sediment Control

Comply with Section 00280 of the Standard Specifications supplemented and/or modified as follows:

00280.00 Scope

Add the following to the end of this subsection:

Corps of Engineers, Division of State Lands, Oregon Department of Fish and Wildlife, and Oregon Department of Environmental Quality permits can require additional measures to comply with current best practices.

00280.03 Standards

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

Comply with Federal, State, and local laws, rules and regulations, and the National Pollutant Discharge Elimination System (NPDES) 1200 Permit or Permits applicable to the project. A copy of the permit is included in the Contract Specifications. Additional erosion and sediment control features, other than those shown on the plans, may be required depending on the Contractor's methods of operation and schedule.

The Contractor shall comply with requirements of National Pollution Discharge Elimination System (NPDES) Phase II.

In order to maintain compliance with the environmental permits, the Contractor must perform the work outlined in these specifications and shown on the ESCP. Jackson County will sustain damages if the Contractor fails to perform the work necessary to maintain compliance. The Contractor agrees to pay Jackson County Liquidated Damages for failure to perform work per the ESCP, or as directed. The Contractor agrees that Jackson County is not required to put an exact dollar value on sustained damages, but they shall be not less than \$250 per day.

00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands

Replace the paragraph and bullet list that begins "For work on Agency-controlled..." with the following:

The Contractor shall submit for approval by the Engineer the Contractor's Erosion and Sediment Control Plan (ESCP) a minimum of 7 Calendar Days prior to scheduling the Pre-Construction Conference. The ESCP shall include a narrative and/or pictorial views sufficient to detail the methods for construction. Designate and provide a representative, certified as a Designated Erosion and Sediment Control Inspector by Rogue Valley Sewer Services, ODOT, or other equivalent training with experience in all disciplines of highway construction, as the Erosion and Sediment Control Manager.

00280.14(e) Slope and Channel Liner Matting

Add the following sentence to the end of the paragraph that begins “Where shown, furnish rolled slope...”:

Channel liner mattings, types F, G and H may be installed as permanent features and are not required to be fully biodegradable.

00280.14(f) Compost Erosion Blanket

Replace the paragraph that begins “Furnish commercially manufactured...” with the following paragraph:

Furnish commercially manufactured medium compost material meeting the requirements of Section 03020. Add tackifier meeting the requirements of 01030.16.

Add the following subsection:

00280.14(g) Straw Bale

Furnish rectangular straw bales weighing between 80 and 100 pounds, meeting the requirements of 01030.15(b).

00280.15(a) Check Dams

Replace the bullet that begins “**Type 2: Fiber Rolls** – Fiber Rolls or wattles...” with the following bullet:

- **Type 2: Fiber Rolls** - Fiber rolls or wattles that are pre-manufactured, filled with plant based, naturally occurring fiber (e.g.: straw, wood, excelsior, hemp or coconut fiber) that contains no weed seeds and that is not moldy, caked, decayed or of otherwise low quality. When straw is used, furnish straw meeting the requirements of 01030.15(b). Furnish fiber roll that is fully biodegradable with enclosing netting derived from natural fibers (e.g.: jute, sisal, hemp or coir fiber). Furnish rolls with a minimum density of 2.75 pounds per cubic foot and constructed to hold its shape to provide a diameter of between 8 and 10 inches.

00280.16(d) Inlet Protection

Replace the bullet that begins “**Type 3: Prefabricated Filter Inserts...**” with the following bullet:

- **Type 3: Prefabricated Filter Inserts** - Prefabricated filter inserts manufactured specifically for collecting sediment in drainage inlets and from the QPL. Include handles and fasteners sufficient to keep the insert from falling into the inlet during maintenance and removal of the insert from the inlet.

00280.16(e) Sediment Barriers

Replace the bullet that begins “**Type 7: Prefabricated Barrier System...**” with the following bullet:

- **Type 7: Prefabricated Barrier System** - Prefabricated barriers manufactured specifically for temporarily obstructing the flow of sediment-laden water and from the QPL.

00280.16(i) Concrete Washout

Delete the bullet that begins “**Geotextile – Type 2 drainage...**” in its entirety.

Add the following subsection:

00280.16(k) Flocculant

Furnish chitosan flocculant material in gel or powdered form packaged in a pervious sleeve.

00280.30 Erosion and Sediment Control Manager

Replace the sentence that begins “If the Agency’s NPDES 1200-CA Permit is applicable...” with the following:

Designate and provide a representative, certified as a Designated Erosion and Sediment Control Inspector by Rogue Valley Sewer Services, ODOT, or other equivalent training with experience in all disciplines of highway construction, as the Erosion and Sediment Control Manager.

Replace the paragraph that begins “Provide the ESCM name, qualifying...” with the following:

Provide the Erosion and Sediment Control Manager (ESCM) name and working telephone number for review and approval by the Engineer within 7 Calendar Days before scheduling the Pre-Construction Conference.

Notify the Engineer within 24 hours of designating the ESCM for the 24-hour period. Make succeeding notifications within 24 hours every time a subsequent ESCM is appointed to the Project. Update the ESCP with the current ESCM contact information within 24 hours of designation.

00280.42(b) Temporary Stabilization

Add the following to the end of this subsection:

The Engineer will notify the Contractor of failure to perform temporary soil stabilization work in writing. If after 14 Calendar Days the Contractor fails to perform work as directed, Liquidated Damages will be assessed against the Contractor for the first instance for each day beyond the 14 Calendar Day deadline but shall be not less than \$250 per day. Further instances will double the Liquidated Damages assessed against the Contractor cumulatively every 14 Calendar Days.

00280.44(f) Compost Erosion Blanket

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

Blend tackifier with compost according to the manufacturer's recommendations. Apply compost and tackifier with equipment that propels the material directly at the soil surface and achieves direct contact with the soil. Apply compost at a uniform depth of 2 inches to all exposed soil surfaces.

Add the following subsection:

00280.44(g) Straw Bales

Unless otherwise approved, use straw bales only by breaking apart and spread as mulch to a thickness of 2 inches. Tack in place according to 01030.48(b)(3).

The use of straw bales in any other application requires approval from the Engineer.

00280.48 Emergency Materials

Replace the paragraph that begins "Provide, stockpile, and..." with the following:

Provide, stockpile, and protect emergency materials on-site for unknown weather or erosion conditions. Stockpiled emergency materials shall be at least 10 percent of the estimated quantity of raw material for each BMP. For example, if the Contractor estimates 1,400 feet of bio filter bag material is required for the project, stockpile 140 feet of bio filter bag material for emergencies. Maintain an accurate inventory of stockpiled materials.

00280.62(a) Inspection

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

Perform general site inspection, complete the Inspection Form provided by the Agency at the Pre-Construction meeting, and submit the completed Inspection Form to the Agency as follows:

- Weekly for active Construction sites.
- Every 2 weeks for inactive sites.

- Within 24 hours after a 1/2 inch or more of rainfall occurs within a 24-hour period.
- When directed by the Engineer.

00280.62(c) Monitoring Receiving Stream

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

Observe and record the turbidity using the current Oregon Department of Environmental Quality standards upstream and downstream of locations where surface waters from the construction site enter the receiving stream. Describe in the report any apparent differences in color and the clarity of the discharge, and any observable difference in comparison with the receiving stream. Note whether sheen and floating matter are present or absent.

If a permit noncompliance or serious water quality issues occur verbally report to the Engineer within 24 hours and submit a written report within 5 Calendar Days.

00280.63 Sediment Removal

Add the following to the end of this subsection:

Remove contaminated material and dispose at an approved sediment control area. Do not flush sediment and sediment laden water into storm drain systems.

Section 00290 - Environmental Protection

Comply with Section 00290 of the Standard Specifications supplemented and/or modified as follows:

00290.90 Payment

Add the following to the end of this subsection:

Payment shall be made only if there is a Pay Item, otherwise, providing environmental protection is considered incidental to one or more existing Contract Schedule of Items.

PART 00300 - ROADWORK

Section 00310 - Removal of Structures and Obstructions

Comply with Section 00310 of the Standard Specifications and Supplemental Standard Specifications supplemented and/or modified as follows:

00310.41(c) Drainage Structures

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

Remove drainage structures, such as box culverts and irrigation box culverts, down to a depth 2 feet below ground, slope or waterway bed. Remove culverts, sewers, siphons, and other conduits according to 00330.41(a)(7).

Section 00320 - Clearing and Grubbing

Comply with Section 00320 of the Standard Specifications supplemented and/or modified as follows:

00320.01 Areas of Work

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

The areas to be cleared and grubbed are intended to be shown on the plans, or if not shown on the plans, the clearing lines are at the right-of-way line or 5 feet from the following:

- Top of side slopes of ditches and channel changes.
- Top of cut slope.
- Top of cutbank rounding if rounded.
- Toe of fill slope.
- Outside edge of structure.
- Other work areas shown on the plans, such as material sources, borrow areas and road connections.
- Tree, plant, or natural areas to be preserved.

00320.02(c) Clear Zone

Replace the sentence that begins “For purposes of...” with the following:

The minimum clear zone line, for purposes of this Section, is 10 feet from the edge of the traveled way, but this distance may vary depending on design speed, horizontal alignment and side slope requirements.

00320.41 Grubbing Operations

Add the following to the end of this subsection:

Remove trees and roots that lie within trenching areas to the bottom and sides of the trench.

00320.42 Disposal of Matter

Replace this subsection with the following:

00320.42 Ownership and Disposal of Matter

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

When requested by the adjacent property owner, place all wood greater than 4 inch in diameter in 6-foot lengths off right-of-way for owner's use.

Burning will not be allowed on this project work site as a substitution for disposal.

Do not dispose of any materials on any wetland, either private or public, or within 300 feet of any river or stream.

00320.90 Payment

Replace the paragraph that begins "No separate or additional payment..." with the following:

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

Add the following to the end of this subsection:

There will be no separate payment for existing fence removal. The item is considered incidental to one or more of the Contract Schedule of Items.

Section 00330 - Earthwork

Comply with Section 00330 of the Standard Specifications supplemented and/or modified as follows:

00330.03(a) General

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

Except as provided in 00330.00, all earthwork shall be performed on either an excavation or on an embankment basis, depending on the Contract Schedule of Items. Prior to installation of aggregate bases, proof roll subgrade with a fully loaded 10 cubic yard dump truck.

Add the following subsection:

00330.03(d) Wetland Mitigation – Comply with all permit conditions. Construct earthwork improvements for Created Wetland Mitigation areas at locations shown on the plans or as directed. Wetland Mitigation work shall include, but is not limited to, excavation/embankment, furnish and placement of new topsoil, and shaping and contouring.

Add the following subsection:

00330.03(e) Water Quality Zones

Comply with all permit conditions. Construct earthwork improvements for Water Quality Zones at locations shown on the plans or as directed. Water Quality Zones shall include, but not be limited to, excavation/embankment, topsoil, topsoil placement, and shaping and contouring.

Add the following subsection:

00330.41(f) Below Grade Excavation – Subgrade

Remove and dispose of soft subgrade soils, as identified by the Engineer through proof-rolling with a loaded 10 cubic yard dump truck. Depth of excavation shall be as directed by the Engineer. Dispose of these unstable materials according to 00330.41(a)(5). After excavation, shape and compact bottom of excavation. Backfill with selected granular backfill material to provide a firm Roadbed as directed. A geosynthetic may be required before backfilling.

Add the following subsection:

00330.41(g) Below Grade Excavation – Pavement

Remove and dispose of failed pavements and soft subgrade soils, as identified by the Engineer through proof-rolling with a loaded 10 cubic yard dump truck. Saw cut or grind marked limits of asphaltic concrete removal. Depth of excavation shall be as directed by the Engineer. Dispose of these unstable materials according to 00330.41(a)(5). After excavation, shape and compact bottom of excavation. Backfill with selected granular backfill material to provide a firm Roadbed as directed. A geosynthetic may be required before backfilling.

Add the following subsection:

00330.41(h) Below Grade Excavation - Hard Rock

In the event that general excavation exposes hard rock, which results in refusal conditions to a large excavator (Cat. 325 or equivalent) using a ripper tooth and/or a D8 Cat with rippers, on the direction of the Engineer, mobilize the necessary equipment to complete the excavation work. On authorization from the Engineer, payment for one

Hard Rock Excavation Mobilization shall be made at the Contractor's bid amount if included in the Contract Schedule of Items. Perform hard rock excavation on the area(s) authorized for payment by the Engineer after the area is delineated and surveyed for quantity calculations. Hard rock excavation pay quantity shall be in-place volume as calculated by the Engineer.

Payment for hard rock excavation shall be at the Contractor's bid amount for Hard Rock Excavation on a per cubic yard basis if included in the Contract Schedule of Items. If Hard Rock Excavation and Mobilization is not included in the Contract Schedule of Items, payment shall be made as extra work per section 00196. The Engineer reserves the right to modify the design line to reduce or eliminate the cut volumes into hard rock. Reducing or eliminating this work shall not constitute a significant change as defined by Section 00195.20. In the event that this item is not used, no payment shall be made for Hard Rock Excavation Mobilization or Hard Rock Excavation. Contractor bid amount for Hard Rock Excavation is in addition to the General Excavation bid amount.

00330.42(c)(3) Embankment Slope Protection

Add the following to the end of this subsection:

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

00330.80 Measurement

Add the following to the end of this subsection:

Below Grade Excavation - Subgrade, shall be measured on a cubic yard basis, as measured in the field by the Engineer.

Below Grade Excavation - Pavement, shall be measured on a cubic yard basis, as measured in the field by the Engineer.

Below Grade Excavation - Hard Rock, shall be measured on a cubic yard basis if included in the Contract Schedule of Items, as measured in the field by the Engineer.

00330.90 Payment

Add the following to the end of this subsection:

No separate or additional payment will be made for supports at existing utilities, potholing, removal and replacement of utility locates or warning markers, placing, maintaining, and removing no-work limits around critical utility facilities, and any

additional work required for non-invasive excavation techniques or non-typical backfilling techniques, as specified in Section 00150.50(c). Payment will be considered incidental to the appropriate Excavation Pay Item under this Section that requires the incidental work.

Add the following subsection:

00330.91(f) Below Grade Excavation - Subgrade:

- Excavate “soft” subgrade at direction of the Engineer. Actual work performed on this Pay Item will be measured in place by the Engineer. Bid quantity is an “estimate” only and may vary significantly.

Add the following subsection:

00330.91(g) Below Grade Excavation - Pavement:

- Excavate failed pavement surfaces at direction of the Engineer. Actual work performed on this Pay Item will be measured in place by the Engineer. Bid quantity is an “estimate” only and may vary significantly.

Add the following subsection:

00330.91(h) Below Grade Excavation - Rock:

- Excavate hard rock at direction of the Engineer.

Add the following subsection:

00330.91(i) Obliterate Roadways:

- Limited to the lines, grades and cross sections shown on the plans or established.
- Remove pavement hard surfacing, rip and scarify rock bases as directed to match surrounding contours and drainage.

00330.92 Kinds of Incidental Earthwork

Add the following bullet to the bullet list:

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

00330.93 Excavation Basis Payment

Add the following to the end of this subsection:

See Contract Schedule of Items for excavation Pay Items. This project may include the following excavation Pay Items:

<u>Pay Item</u>	<u>Unit of Measurement</u>
(f) Below Grade Excavation - Subgrade	Cubic Yard
(g) Below Grade Excavation - Pavement	Cubic Yard
(h) Below Grade Excavation - Hard Rock	Cubic Yard
(i) Obliterate Roadway	Square Yard

00330.94 Embankment Basis Payment

Add the following to the end of this subsection:

Payment for Aggregate Base, Aggregate Subbase, Stone Embankment, and Select Borrow will be made at the Contract unit price under the associated Pay Item with that title.

Section 00350 - Geosynthetic Installation

Comply with Section 00350 of the Standard Specifications supplemented and/or modified as follows:

00350.00 Scope

Replace the word “geotextile” with the word “geosynthetics”.

00350.01 Definitions

Add the following to the end of the **Geogrid** definition:

Pay Item “Subgrade Geogrid” is roadway geogrid for soil applications only. This is intended for use in below-grade excavation or as directed.

Add the following subsection:

00350.42 Subgrade Reinforcement Geogrid Installation Requirements

(a) Placement – Prepare the surface receiving Geogrid to a smooth condition to the depth shown and as follows:

- Orient the Geogrid rolls parallel to the roadway centerline in the direction of travel.

- Unroll the Geogrid in the same direction the cover material will be placed. If the Geogrid shifts or becomes misaligned, realign it and anchor it according to the manufacturer's recommendations.
- Do not place Geogrid over coarse, cobbly round rock soils, or surfaces covered with imported aggregate with particle size in excess of 4-inch diameter. Consult with the Engineer, or Geogrid Manufacturer's Representative, for recommended applications to achieve an interlocking soil matrix.

(b) Overlaps – Overlap the Geotextile material per manufacturer's recommendations. Overlap the Geogrid in the same direction the cover material is placed with the preceding layer lapped on top of the following layer.

(c) Protection of Geogrid – Drive rubber-tired equipment on the Geogrid at no more than 5 mph. Drive tracked equipment on the Geogrid only after placing a minimum of 6 inches of cover material on top of the Geogrid. Do not turn or make sudden stops or starts on the Geogrid or cover material.

During installation cover the Geogrid with cover material as soon as possible. Do not leave uncovered for more than 5 Calendar Days.

(d) Repair – Repair or replace damaged or torn Geogrid according to manufacturer's recommendations at no cost to the Agency.

00350.90 Payment

Add the following to the end of the pay Item and unit of measurement list:

<u>Pay Item</u>	<u>Unit of Measurement</u>
(f) Subgrade Reinforcement Geogrid	Square Yard
(g) Non-woven Subgrade Geotextile	Square Yard

Add the following to the end of this subsection:

Each geosynthetic installation shall be measured along the lines and grades of the surface area actually covered according to the plans, or as required, except for drainage applications.

Section 00390 - Riprap Protection

Comply with Section 00390 of the Standard Specifications supplemented and/or modified as follows:

00390.43 Riprap Backing

Add the following to the end of this subsection:

Use either riprap geotextile or a filter blanket under the riprap.

PART 00400 – DRAINAGE AND SEWERS

Section 00405 – Trench Excavation, Bedding, and Backfill

Comply with Section 00405 of the Standard Specifications supplemented and/or modified as follows:

00405.01 General

In the paragraph that begins “Excavate, backfill and...”, replace the sentence that begins “Perform excavation for...” with the following:

Perform excavation and backfill for major structures, and conduits with a nominal inside diameter or width greater than 72 inches according to Section 00510.

00405.12 Bedding

Replace the bullet that begins “3/8” – 0 PCC Fine Aggregate...” with the following bullet:

- 3/8” – 0 PCC fine Aggregate conforming to 02690.30(g).

Add the following to the end of this subsection:

See Jackson County Standard Drawing JCRD302, “Typical Trench Section & Pipe Backfill”, for specific bedding requirements and specific pipe backfill requirements.

00405.13 Pipe Zone Material

Add the following to the end of this subsection:

See Jackson County Standard Drawing JCRD302, “Typical Trench Section & Pipe Backfill”, for specific pipe zone requirements.

00405.14 Trench Backfill

Add the following to the end of this subsection:

See Jackson County Standard Drawing JCRD302, “Typical Trench Section & Pipe Backfill”, for specific backfill requirements.

00405.14(e) Class E Backfill

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

Use controlled low-strength material (CLSM) meeting Jackson County's trench backfill requirements for CLSM.

00405.41(b) Open Trench Limit

Add the following to the end of this subsection:

No more than half of the road surface may be closed at any time for either longitudinal or transverse trenches. Trenching in travel lane or on shoulder within 3' of edge of travel lane shall be either backfilled daily or protected by sufficient means to eliminate vertical drop-off hazards. Diagonal trenches are not allowed unless otherwise approved by Jackson County.

00405.43 Dewatering

Add the following to the end of this subsection:

Contractor shall provide a means for handling roadside drainage, irrigation, and storm runoff throughout the term of the Contract. Costs associated with temporarily handling and conveying roadside drainage, irrigation, and storm water are considered incidental to one or more Contract Schedule of Items.

00405.46(a) General

Add the following to the end of this subsection:

Trenches in areas of existing pavement that will be overlain as part of this project shall be paved back with 4 inches of hot mix asphaltic concrete mix, placed in 2 lifts. Trench paving shall be completed within 20 working days of opening trench or 10 working days following completion of work, whichever is earlier. Changes to this requirement must be approved by the Engineer.

00405.46(c)(2) Class A, B, C, or D Backfill

Replace the paragraph that begins "Compact the top 3 feet..." with the following paragraph:

Compact each layer of trench backfill material within the Roadway and Shoulders, and within a 2V:1H Slope line projected from each Subgrade Shoulder, to not less than 95 percent of maximum density. Compact all other trench backfill material to not less than 90 percent of maximum density.

00405.46(c)(3) Class E Backfill

Add the following to the end of this subsection:

Use Class E backfill under all existing and future pavement and/or concrete and if edge of trench falls within 1 foot of existing and/or future pavement or concrete.

Section 00440 - Commercial Grade Concrete

Comply with Section 00440 of the Standard Specifications supplemented and/or modified as follows:

Add the following subsection:

00440.01 Terminology

According to 00110.05(a), for the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

Add the following subsection:

00440.02 Abbreviations and Definitions

ASTV – Actual Strength Test Value – See 02001.02 for definition.

00440.12 Properties of Commercial Grade Concrete

Replace the bullet that begins “Compressive strength...” with the following bullet:

- **Compressive Strength** – ASTV minimum of 3,000 psi at 28 days.

00440.14(d) Hardened CGC

Add the following to the end of this subsection:

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

00440.40(d) Weather

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

Do not place CGC when the air temperature is above 90° F without prior written approval.

Do not place CGC when the air temperature is below 35° F without prior written approval.

Protect CGC from freezing if the air temperature is expected to drop below 35° F during the first 5 Calendar Days after the placement.

Section 00442 – Controlled Low Strength Materials

Replace this section with the following:

00442.00 Scope

This work consists of furnishing and placing controlled low strength materials (CLSM) in accordance with the Contract Documents, Jackson County permit requirements, or as directed by the Engineer. All products shall be pre-approved by the Engineer in accordance to this specification.

00442.01 Definition

CLSM – A highly flowable lean concrete mix consisting of a mixture of cement, fly ash, densely graded mineral aggregates, water and admixtures. CLSM shall be capable of freely flowing to fill all voids in trenches or other areas without compaction or other additional effort, shall be of uniform density, shall be of low permeability to prevent migration of adjacent fines into the set mix, and shall excavate easily at any later time with minimal risk of damage to buried services.

Fine Aggregate CLSM – A CLSM containing a maximum size aggregate of 3/8 inch.

00442.10 Materials

Furnish Materials meeting the following requirements and/or modified in the Special Provisions:

Admixtures	02040
Fly Ash	02030.10
Portland Cement	02010.10
Water	02020

00442.11 Fine Aggregates

Aggregates shall be a densely graded virgin rock or appropriate recycled material which produces a mix meeting all requirements within this Specification. A minimum of 50 percent of the total aggregate weight shall pass a #8 sieve and no more than 5 percent

of the total aggregate by weight may pass a #200 sieve. The maximum size aggregate for fine aggregate CLSM shall pass a 3/8-inch sieve.

00442.13 Compressive Strength

CLSM shall have a 28-day compressive strength of between 50 and 150 psi, per AASHTO Designation T 22-90 or ASTM Designation C 39.

00442.14 Flowability

CLSM shall have a slump of between 6 and 8 inches as per AASHTO Designation T 119-82 or ASTM Designation C 143.

00442.15 Mix Design and Testing

Vendors who propose to supply CLSM for work with within Jackson County right-of-way shall submit a mix design and test results to the Engineer for review and approval. Jackson County will maintain an approved products list on the Jackson County Roads website. The mix submittal shall include the following information:

- (A) Company Name and Address
- (B) Company Contact Information
- (C) Identifying name and/or number for the mix design
- (D) Mix Design (including aggregate type and gradation)
- (E) Certified test results for flowability, and compressive strength.

Submittals which do not contain all the required information shall not be considered.

Products that are rejected in the field may be removed from the approved list at the discretion of the Jackson County Inspector or Engineer.

00442.16 Mixing, Placement, and Acceptance

CLSM shall be mixed accordance with subsection Sections 00756.20 or 00756.21; delivered in a truck mixer conforming to 00756.22; and conveyed in accordance with 00540.22.

Contractor shall provide and maintain steel jump plates with locks as required for traffic and safety. In paved areas open to the public, the top of the trench shall be patched with Asphalt Concrete Pavement not sooner than the CLSM is adequately set (generally 48 hours), nor longer than 10 calendar days following placement of the CLSM.

When CLSM is delivered to the job site, delivery tags shall be collected from the delivery driver and provided to the Jackson County Inspector or Engineer. The delivery tag shall contain the supplier name and the mix identifying name and/or number as identified in the supplier's submitted mix design.

The Jackson County Inspector or Engineer may reject any mix that does not appear to meet the requirements of this Specification (for example: segregation, insufficient slump, or open graded aggregates). The Jackson County Inspector or Engineer may require removal of any mix that has been placed but doesn't perform as specified.

Only fine aggregate CLSM will be allowed in pipe zones or trenches of less than 1-foot width.

In the event of extremely cold or wet conditions, and with the approval of the Jackson County Inspector or Engineer prior to use, an approved fine aggregate CLSM may have up to 94 additional pounds of cement per cubic yard added to the design mix to facilitate setting.

00442.80 Measurement

No measurement of quantities will be made for CLSM.

00442.90 Payment

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

Section 00445 - Sanitary, Storm, Culvert, Siphon and Irrigation Pipe

Comply with Section 00445 of the Standard Specifications supplemented and/or modified as follows:

00445.00 Scope

Add the following to the end of this subsection:

Prior to installation of any piping, the Contractor shall call for locates and pothole all potential utility crossings and inform the Engineer of any conflicts.

The Contractor shall coordinate the Work on any facilities with the appropriate utility company for that area. Refer to the Special Provisions for a list of utilities with facilities located within the project limits.

00445.80(a) Pipes

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

The length will be measured with no deduction for structures or fittings, along the pipe flow line from center to center of manholes, inlets, special sections or the end(s) of pipe, whichever is applicable. Payment for pipes will be based on length only for each pipe

Pay Item regardless of depth installed. Watertight Joints shall be used for all irrigation lines, storm drains, and sanitary sewers.

00445.80(b) Tee and Wye Fittings

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

There is no special pay quantity allowance for factory fabricated fittings. Payment for special fittings shall be considered incidental to drain line connection or other existing Contract Schedule of Items.

Add the following subsection:

00445.80(k) Installation Under Pavement

No special allowance shall be made for pipe installation under pavement. Trench patching is considered incidental to the pipe installation and no separate payment shall be made for materials.

Add the following subsection:

00445.80(l) Drain Line Connection

Drain Line Connection Pay Item includes locating (by excavation or water flushing), connecting existing private drain lines to newly installed culver or storm drain piping using manufactured fittings and extending existing pipes. Payment will be made for each drain line connected based on the Contractor's bid amount. Extension of existing pipe, manufactured fittings, as well as locating the existing drain line are considered incidental to this Pay Item.

00445.91 Payment

Add the following to the end of the pay Item and unit of measurement list:

<u>Pay Item</u>	<u>Unit of Measurement</u>
(n) Drain Line Connections	Each

Add the following bullets to the bullet list that follows the paragraph that begins "No separate or additional payment...":

- special fittings
- installing pipes under pavement
- trench resurfacing and patching for installations under pavement
- supports at existing utilities
- depth of pipe work

Add the following subsection:

00445.99 Incidental Basis

When neither the Special Provisions of the Contract Schedule of Items indicate separate payment for the work under this section, perform the work as incidental work for which no separate payment will be made.

No separate payment will be made for supports at existing utilities, potholing, removal and replacement of utility locates or warning markers, placing, maintaining, and removing no-work limits around critical utility facilities, and any additional work required for non-invasive excavation techniques or non-typical backfilling techniques, as specified in Section 00150. Payment will be considered incidental to the appropriate Pay Item under this Section that requires the incidental work.

Section 00470 – Manholes, Catch Basins, and Inlets

Comply with Section 00470 of the Standard Specifications supplemented and/or modified as follows:

Add the following subsection:

00470.40(c) Proprietary Products

Shall be installed according to manufacturer’s specifications.

00470.90 Payment

Add the following to the end of the pay Item and unit of measurement list:

<u>Pay Item</u>	<u>Unit of Measurement</u>
(l) Intermediate Inlet	Each
(m) Area Drain	Each
(n) Entrance Inlet	Each
(o) Utility Potholing	Lump Sum

Section 00495 – Trench Resurfacing

Comply with Section 00495 of the Standard Specifications supplemented and/or modified as follows:

Add the following subsection:

00495.40(l) Longitudinal Trench Paving

Longitudinal trenches greater in length than 100' within a travel lane, shall have existing pavement removed and replaced to full lane width (normally 10'-12') for the length of trench unless approved otherwise by Jackson County. Drag boxes or other pull-type asphalt spreaders will not be permitted lane restoration.

PART 00600 - BASES

Section 00640 - Aggregate Base and Shoulders

Delete this section in its entirety.

Section 00641 - Aggregate Subbase, Base and Shoulders

Comply with Section 00641 of the Standard Specifications supplemented and/or modified as follows:

00641.10(a) Base and Shoulder Aggregate

Add the following to the end of this subsection:

Base aggregate shall be 3/4" -0 or 1"-0 size.

00641.10(b) Subbase Aggregate

Add the following to the end of this subsection:

(4) Fracture Face - Fracture of aggregate subbase will be determined by WAQTC TM1. Ninety (90) percent minimum by weight retained on the No. 4 sieve shall have at least one mechanically induced fracture.

Aggregate Subbase shall be 4"-0 size.

00641.44(a) Aggregate Base Courses

Replace this subsection with the following:

00641.44(a) Base and Subbase Courses

Sufficiently water and compact each layer of material placed until there is no reaction or yielding observed under the compactor. Proof roll compacted base and subbase with a fully loaded 10 cubic yard dump truck and correct soft areas to the satisfaction of the Engineer. Compaction testing will not be required unless specified in the project Special Conditions. Courses not passing proof rolling will be rejected by the Engineer.

Shape the surface of each layer during the compaction operations, to meet the requirements of subsection 00641.45, to produce a uniform texture, and firmly interlock the aggregates with underlying substrate. Aggregate surfaces showing significant segregation, raveling or rutting will be rejected by the Engineer.

Apply additional water over the materials, for proper compaction, according to Section 00340, and as directed.

00641.44(b) Aggregate Subbase and Shoulder Courses

Replace this subsection with the following:

00641.44(b) Shoulder Courses - Compact each layer of material placed using a pneumatic roller or other method approved by the Engineer until there is no reaction or yielding observed under the compactor. Finish roll with a steel wheeled roller.

Shape the surface of each layer during the compaction operations, to meet the requirements of subsection 00641.45, to produce a uniform texture, and firmly interlock the aggregates with underlying substrate. Aggregate surfaces showing significant segregation, raveling or rutting will be rejected by the Engineer.

Apply additional water over the materials, for proper compaction, according to Section 00340, and as directed.

00641.90 Payment

Add the following to the end of this subsection:

Gravel driveways called for on the plans or new driveways added during construction are incidental to one or more existing Contract Schedule of Items, and shall be constructed as shown on the Plans or as directed by the Engineer.

PART 00700 – WEARING SURFACES

Section 00730 – Emulsified Asphalt Tack Coat

Comply with Section 00730 of the Standard specifications supplemented and/or modified as follows:

00730.80 Measurement

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

There will be no measurement of asphalt cement used as tack coat, unless listed as a Pay Item on the Contract Schedule of Items.

00730.90 Payment

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

No separate or additional payment will be made for furnishing and applying the emulsified asphalt tack coat, the cost of this work is included in one or more of the Pay Items, unless listed as a Pay Item is on the Contract Schedule of Items.

Section 00738 – Safety Edge

Comply with Section 00738 of the Standard Specifications supplemented and/or modified as follows:

00738.20 Safety Edge Device

Add the following paragraph to the end of this subsection:

Use a safety edge device manufactured by Transtech Systems, Inc; Advant-Edge Paving Equipment, LLC; Carlson Paving Products; Troxler Electronic Laboratories, Inc; or a similar device that produces the same wedge consolidation results. If a similar device is used, provide proof the device has been used on previous projects with acceptable results or construct a test section meeting the requirements of 00738.47

Section 00744 –Asphalt Concrete Pavement

Comply with Section 00744 of the Standard Specifications supplemented and/or modified as follows:

00744.00 Scope

Add the following to the end of this subsection:

This section shall be used on work performed under permits issued by Jackson County or if specified in the project Special Provisions.

Section 00745 - Asphalt Concrete Pavement – Statistical Acceptance

Comply with Section 00745 of the Standard Specifications supplemented and/or modified as follows:

00745.00 Scope

Add the following to the end of this subsection:

This section shall be used on Contract Work procured by Jackson County, unless otherwise specified in the project Special Provisions.

00745.17(a) Within Specification Limits

Replace the sentence that begins “If all subplot sample test results ...” with the following sentence:

If all subplot sample test results are within specification limits for all constituents, including compaction, the material will be accepted and the Contract unit price will be paid for the material represented by that test.

00745.17(b)(1) Backup Within Specification

Replace the sentence that begins “If the backup sample test results ...” with the following sentence:

If the backup sample test results for all constituents are within specification, the material will be accepted and the full Contract unit price will be paid for the material represented by that test.

00745.17(b)(3) In-Place Samples

Replace the paragraph that begins “If the Contractor chooses to sample ...” with the following paragraph:

If the Contractor chooses to sample the in-place material, sample from a minimum of three random locations from the area represented by the lot in question under the observation of the Engineer. If the in-place sample test results are within specification, the material will be accepted and paid for at the full Contract unit price. If the in-place sample test results are not within specification, the material will be accepted and paid for at an adjusted price according to 00745.95. The maximum CPF will be 1.0. Perform sampling and testing of in-place material at no additional cost to the Agency.

00745.24 Compactors

Add the following to the end of this subsection:

A minimum of 3 compactors shall be in operation during travel lane construction unless otherwise approved by Engineer. The number of rollers shall match the placement rate so as to provide complete coverage and achieve ideal unyielding compaction.

Use of pneumatic tired roller is required on leveling course placement when directed by the Engineer.

Use of vibraplate compactors or hand tampers around stationary objects such as guardrails, bridge ends, curb inlets, mail boxes, or in other areas not accessible to self-propelled rollers is required when directed by the Engineer.

00745.47(b) Drop-Offs

Replace the bullet that begins "Construct, maintain, remove, and dispose ..." with the following bullet:

- Construct, maintain, remove, and dispose of the temporary wedge at no additional cost to the Agency. ACP for the temporary wedge will be paid for at the Contract unit price.

00745.48(a)(1) Temporary End Panel

Replace the bullet that begins "Construct, maintain, remove, and dispose ..." with the following bullet:

- Construct, maintain, remove, and dispose of the temporary wedge at no additional cost to the Agency. ACP for the temporary wedge will be paid for at the Contract unit price.

00745.80 Measurement

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

The quantities of ACP will be measured on the weight basis. No separate measurement will be made for asphalt cement used in the mixture. No deduction will be made for lime or any other additive used in the mixture.

00745.90 Payment

Delete pay item (b).

Add the following to the end of this subsection:

No separate or additional payment will be made for asphalt cement used in the mixture.

Section 00759 – Miscellaneous Portland Cement Concrete Structures

Comply to Section 00759 of the Standard Specifications supplemented and/or modified as follows:

Add the following subsection:

00759.01 Terminology

According to 00110.05(a), for the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

Add the following subsection:

00759.02(c) ADA Certification for Contractors

For all supervisory personnel who will directly supervise the curb ramp Work, submit the names, telephone numbers, and copies of the ODOT ADA Certification for Contractors 7 Calendar Days before the preconstruction conference.

00759.03 Preplacement Conference

Add the following to the end of this subsection:

All supervisory personnel who have an active ODOT ADA Certification for Contractors and will directly supervise the curb ramp Work must attend the preplacement conference.

00759.12 Sidewalk Ramp Treatment

Replace the title of this subsection with “**Curb Ramp Treatment**”

Replace the sentence that begins “Furnish truncated dome detectable warning...” with the following sentence:

Furnish truncated dome detectable warning surfaces for curb ramps and accessible route islands from the QPL. Furnish truncated dome detectable warning surfaces that are safety yellow.

Add the following subsection:

00759.22 Smart Level

Slopes will be verified with the use of a 24-inch SmartTool level model 92379 or model 92500, and a 6-inch SmartTool level model 92346. The 6-inch level will only be used to measure counter slope when there is a concrete gutter. All other locations will use the 24-inch level to measure slopes.

Add the following subsection:

00759.31 Qualifications

Use supervisory personnel who have an active ODOT ADA Certification for Contractors to directly supervise the curb ramp Work.

00759.80 Measurement

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

The quantities of Structures constructed under this Section will be measured according to the following:

- **Volume Basis** - Measurement will be limited to the Neat Lines of the finished Structure as shown or directed.
- **Area Basis** - Measurement will be the finished surface, limited to the Neat Lines shown or directed.

Measurement of concrete walks will include the total area of concrete walk, including the area of concrete curb ramps within the footprint of the concrete walk.

When monolithic curb and sidewalks are measured on the area basis, measurement will include the total area of monolithic curb and sidewalk, including the area of concrete curb ramps within the footprint of the monolithic curb and sidewalk.

Measurement of concrete islands will include the total area of concrete islands, including the area of concrete curb ramps within the footprint of the concrete islands.

When concrete curb ramp construction is not adjacent to concrete walk, monolithic curb and sidewalk, or concrete island Work, the area of the concrete curb ramp Work will be included in the measurement of concrete walks.

- **Length Basis** - Measurement of concrete items will be along the face of the Structure, from end to end including curb tapers or depressed lengths at driveways and ramps. Measurement of metal handrail will be along the top rail member, from center of end post to center of end post.
- **Each Basis** - Measurement will be by actual count. Extra for Curb Ramps will be counted for each instance of where a curb ramp crosses a curb at the transition between a pedestrian facility and a roadway.

00759.90 Payment

Replace pay items (m) and (n) with the following pay item:

(n) Extra for Curb Ramps Each

Replace pay items (o) and (p) with the following pay item:

(o) Truncated Domes on New Surfaces Square Foot
(p) Truncated Domes on Existing Surfaces Square Foot

Add the following after the sentence that begins “In item (a)”;

Item (a) includes the curb runs constructed adjacent to the curb ramps.

Add the following after the sentence that begins “Items (e) and (f)”;

Item (f) includes the curb runs constructed adjacent to the curb ramps.

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

Item (n) includes the additional Work required to construct a curb ramp or replace an existing curb ramp. When replacing an existing curb ramp or retrofitting a curb ramp into an existing concrete pedestrian facility, Item (n) also includes saw cutting and removal.

Add the following to the end of this subsection:

No separate or additional payment will be made for providing supervisory personnel who have an active ODOT ADA Certification for Contractors to directly supervise the curb ramp Work.

PART 00800 – PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES
Section 00810 - Metal Guardrail

Comply to Section 00810 of the Standard Specifications supplemented and/or modified as follows:

00810.10 Materials

In the list of materials, replace the line that begins “Wood Guardrail Blocks...” with the following line:

Guardrail Blocks 02110.20

00810.11 Posts

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

Guardrail posts, except as specified for use on bridges or otherwise shown or directed, shall be wood meeting the requirements of 0810.10.

00810.15 Salvaged Materials

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

All materials shall be new.

00810.40 Timing and Coordination of Work

Add the following to the end of this subsection:

Contact the Engineer and appropriate utilities 72 hours before beginning hand digging guardrail post holes.

00810.41 Excavation and Backfill

Add the following paragraph to the end of this subsection:

Hand dig guardrail post holes or use other non-invasive methods when post are located within 24 inches surrounding the outside dimensions of all sides of underground utilities.

00810.90 Payment

Add the following to the end of this subsection:

No separate or additional payment will be made for hand dug guardrail post holes. Hand digging guardrail post holes will be considered incidental to one or more of the Contract Schedule of Items.

Section 00850 – Common Provisions for Pavement Markings

Comply to Section 00850 of the Standard Specifications supplemented and/or modified as follows:

00850.45 Installation

Add the following bullet before the bullet that begins “Place material according to...”:

- Place material between May 1 and October 15.

Replace the bullet that begins “Place material according to...” with the following bullet:

- Place material according to the manufacturer’s installation instructions.

Section 00865 – Longitudinal Pavement Markings – Durable

Comply with Section 00865 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

00865.80 Measurement

Measurement will be made from the neat line off the plans. Any additional striping will be measured in the field.

PART 01000 – RIGHT OF WAY DEVELOPMENT AND CONTROL

Section 01030 - Seeding

Comply with Section 01030 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

01030.02 Definitions:

Add the following definition to the definition list:

Disturbed Soil - Any on-site soil surface disturbed by construction activities including cut or filled areas, stockpiled soil, access roads, wetlands, or other off-site project related surfaces areas of disturbance as determined by the Engineer.

01030.43(a) Temporary Seeding

Replace the sentence that begins “Temporarily seed disturbed...” with the following:

Temporarily seed disturbed Soils and slopes that are not at finished grade and which will be exposed for 14 days or longer before being disturbed again.

01030.90 Payment

Add the following to the end of this subsection:

If “Temporary Seeding” is not listed as a Pay Item, it is incidental Work for which no separate payment will be made. If “Temporary Seeding” areas achieve establishment standards for “Permanent Seeding” as specified in 01030.43 and 01030.60, then payment will be made as “Permanent Seeding” at the Contract unit price.

Section 01070 - Mailbox Supports

Comply with Section 01070 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

01070.10 Reinforcement

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

Refer to the Jackson County Standard Drawings JCRD201 thru JCRD205.

01070.11 Concrete

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

Refer to the Jackson County Standard Drawings JCRD201 thru JCRD205.

01070.12 Tube Support Frame

Replace this subsection, expect for the subsection number, with the following:

01070.12 Support Frame

Refer to the Jackson County Standard Drawings JCRD201 thru JCRD205.

01070.13 Mounting Brackets and Hardware

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

Refer to the Jackson County Standard Drawings JCRD201 thru JCRD205.

01070.14 Post Mounting Socket

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

Refer to the Jackson County Standard Drawings JCRD201 thru JCRD205.

01070.40 General

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

Protect and maintain mailboxes and supports at locations accessible to the delivery agent and as convenient as possible for the public being served. This may require removing and relocating the mailboxes and supports more than once to maintain service. When roadway construction is completed, install the mailboxes and newspaper boxes on new supports in their permanent locations as shown or directed. Relocate newspaper boxes to new mailbox supports. In the event of a single stand-alone newspaper box, relocate existing post and newspaper box.

Refer to the Jackson County Standard Drawings JCRD201 thru JCRD205.

If property owners want to keep the original mailbox support, place the support on the owner's property adjacent to the Work. Otherwise, dispose of the original mailbox support according to 00290.20.

01070.80 Measurement

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

The quantities of mailbox supports will be measured on the unit basis of each kind of mailbox support, regardless of size, installed in permanent location.

Temporary mailbox locations shall not be measured for payment.

Relocated newspaper boxes shall not be measured for payment.

01070.90 Payment

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

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

Pay Item	Unit of Measurement
(a) Single Mailbox Supports	Each
(b) Multiple Mailbox Supports	Each

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

No separate or additional payment will be made for:

- Removing existing mailbox supports
- Providing temporary installations
- Installing new supports in permanent locations
- Installing owner-furnished mailboxes and newspaper boxes

PART 02000 – MATERIALS

Section 02001 – Concrete

Comply with Section 02001 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02001.01 General

Replace the sentence that begins “Provide quality control...”, with the following sentence:

Provide quality control according to Section 00165 and this Section.

02001.02 Abbreviations and Definitions

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

- ASTV** - Actual Strength Test Value - average of test cylinder compressive strengths
 f'_c - Minimum Specified Compressive Strength at 28 days
 f'_{cr} - Average Compressive Strength Over-design. The average strength required to assure that, with normal variations, the concrete will meet f'_c
GGBFS - Ground Granulated Blast Furnace Slag
HPC - High Performance Concrete
HRWRA - High-Range Water-Reducing Admixture (super-plasticizer)
PPCM - Precast prestressed concrete member
SCM - Supplementary Cementitious Materials
SSD - Saturated Surface-Dry
w/cm Ratio - Water-Cementitious Material Ratio
WRA - Water Reducing Admixture

Cementitious Materials - Portland cement and supplementary cementitious materials.

High Performance Concrete - Concrete designed for enhanced durability and performance characteristics. High performance concrete is identified by the letters "HPC" in front of the concrete class designation (for example, HPC4500 - 1 1/2).

Moderate Exposure - Elevations below 1,000 feet.

Pozzolans - Fly ash, silica fume, and metakaolin.

Severe Exposure - Elevations 1,000 feet and above.

Supplementary Cementitious Materials - Fly ash, silica fume, metakaolin, and ground granulated blast furnace slag.

02001.10 Materials

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

Furnish Materials meeting the requirements of the following:

Aggregates	02690
Cement	02010
Chemical Admixtures.....	02040
Concrete Modifiers.....	02035

Supplementary Cementitious Materials	02030
Synthetic Fiber Reinforcing.....	02045
Water	02020

02001.20(a) Strength

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

Provide concrete meeting the required Classes shown in the Contract Documents. The class of concrete designates the minimum required compressive strength, f'_c at 28 days.

Table 02001-1

Concrete Strength and Water/Cementitious Material (w/cm) Ratio		
Type of Concrete	Strength (PSI)	Maximum w/cm Ratio
Structural	3300	0.50
	3300 (Seal)	0.45
	4000	0.48
	HPC4500	0.40
	5000 and Above	0.40 ¹
	HPC5000 and above	0.40
Drilled Shaft	4000	0.48
Paving	4000	0.44
¹ PPCM's with cast-in-place decks and no entrained air may have w/cm as follows: 5000 psi - 0.48; 5500 psi - 0.44; 6000 psi and up - 0.42		

(1) Required Over Design Strength (f'_{cr}) - Using the ASTV from either field results or trial batch cylinder's, provide calculations demonstrating compliance with one of the following:

- $f'_{cr} = f'_c \times 1.20$ for up to but not including Class 6000; $f'_{cr} = f'_c \times 1.15$ for Class 6000 and higher

- $f'_{cr} = f'_c + 1.34 \times S^1$ for up to but not including Class 6000; $f'_{cr} = f'_c + 1.28 \times S^1$ for Class 6000 and higher

¹ For current designs, S is the standard deviation of 28-Day cylinder strengths from the available data set. For new mix designs, the second option above may be used if there are at least 15 sets of 28-Day cylinders from a similar class (\pm 1,000 psi) mix design produced at the same plant.

(2) Flexural Beams - Flexural beams for paving concrete mix designs shall achieve 600 psi at 28 Days.

02001.20(c) Slump

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

Provide concrete at the appropriate slump shown in Table 02001-3. Take corrective action to maintain a consistent slump at the point of discharge from the delivery vehicle.

Table 02001-3

Concrete Slump	
Condition	Slump
Concrete without WRA	4" max.
Concrete with WRA	5" max.
Concrete with HRWRA	5 1/2" \pm 2 1/2"
Precast Prestressed Concrete with HRWRA	10" max.
Seal Concrete	8" \pm 2"
Drilled Shaft Concrete	8 1/2" \pm 1 1/2" ¹
¹ Maintain a minimum slump of 4 inches throughout drilled shaft placement, including temporary casing extraction.	

Add the following subsection:

02001.20(e) Durability - For HPC and SFC designs, except designs for precast bridge rail elements, the following additional requirements apply:

Test	Test Method	Acceptance Value
Length Change	ASTM C157	-0.045%
Permeability	AASHTO T 277	1,000 Coulombs (max.) at 90 days ¹

¹ Only required for alternate HPC designs. See 02001.30(b)(2).

02001.30 Concrete Mix Design

Replace this subsection with the following subsection:

02001.30 Concrete Constituents:

(a) Portland Cement - Use AASHTO M 85 or ASTM C150, Type I or II cement for structural or paving concrete. Use AASHTO M 85 or ASTM C150, Type III cement for precast prestressed concrete. Provide all cement from the QPL.

(b) Supplementary Cementitious Materials - SCM may be used separately or in combinations up to the specified maximum percentage by mass according to the following:

(1) General Limits - SCM may be used separately or in combination as shown:

Separate SCM	Maximum
Fly Ash + Other Pozzolans	25%
GGBFS	50%
Silica Fume	5%

Combined SCM	Maximum
Fly Ash + Other Pozzolans + GGBFS + Silica Fume	50%*
Fly Ash + Other Pozzolans + Silica Fume	30%*

* Fly ash + other pozzolans shall constitute no more than 25% and silica fume shall constitute no more than 5% of the total weight of cementitious materials.

When silica fume is added to truck mixed concrete, mix the batch a minimum of 100 revolutions at the mixing speed specified by the manufacturer before leaving the batch plant.

(2) HPC Cementitious Composition - Provide HPC with one of the following:

- Cementitious material with 66 percent portland cement, 30 percent fly ash, and 4 percent silica fume.
- Cement with SCM proportioned according to 02001.30(b)(1) and with trial batches performed to demonstrate that the proposed alternate mix design provides a maximum of 1,000 coulombs at 90 days when tested according to AASTHO T 277.

(c) Blended Hydraulic Cement - Blended hydraulic cement may be used subject to the limits of 02001.30(b) and 02010.20.

(d) Chemical Admixtures - Use chemical admixtures according to the manufacturer's recommendations. Use WRA in all seal concrete and in Class 5000 concrete or greater. Use HRWRA in all HPC.

Use a superset extender from the QPL in all concrete for bridge decks. Use an appropriate amount to extend the initial set time of the concrete by 90 minutes.

(e) Aggregate - If the nominal maximum size of the coarse Aggregate is not included as a part of the class of concrete, or shown on the Plans, any size from 1 1/2-inch to 3/8-inch nominal maximum size Aggregate may be used according to ACI guidelines except:

- Use 1-1/2 inch nominal maximum size Aggregates in bridge deck concrete.
- Use 1-1/2 inch nominal maximum size Aggregates in paving concrete unless otherwise indicated.
- Use 3/8 inch nominal maximum size Aggregates in drilled shafts unless otherwise indicated.

(f) Synthetic Fiber Reinforcing for Concrete - Use synthetic fiber reinforcing from the QPL and according to Section 02045 in all bridge deck and silica fume overlay concrete. Use synthetic fiber reinforcing according to the manufacturer's recommendations at the rate designated on the QPL. Fiber packaging is not allowed in the mixed concrete.

Proportion all HPC for a minimum coarse Aggregate absolute solid volume according to Table 02001-4:

Table 02001-4

Absolute Solid Volume	
Maximum Nominal Aggregate Size	Cu. Yd. (Aggregate) / Cu. Yd. (Concrete)
3/8"	0.36
1/2"	0.38
3/4"	0.40
1"	0.42
1 1/2"	0.44

Two or more Aggregate products or sources meeting Specifications may be blended to improve concrete properties. Blending non-specification Aggregate Materials, except for gradation, with specification Materials is not allowed.

02001.31 Concrete Constituents

Replace this subsection with the following subsection:

02001.31 Concrete Mix Design

Submit new or current mix designs, prepared by a CCT, for each required class of structural or paving concrete to the Engineer for review. Allow 21 Calendar Days for the review. Design mixes by the volumetric method in ACI 211.1 to achieve the properties of 02001.20. Do not proceed with concrete placement until the Engineer has determined that the mix design complies with the Specifications. Review of concrete mix designs does not relieve the Contractor of the responsibility to provide concrete meeting the Specification requirements.

02001.32(a) Trial Batch

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

Make at least one trial batch for each concrete mix design. Notify the Engineer at least 48 hours before making each trial batch. The Engineer may witness preparation and testing. Prepare and test trial batches using the same materials, at the same proportions, and having the same plastic properties of concrete that will be used in the Project. Simulate haul time and mixing conditions to ensure proper workability at the jobsite. Furnish all materials, Equipment and Work required for designing the mixes, testing Materials, and making trial batches to verify the final design for final use at no additional cost to the Agency.

02001.32(b) Plastic Concrete

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

For each trial batch, test the temperature, slump, density, and air content and compute the w/cm ratio and yield according to the following test methods:

Test	Test Method
Sampling Fresh Concrete	WAQTC TM 2
Slump	AASHTO T 119 ¹
Density	AASHTO T 121
Yield	AASHTO T 121
Air Content	AASHTO T 152
Concrete Temperature	AASHTO T 309
Molding Concrete Specimens	AASHTO T 23 or R 39 ²
Water-Cement Ratio	³

¹ For drilled shaft concrete test the slump retention characteristics by subsequent tests at half-hour intervals for the duration of the estimated drilled shaft placement, including temporary casing extraction. Report in table or graphical format.

² Cast cylinders in single-use plastic molds

³ Use ODOT's Field Operating Procedure for AASHTO T 121 in the MFTP

02001.32(c) Strength Test

Replace this subsection with the following subsection:

02001.32(c) Hardened Concrete

When applicable, test properties according to the following test methods:

Test	Test Method
Compressive Strength	AASHTO T 22
Flexural Strength	AASHTO T 97
Length Change	ASTM C157
Permeability	AASHTO T 277

(1) Compressive Strength Tests - For each trial batch, cast and cure at least three test cylinders according to AASHTO T 23 or AASHTO R 39, in 6 inch by 12 inch or 4 inch by 8 inch single use plastic molds. Test at 28 days according to AASHTO T 22.

(2) Flexural Strength Tests - For each paving concrete trial batch, cast and cure at least three flexural beams according to AASHTO T 23 or AASHTO R 39. Test flexural beams at 28 days according to AASHTO T 97.

(3) Length Change Tests - For all HPC and SFC mix designs, except for precast bridge rail elements, make at least three specimens from the trial batch for length change testing. Sample prisms shall have a square, 4 inch by 4 inch cross section. Wet cure the samples until they have reached an age of 28 days, including the period in the molds. Store and measure samples according to ASTM C157, Section 11.1.2. Report length change results at 28 days.

(4) Permeability Tests - For alternate HPC mix designs, make at least three specimens from the trial batch for permeability testing. Prepare, cure, dry and test according to AASHTO T 277. Report permeability in coulombs at 90 days.

02201.32(d) Length Change Tests

Delete this subsection in its entirety.

02001.32(e) Permeability Tests

Delete this subsection in its entirety.

02001.33 Required Over Design Strength (f'_{cr}) for New Mix Designs

Delete this subsection in its entirety.

02001.34(a) Length Change Tests

Delete this subsection in its entirety.

02001.34(b) Permeability Tests

Delete this subsection in its entirety.

02001.35 Required Submittals for Mix Designs

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

Submit the following information for each concrete mix design:

(a) Supplier's Information - Provide the supplier's unique mix design identification number and batch plant location.

(b) Mix Design Constituent Proportions:

- Weight per cubic yard (pounds per cubic yard) of cement, SCM, fine Aggregates and coarse Aggregates (SSD), mix water, concrete modifiers, and chemical admixtures
- Absolute volumes of cement, SCM, fine Aggregates and coarse Aggregates (SSD), mix water, air content, concrete modifiers, and chemical admixtures
- Dosage rates for chemical admixtures (ounces per cubic yard)
- w/cm ratio including all chemical admixtures

(c) Aggregates - Identify the Aggregate source by the ODOT source number. Report current values of the following:

- Bulk specific gravities (SSD)
- Fine Aggregate absorptions
- Coarse Aggregate absorptions
- Dry-rodded density of coarse Aggregates
- Average stockpile gradations
- Fineness modulus of sand used in the mix design calculations

(d) Cement - For each cement used, provide the following:

- Manufacturer
- Brand name
- Type
- Source or location plant
- QPL product number

(e) SCM - For each SCM used, provide the following:

- Manufacturer
- Brand name
- Source
- Class
- QPL product number

(f) Concrete Modifiers - For each concrete modifier used, provide the following:

- Manufacturer
- Brand name
- QPL product number

(g) Admixtures - For each admixture used, identify the following:

- Manufacturer
- Brand name
- Design dosage rate
- QPL product number

(h) Synthetic Fiber Reinforcing - For each synthetic fiber reinforcing used, provide:

- Manufacturer
- Brand name
- Design dosage rate
- QPL product number

(i) Water - Identify the source of water to be used and provide a certificate of compliance certifying that the water meets the requirements of 02020.10.

(j) Plastic Concrete Tests - Report the temperature, slump, density, air content, yield, and w/cm ratio of the trial batch or the average of these values for the cylinder sets presented for evaluation of a current mix design.

For drilled shaft concrete, report the following additional information:

- The total time estimate from initial batching through drilled shaft placement, including haul time, placing concrete, and temporary casing extraction.
- Initial slump test results and subsequent results at 15-minute intervals, verifying a minimum slump of 4 inches is maintained for the total time estimated for drilled shaft placement, including temporary casing extraction. Report data in a table or graph format.

(k) Compressive Strength Test Results - Report the individual test results and the ASTV of cylinders from the trial batch for new mix designs. For current designs, provide the individual tests and the average of the cylinder sets presented for evaluation.

(l) Strength Analysis - Provide an analysis, showing all calculations, demonstrating that the mix design meets the requirements of 02001.20(a).

(m) HPC and SFC Test Results - For all HPC and SFC designs, report the length change according to 02001.32(c)(3).

For alternate HPC designs, report the permeability according to 02001.32(c)(4). An SFC permeability report is not required.

HPC test results are not required for precast bridge rail elements.

(n) Quality Control Personnel - Provide the name and certification number of the CCT who prepared the mix design, the QCT who performed the plastic concrete tests and cast the test cylinders, the CSTT who tested the cylinders, and the ODOT certification number of the laboratory where the cylinders were tested.

02001.36 Adjusting Concrete Proportions

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

After a mix design has been reviewed and accepted, submit any proposed adjustments to concrete proportions for review. Significant changes to the mix design, as determined by the Engineer, may require verification of performance by trial batch according to 02001.32. Significant changes include, but are not limited to the following:

- Decreases in cementitious material content.
- Changes in cement source.
- Increases in SCM quantity replacing cement.
- Changes in SCM source.
- Substitution of aggregates from a different source.

- Admixture product changes.
- Large admixture dosage adjustments.
- Excluding seasonal adjustments for air entraining agents and Type A or D water reducers (± 25 oz/cubic yard).

02001.37 Trial Batch Costs

Delete this subsection in its entirety.

02001.50(a) Certified Aggregate Technician (CAgT)

Add the following bullet to the bullet list of duties:

- Notify the CCT whenever a fine aggregate fineness modulus varies by more than ± 0.20 from the mix design it is to be used in.

02001.50(b) Quality Control Technician (QCT)

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

- Duties:
 - Attend pre-placement meetings for bridge deck pours and paving.
 - Be at the concrete placement site when concrete placement is in progress.
 - Have a copy of the mix design on site and available during concrete placement.
 - Obtain and check each batch ticket upon arrival of the concrete at the jobsite for the correct mix design.
 - Sample the concrete and test for ambient air temperature, plastic concrete temperature, slump, air content, density, w/cm ratio and yield at the frequencies required by and according to the tests listed in the MFTP, after concrete mixture proportions are adjusted in the field, and at such times as requested by the Engineer.
 - Notify the Contractor and the Engineer immediately when the concrete is not in compliance with the Specifications.
 - Be in direct contact with the CCT by telephone, radio or other means to convey information.
 - Notify the CCT of loads rejected and the reason for rejection.
 - Notify the CCT immediately whenever the w/cm ratio varies from the mix design target by more than ± 0.03 .
 - Notify the CCT immediately whenever the air content varies from the mix design target by more than ± 1.5 percent.

- Notify the CCT immediately whenever the slump varies from the allowable limits of Table 02001-3.
- Notify the CCT immediately whenever the density of the plastic concrete varies from the mix design target by more than ± 3.0 pounds per cubic foot.

02001.50(c) Concrete Control Technician (CCT)

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

- Duties:
 - Prepare new concrete mix designs.
 - Adjust current mix designs.
 - Notify the Engineer 48 hours prior to trial batching.
 - Control the quality of concrete during production.
 - Submit proposed adjustments of the mix design, in writing, to the Engineer for approval by the middle of the following work shift.
 - Ensure approved adjustments are implemented prior to proceeding with production.
 - Test the fine and coarse aggregates for total moisture content according to AASHTO T 255 before batching is started and when there is a significant change in the slump of the concrete. Moisture testing may be by an alternate method if approved by the Engineer. Provide moisture content test results to the Engineer upon request.
 - Visually inspect the coarse aggregate for changes in moisture content throughout the day. Perform necessary testing for total moisture, and make mixture adjustments if necessary.
 - Monitor concrete properties and compressive strength tests throughout the duration of the Project.
 - Make adjustments to loads that fail to meet the air content or slump criteria of these Specifications prior to the 90-minute time limit. Adjustments shall comply with the provisions of ASTM C94.
 - Make adjustments to maintain a satisfactory over-design f'_{cr} .
 - Perform an analysis and verify the accuracy of coarse and fine aggregate moistures whenever the w/cm ratio varies from the mix design target by more than ± 0.03 .
 - Perform an analysis and make necessary adjustments whenever the unit weight of the plastic concrete varies from the mix design by more than ± 3.0 pounds per cubic foot.
 - Perform an analysis whenever the fineness modulus of the fine aggregate varies by more than ± 0.20 from the established mix design. If necessary to maintain proper workability, ability to pump or ability to finish, make an

adjustment to the coarse/fine aggregate ratio and submit to the Engineer by the middle of the following work shift.

Section 02040 – Chemical Admixtures

Comply with Section 02040 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02040.10 Materials

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

Furnish admixtures from the QPL.

Section 02050 – Curing Materials

Comply with Section 02050 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02050.10 Liquid Compounds

Replace the paragraph that begins “Furnish liquid membrane-forming curing...” with the following paragraph:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309.

Delete the sentence that begins “Before using liquid compounds, submit...” in its entirety.

02050.20 Polyethylene Films

Replace the sentence that begins “Furnish clear or white...” with the following sentence:

Furnish clear or white polyethylene films for curing concrete meeting the requirements of ASTM C171.

Section 02190 – Preservative Treatment of Timber

Comply with Section 02190 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02190.20 Drying After Treatment

Replace the sentence that begins “When using waterborne preservatives...” with the following sentence:

When using waterborne preservatives, dry items according to AWWA T1, Section 7.

02190.30 Field Treatment

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

Field-treat cuts, abrasions, bolt holes, drilled surfaces or any other damaged wood surfaces according to AWWA M4, Section 6 with a preservative from the QPL.

Section 02410 – Concrete Pipe

Comply with Section 02410 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02410.10(a) End Designs

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

Where rubber gasket joints are used, modify the design of the ends of the pipe sections according to ASTM C443 to accommodate rubber gaskets.

Section 02415 – Plastic Pipe

Comply with Section 02415 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02415.10 Corrugated Polyethylene Pipe

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

Furnish corrugated polyethylene pipe from the QPL and meeting the following requirements:

- Corrugated polyethylene drain pipe.....AASHTO M 252
- Corrugated polyethylene culvert pipeAASHTO M 294, Type S or D
- Corrugated polyethylene storm sewer pipeAASHTO M 294, Type S or D

The allowable nominal inside diameter of corrugated polyethylene pipe is as follows:

- Corrugated polyethylene drain pipe..... Up to 24”
- Corrugated polyethylene culvert pipe12” - 60”
- Corrugated polyethylene storm sewer pipe12” - 60”

Furnish watertight joints for corrugated polyethylene pipe from the QPL and meeting the requirements of ASTM D3212 when used for culvert or storm sewer. Furnish soil tight joints for corrugated polyethylene drain pipe.

002415.30 Steel Reinforced Polyethylene Pipe

Replace the sentence that begins “Furnish steel reinforced polyethylene pipe meeting the following...” with the following sentence:

Furnish steel reinforced polyethylene pipe from the QPL and meeting the following requirements:

In the paragraph that begins “For Steel reinforced polyethylene pipe...”, replace the sentence that begins “Provide watertight joint...” with the following sentence:

Provide watertight joints from the QPL and meeting the requirements of ASTM D3212.

02415.40 Polypropylene Pipe

Replace the sentence that begins “Furnish polypropylene pipe...” with the following sentence:

Furnish polypropylene pipe and fittings from the QPL and meeting the following requirements:

Section 02440 – Joint Materials

Comply with Section 02440 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

02440.19 Steel Bridging Plate

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

Furnish ASTM A36 steel bridging plate with a minimum thickness of 1/4 inch and a width of 8 inches, cut in lengths of 4 to 8 feet. Drill spike holes at 12-inch centers along the centerline of the plate.

02440.20 Preformed Joint Seal

Replace this subsection, except for the subsection number, with the following:

02440.20 Strip Seal

Furnish strip seals from the QPL and conforming to ASTM D5973.

Add the following subsection:

02440.22 Preformed Compression Joint Seal

Furnish preformed compression joint seals from the QPL and conforming to the requirements of AASHTO M 297.

Add the following subsection:

02440.23 Precompressed Foam Silicone Joint Seal

Furnish precompressed foam silicone joint seals from the QPL.

02440.30 Hot Poured Joint Filler

Replace this subsection with the following subsection:

02440.30 Hot Applied Joint Sealant

Furnish hot applied joint sealant from the QPL.

02440.40 Gaskets for Concrete Pipe and Precast Manhole Section Joints

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

(a) Preformed Flexible Joint Sealant - Furnish Materials for tongue and groove or key lock manhole joints conforming to the requirements of ASTM C990.

(b) Rubber Gaskets - Furnish Materials for O-ring manhole and concrete pipe joints conforming to ASTM C443.

02440.70(b) Rubber

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

Provide rubber water stops to the dimension shown and conforming to the requirements of ASTM C923, ASTM C1478, or ASTM F2510 as appropriate for the specific structure and pipe types.

Section 02690 – PCC Aggregates

Replace Section 02690 of the Standard Specifications or Supplemental Standard Specifications, supplemented and/or modified as follows:

Description

02690.00 Scope - This Section includes the requirements for coarse and fine aggregates for portland cement concrete.

02690.01 Definitions:

Coating - Foreign or deleterious substances found adhering to the aggregate particles.

Detrimental Materials - Materials that adversely affect concrete, including but not limited to clay, shale, mica, silt, bark, alkali, sticks, organic matter, soft and flaky particles.

Nominal Maximum Size of Aggregate - One sieve larger than the first sieve that retains more than 10 percent of the material using an agency specified set of sieves based on cumulative percent retained. Where large gaps in specification sieves exist, intermediate sieves may be inserted to determine nominal maximum size.

Materials

02690.10 Materials - PCC Aggregates shall consist of natural or crushed rock that is hard, strong, durable and free from adherent coatings or other detrimental materials.

Produce, handle and store the aggregates in a way that will maintain passing material properties and avoid introducing deleterious materials or segregation prior to its use in portland cement concrete.

02690.11 Alternate Grading - The Contractor may request approval to produce coarse and fine aggregates in sizes other than those stated in 02690.20 and 02690.30. The request shall be in writing, and shall state the proposed target value and specified tolerances for each of the individual sieve sizes of the materials the Contractor proposes to produce.

02690.12 Acceptance of Aggregate - Acceptance of aggregate will be according to Section 00165 and based on the Contractor's quality control testing, if verified, according to Section 00165.

(a) Aggregate Gradation - A stockpile contains specification aggregate gradation when the quality level for each sieve size calculated according to 00165.40 is equal to or greater than the quality level indicated in Table 00165-2 for a PF of 1.00. Each required sample represents a subplot. When the quality level indicated in Table 00165-2 yields a PF of less than 1.00 for any constituent, the material is non-specification.

(b) Non-specification Aggregate Gradation - Stockpiled aggregates that contain non-specification aggregate gradation will be rejected by the Engineer unless non specification material is removed from the stockpile. Do not add additional material to the stockpile until enough non-specification material is removed so that the quality level for each constituent is equal to or greater than the quality level in Table 00165-2 for a 1.00 PF.

Reprocessing of non-conforming material and the testing required for acceptance will be

at no additional cost to the Agency. Acceptance of reprocessed material will be based on passing test results or accepted visually by the Engineer.

02690.20 Coarse Aggregate:

(a) **Harmful Substances** - Harmful substances shall not exceed the following limits:

Test	Test Method		Percent (by Weight)
	ODOT	AASHTO	
Lightweight Pieces	–	T 113	1.0
Material passing No. 200 sieve	–	T 11	1.0
Wood Particles	TM 225	–	0.05

(b) **Soundness** - Coarse aggregates for concrete shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 12 percent by weight.

(c) **Durability** - Coarse aggregates shall meet the following durability requirements:

Test	Test Method		Requirements
	ODOT	AASHTO	
Abrasion	–	T 96	30.0% Max.
Oregon Air Aggregate Degradation:			
Passing No. 20 sieve	TM 208	–	30.0% Max.
Sediment Height	TM 208	–	3.0" Max.

(d) **PCC Paving Aggregate** - In addition to requirements above, comply with the following:

(1) **Fracture** - Provide aggregate with at least two fractured faces on at least 50 percent of the particles retained on the 3/8 inch, 1/2 inch, 3/4 inch, 1 inch, and 1 1/2 inch sieves, as determined by AASHTO T 335.

(2) **Elongated Pieces** - Provide aggregate with elongated pieces not exceeding 10 percent by weight of the material retained on the No. 4 sieve when tested according to ODOT TM 229 with the proportional caliper device set at a ratio of 5:1.

(e) **Grading and Separation by Sizes for Prestressed Concrete** - Sampling shall be according to AASHTO T 2 and sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. PCC coarse aggregate shall conform to grading and separated sizes as follows:

(1) Where indicated in Table 02690-1, the coarse aggregate shall be separated into two sizes and each separated size shall be measured into the batch in the quantity determined by the mix design.

For each of the indicated maximum sizes of coarse aggregates, the separated sizes shall be as indicated in Table 02690-2:

Table 02690-1

Maximum Nominal Size of Aggregates	Separated Sizes
1"	1" - No. 4
3/4"	3/4" - No. 4
3/4"	3/4" - 1/2" and 1/2" - No. 4
3/4"	3/4" - 3/8" and 3/8" - No. 4

(2) The grading of each of the specified separated sizes of coarse aggregate shall conform to the following:

Table 02690-2

	Separated Sizes					
	Sieve Size 1" - No. 4	3/4" - No. 4	3/4" - 1/2"	3/4" - 3/8"	1/2" - No. 4	3/8" - No. 4
	Percent Passing (by Weight)					
1 1/2"	100	—	—	—	—	—
1"	90 - 100	100	100	100	—	—
3/4"	50 - 80	90 - 100	85 - 100	85 - 100	100	100
1/2"	—	—	0 - 15	—	85 - 100	—
3/8"	15 - 40	20 - 50	—	0 - 15	35 - 65	85 - 100
No. 4	0 - 10	0 - 10	—	—	0 - 15	0 - 15
No. 200	*	*	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

(f) **Grading and Separation by Sizes for Other Concrete** - Sampling shall be according to AASHTO T 2. Sieve analysis shall be according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Tables 02690-3 and 02690-4 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-3

Gradation of Coarse Aggregates			
Combined* Sizes	Separated Sizes	Separated Sizes	Separated Sizes

Sieve Size	1 1/2" - No. 4	1 1/2" - 3/4"	1" - No. 4	3/4" - 1/2"
	Percent Passing (by Weight)			
2"	100	100	—	—
1 1/2"	90 - 100	90 - 100	100	—
1"	70 - 89	20 - 55	90 - 100	100
3/4"	35 - 70	0 - 15	—	85 - 100
1/2"	—	—	25 - 60	0 - 15
3/8"	10 - 30	0 - 5	—	—
No. 4	0 - 5	—	0 - 10	—
No. 8	—	—	0 - 5	—
No. 200	**	**	**	**

* For 1 1/2 inch coarse aggregate use two or more separated sizes which when combined shall meet the gradation limits for 1 1/2" - No. 4

** See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

Table 02690-4
Gradation of Coarse Aggregates

Sieve Size	Separated or			
	Separated	Combined	Separated	Separated
	Sizes	Sizes	Sizes	Sizes
	3/4" - 3/8"	3/4" - No. 4	1/2" - No. 4	3/8" - No. 8
Percent Passing (by Weight)				
1"	100	100	—	—
3/4"	90 - 100	90 - 100	100	—
1/2"	20 - 55	—	90 - 100	100
3/8"	0 - 15	20 - 55	40 - 70	85 - 100
No. 4	0 - 5	0 - 10	0 - 15	10 - 30
No. 8	—	0 - 5	0 - 5	0 - 10
No. 16	—	—	—	0 - 5
No. 200	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

02690.30 Fine Aggregates:

(a) Different Sources - Do not mix fine aggregates from different sources of supply, or store in the same pile. Do not use alternately in the same class of mix, without prior approval.

(b) Harmful Substances - The amount of harmful substances shall not exceed the following limits:

Test	Test Method (AASHTO)	Percent (by Weight)
Lightweight Pieces	T 113	2.0%
Material passing No. 200 sieve	T 11	3.0%

(c) Soundness - Fine aggregate shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 10 percent by weight.

(d) Organic Impurities - All fine aggregate shall meet the requirements of AASHTO M 6 for organic impurities.

(e) Sand Equivalent - Fine aggregate shall be tested according to AASHTO T 176 and shall have a sand equivalent of not less than 75.

(f) Sand for Mortar - Sand for mortar shall conform to the requirements of this Section.

(g) Grading - Sampling shall be according to AASHTO T 2. Sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Table 02690-5 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-5
Gradation of Fine Aggregate*

Sieve Size	Percent Passing (by Weight)
3/8"	100
No. 4	90 - 100
No. 8	70 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	5 - 30
No. 100	0 - 10
No. 200	**

* Determine the fineness modulus according to AASHTO T 27 and AASHTO T 11. Maintain the fine aggregate fineness modulus within plus or minus 0.20 from the fineness modulus used in the Contractor's mix design. Fine aggregates in which the fineness modulus varies by more than 0.20 from the mix design target shall not be incorporated until an assessment is done to determine whether an adjustment in the aggregate proportions is necessary. Proportion changes must be performed by a CCT according to

the provisions of ACI 211. Submit analysis of FM and mix design adjustments to the Engineer for approval.

** See 02690.30(b). Do not evaluate material passing No. 200 sieve according to 0165.40.

Section 02820 – Metal Guardrail

Comply with Section 02820 of the Standard Specifications supplemented and/or modified as follows:

02820.40 Guardrail Anchor Hardware

Replace the paragraph that begins “Provide cable and fittings...” with the following paragraph:

Provide cable and fittings for guardrail anchors that conform to the requirements of AASHTO M 30, Class A, for Type II cable. Galvanize all fittings according to AASHTO M 111 (ASTM A123).

02820.50 Acceptance of Materials

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

Acceptance of metal guardrail Materials will be according to Section 00165.35.