

The Tulalip Tribes of Washington



**I-5/116th Street NE
Interchange Improvements
Phase 4 Ramps**

Bid Solicitation No. 17-007

Contract Documents

September 2017

Volume 1 of 3

I-5/116TH STREET NE INTERCHANGE IMPROVEMENTS Phase 4 Ramps

Bid Solicitation No. 17-007

Contract Documents

Prepared for

The Tulalip Tribes
8802 27th Avenue NE
Tulalip, WA 98271-9694

Prepared by

Parametrix
719 2nd Avenue, Suite 200
Seattle, WA 98104
206-394-3700
www.parametrix.com

September 2017

CITATION

Parametrix. 2017. I-5/116th Street NE
Interchange Improvements
Phase 4 Ramps
Contract Documents

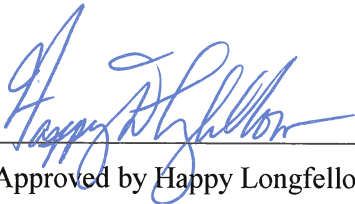
Prepared by Parametrix, Seattle, Washington.
September 2017.

CERTIFICATION

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.



Prepared by Steve Olling, P.E.



Approved by Happy Longfellow, P.E.



TABLE OF CONTENTS

VOLUME 1

DIVISION 0 – BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF CONTRACT

NOTICE TO BIDDERS	
CONFIDENTIALITY AGREEMENT	
INSTRUCTIONS TO BIDDERS	
BID PROPOSAL FORMS	
BID PROPOSAL FORM	
NON-COLLUSION DECLARATION	
NAOB WRITTEN CONFIRMATION DOCUMENTATION	
BID GUARANTY AND CONTRACT BOND	
FORM OF BID GUARANTY & CONTRACT BOND	
STATEMENT OF INTENDED SURETY	
BID PROPOSAL BOND	
PAYMENT BOND	
PERFORMANCE BOND	
TRIBAL EMPLOYMENT RIGHTS OFFICE (TERO)	
CONTRACT FORMS	
CONTRACT AGREEMENT	
INTERIM WAIVER AND RELEASE OF CLAIMS	
FINAL WAIVER AND RELEASE OF CLAIMS	
BUYERS' RETAIL SALES TAX EXEMPTION CERTIFICATE	

AMENDMENTS TO WSDOT STANDARD SPECIFICATIONS

SPECIAL PROVISIONS

DIVISION 1 GENERAL REQUIREMENTS

DESCRIPTION OF WORK.....	SP-1
DEFINITIONS	SP-2
BID PROCEDURES AND CONDITIONS.....	SP-6
PREQUALIFICATION OF BIDDERS	SP-6
PLANS AND SPECIFICATIONS	SP-8
EXAMINATION OF PLANS, SPECIFICATIONS AND SITE OF WORK.....	SP-8
SUBSURFACE INFORMATION	SP-8
PROPOSAL FORMS	SP-8
PREPARATION OF PROPOSAL	SP-8
PRE AWARD INFORMATION.....	SP-9
AWARD AND EXECUTION OF CONTRACT	SP-10
CONSIDERATION OF BIDS	SP-10
AWARD OF CONTRACT	SP-10
EXECUTION OF CONTRACT	SP-10
CONTRACT BOND.....	SP-10
FAILURE TO EXECUTE CONTRACT	SP-10

TABLE OF CONTENTS (CONTINUED)

RETURN OF BID DEPOSIT	SP-10
JUDICIAL REVIEW	SP-10
SCOPE OF THE WORK.....	SP-10
COORDINATION OF CONTRACT DOCUMENTS, PLANS, SPECIAL PROVISIONS, CHANGES.....	SP-10
CONTROL OF WORK.....	SP-12
AUTHORITY OF THE ENGINEER	SP-12
CONFORMITY WITH AND DEVIATIONS FROM PLANS AND STAKES	SP-13
CONTRACTOR SURVEYING - STRUCTURE.....	SP-13
CONTRACTOR SURVEYING - ROADWAY	SP-16
LICENSED SURVEYORS.....	SP-19
CONTACTOR SURVEYING – ADA FEATURES	SP-20
COOPERATION WITH OTHER CONTRACTORS.....	SP-21
OTHER CONTRACTS OR OTHER WORK	SP-21
CONTROL OF MATERIAL	SP-21
BUY AMERICA	SP-21
LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC	SP-23
LAWS TO BE OBSERVED.....	SP-23
INDIAN PREFERENCE AND TRIBAL ORDINANCES	SP-23
STATE SALES TAX.....	SP-31
FOREST PROTECTION AND MERCHANTABLE TIMBER REQUIREMENTS	SP-32
FOREST FIRE PREVENTION.....	SP-32
MERCHANTABLE TIMBER REQUIREMENTS	SP-32
ENVIRONMENTAL REGULATIONS	SP-33
ENVIRONMENTAL COMMITMENTS.....	SP-33
STATE DEPARTMENT OF FISH AND WILDLIFE	SP-34
STATE DEPARTMENT OF ECOLOGY	SP-34
AIR QUALITY	SP-34
PERMITS AND LICENSES	SP-34
LOAD LIMITS	SP-35
WAGES	SP-35
GENERAL	SP-35
REQUIREMENTS FOR NONDISCRIMINATION	SP-36
SPECIAL TRAINING PROVISIONS	SP-43
EQUAL EMPLOYMENT OPPORTUNITY (EEO) RESPONSIBILITIES.....	SP-48
REQUIRED RECORDS AND RETENTION	SP-49
CONTRACTOR'S RESPONSIBILITY FOR WORK	SP-49
REPAIR OF DAMAGE	SP-49
RESPONSIBILITY FOR DAMAGE	SP-49
TEMPORARY WATER POLLUTION/EROSION CONTROL	SP-51
SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN	SP-52
PROTECTION AND RESTORATION OF PROPERTY	SP-52
VEGETATION PROTECTION AND RESTORATION.....	SP-52
PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE	SP-52

TABLE OF CONTENTS (CONTINUED)

GRATUITIES	SP-55
PUBLIC CONVENIENCE AND SAFETY.....	SP-55
CONSTRUCTION UNDER TRAFFIC	SP-55
WORK ZONE CLEAR ZONE	SP-56
TRAFFIC BLOCKAGE FOR MAST ARM ERECTION.....	SP-61
SIGNAL TURN ON.....	SP-61
ADVANCE NOTIFICATION.....	SP-61
PUBLIC NOTIFICATION.....	SP-62
PERSONAL LIABILITY OF PUBLIC OFFICERS.....	SP-62
NO WAIVER OF THE TULALIP TRIBES AND STATE'S LEGAL RIGHTS	SP-62
PROSECUTION AND PROGRESS.....	SP-63
PRECONSTRUCTION CONFERENCE.....	SP-63
SUBCONTRACTING	SP-63
PROSECUTION OF WORK.....	SP-64
TIME FOR COMPLETION.....	SP-66
LIQUIDATED DAMAGES.....	SP-67
TERMINATION OF CONTRACT	SP-69
MEASUREMENT AND PAYMENT	SP-69
FORCE ACCOUNT.....	SP-69
PAYMENT FOR MATERIAL ON HAND.....	SP-69
PAYMENTS.....	SP-69
DISPUTES AND CLAIMS	SP-70
CLAIMS RESOLUTION.....	SP-70
TEMPORARY TRAFFIC CONTROL.....	SP-70
TRAFFIC CONTROL MANAGEMENT.....	SP-70
TRAFFIC CONTROL LABOR, PROCEDURES, AND DEVICES.....	SP-71

DIVISION 2 EARTHWORK

CLEARING, GRUBBING, AND ROADSIDE CLEANUP	SP-71
REMOVAL OF STRUCTURES AND OBSTRUCTIONS.....	SP-73
ROADWAY EXCAVATION AND EMBANKMENT	SP-75

DIVISION 5 SURFACE TREATMENTS AND PAVEMENTS

HOT MIX ASPHALT	SP-76
ESAL'S	SP-77

TABLE OF CONTENTS (CONTINUED)

DIVISION 6 STRUCTURES

CONCRETE STRUCTURES	SP-78
RESIN BOND ANCHORS	SP-79
EPOXY BONDING AGENT FOR SURFACES AND STEEL REINFORCING BAR DOWELS	SP-80
FRACTURED FIN FINISH.....	SP-80
STRIATED FINISH.....	SP-81
SPLIT FACE FINISH.....	SP-81
BRIDGE SUPPORTED UTILITIES	SP-83
CORE DRILLED BRIDGE DECK	SP-84
FINISHING CONCRETE SURFACES	SP-85
PLACING ANCHOR BOLTS	SP-85
CONCRETE BARRIER	SP-87
STRUCTURAL EARTH WALLS	SP-87

DIVISION 7 DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS.....	SP-92
WATER MAINS.....	SP-94
VALVES FOR WATER MAINS	SP-96
SANITARY SEWERS.....	SP-98

DIVISION 8 MISCELLANEOUS CONSTRUCTION

EROSION CONTROL AND WATER POLLUTION CONTROL.....	SP-100
SEEDING, FERTILIZING AND MULCHING.....	SP-101
ROADSIDE RESTORATION	SP-105
CURBS, GUTTERS, AND SPILLWAYS.....	SP-113
GUIDE POSTS.....	SP-113
CHAIN LINK FENCE AND WIRE FENCE	SP-114
CEMENT CONCRETE SIDEWALKS.....	SP-116
ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, AND ELECTRICAL.....	SP-117
PERMANENT SIGNING.....	SP-161
SIGN STRUCTURES.....	SP-163
ERROSION CONTROL AND ROADSIDE PLANINT (MATERIALS).....	SP-174
STANDARD PLANS.....	SP-174

VOLUME 2

Appendices

- A WAGE RATES
- B PERMITS

TABLE OF CONTENTS (CONTINUED)

C GEOTECHNICAL REPORTS

GEOTECHNICAL REPORT I-5, 116TH STREET NE INTERCHANGE IMPROVEMENTS
PREPARED BY PANGEO INCORPORATED DATED NOVEMBER 30, 2011.

SUPPLEMENTED FINAL GEOTECHNICAL REPORT I-5, 116TH STREET NE
INTERCHANGE IMPROVEMENTS PREPARED BY PANGEO INCORPORATED DATED
JULY 18, 2012.

FINAL GEOTECHNICAL REPORT, BRIDGE ONLY - I-5 116TH STREET NE
INTERCHANGE IMPROVEMENTS PREPARED BY PANGEO INCORPORATED DATED
JULY 10, 2013

VOLUME 3

CONTRACT PLANS

DIVISION 0
BIDDING REQUIREMENTS,
CONTRACT FORMS, AND
CONDITIONS OF CONTRACT

The Tulalip Tribes of Washington

Notice to Bidders

Sealed bid proposals will be received by The Tulalip Tribes of Washington, at the Consolidated Borough of Quil Ceda Village's Office located at 8802 27th Avenue NE, Tulalip, Washington 98271-9694 for the following Project:

BID SOLICITATION NUMBER 17-007

I-5/116th Street NE Interchange Improvements

in accordance with the Drawings and Specifications prepared by:

Parametrix - 719 2nd Avenue, Suite 200 Seattle, WA 98104 - 206-394-3700

The Construction Manager for the Project is:

The Tulalip Tribes of Washington 8802 27th Avenue NE Tulalip, WA 98271-9694
Attn: Ms. Debra Bray 425-754-2294 dbray@tulaliptribes-nsn.gov

This Tulalip Tribes project provides for the improvement of the 116th Street NE Interchange existing diamond interchange. The project includes constructing new I-5 ramps, structural earth retaining walls, stormwater treatment facilities, signal, illumination, permanent signing, Intelligent Transportation System, and Temporary Erosion and Sediment Control, and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

Any Proposed Equal for a Standard shall be submitted to the Construction Manager no later than ten (10) days prior to the bid opening. If no Addendum is issued accepting the Proposed Equal, the Proposed Equal shall be considered rejected.

Native American Preference related to contracting, subcontracting, and suppliers in the project is required. Bidders shall abide by The Tulalip Code, Chapter 9.05 – TERO Code which provides Indian preference in contracting goods and services. Additionally, The Tulalip Tribes' Board of Directors has the authority to require those employers subject to The Tulalip Code, Chapter 9.05 – TERO Code and applicable federal laws and guidelines, to give preference to Indians in hiring, promotions, training, and all other aspects of employment. Bidders shall comply with this Code and the rules, regulations, and orders of the TERO Commission. For more information about The Tulalip Code, Chapter 9.05 – TERO Code, contact The Tulalip Tribes' TERO Department at 6406 Marine Drive, Tulalip, Washington 98271, Office (360) 716-4747 or Facsimile (360) 716-0249. The Tulalip TERO Code is available for review on the Tulalip TERO website: <http://www.tulaliptero.com/>
Sealed bids will be received for: until Wednesday, October 18, 2017 at 1:30 p.m. at which time all bids will be opened and read aloud. All required bid documentation shall be submitted to the front desk receptionist at the QCV – Administrative Office located at 8802 27th Avenue NE, Tulalip, WA by the scheduled bid date and times. ORAL, TELEPHONIC, FAXED, OR TELEGRAPHIC BIDS WILL NOT BE ACCEPTED.

A non-mandatory pre-bid meeting will be held on Wednesday September 27, 2017 at 10:00 a.m., at the following location: 116th Street Job Shack located at 11404-34th Ave NE, Tulalip, WA. The following is applicable to federal nexus projects.

The Tulalip Tribes in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will

affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.

All pre-bid questions and clarifications should be made in writing to the Construction Manager no later than five (5) working days prior to bid opening. Any and all such clarifications and any supplemental instructions will be in the form of written addenda, if issued or responded to. Be sure to include in the address of the correspondence the words "PRE-BID QUESTION".

The bid documents may also be reviewed for bidding purposes by the following means and methods:

1. On the Internet – Free of Charge:

Plans, specifications, addenda, bidders list, and plan holders list for this project are available through the Consolidated Borough of Quil Ceda Village – Tulalip Tribes' online plan room. Free of charge access is provided to Prime Bidders, Subcontractors, and Vendors by going to: <http://www.quilcedavillage.org> and clicking on: **"Government"** then **"Project Management"** then scroll to the heading **"Tulalip Tribes Bidding Opportunities"**. This online plan room provides Bidders with fully usable online documents; with the ability to download and print to your own printer. Contact The Tribes' Construction Manager listed above should you require assistance.

Plans, Specifications, Addenda, Bidders List, and Plan Holders List for this project are also available through the Consolidated Borough of Quil Ceda Village – Tulalip Tribes' online plan room with Builders Exchange of Washington. Free of charge access is provided to Prime Bidders, Subcontractors, and Vendors by going to: <http://bxwa.com> and clicking on: **"Posted Projects"**; **"Public Works"**, **"Tribal Agencies"**, **"Consolidated Borough of Quil Ceda Village – Tulalip Tribes"**, and **"Projects Bidding"**. Bidders are encouraged to "Register" in order to receive automatic email notification of future addenda and to place themselves on the self-registered "Bidders List". This online plan room provides Bidders with fully usable online documents; with the ability to: download, print to your own printer, order full/partial plan sets from numerous reprographic sources (online print order form), and a free online digitizer/take-off tool. Contact Builders Exchange of Washington at 425-258-1303 should you require assistance.

2. For review at the following locations during normal business hours:

Consolidated Borough of Quil Ceda Village
8802 27th Avenue NE
Tulalip, WA 98271-9694
(360) 716-5024 office

Builders Exchange of Washington, Inc.
2607 Wetmore Avenue
Everett, WA 98201
<http://www.bxwa.com>
(425) 258-1303 office
(425) 259-3832 facsimile

The Tulalip Tribes of Washington

CONFIDENTIALITY AGREEMENT

Upon award of a Contract the successful Bidder shall provide the Tulalip Tribes of Washington with a completed and signed Confidentiality Agreement as set forth herein. Successful Bidder shall also provide the Tulalip Tribes of Washington with a Confidentiality Agreement Completed and signed by all lower tier contractors and/or suppliers whom may perform Work on the Project.

I / we, the undersigned, have been provided certain confidential and proprietary information ("Confidential Information") regarding the Tulalip Tribes of Washington for the Project identified as I-5/116th St NE Interchange Improvements Phase 4 Ramps ("Project"). "Confidential Information" shall include, without limitation, all financial information, data, materials, products, manuals, business plans, marketing plans, Project design documents, or other information disclosed or submitted orally, in writing, or by any other media.

The undersigned acknowledges that this Confidential Information is sensitive and confidential in nature, and that the disclosure of this information to anyone not part of this agreement would be damaging to the Tulalip Tribes of Washington.

In consideration of the premises herein contained, I / we understand and agree that I / we will not disclose any "Confidential Information" regarding this "Project" to any person(s) not privy to this agreement. Furthermore, I / we will not disclose any of this information directly or indirectly to any competitor of the Tulalip Tribes of Washington.

Agreed to and accepted:

Signature: _____

Title: _____

Printed Name: _____

DATE: _____

The Tulalip Tribes of Washington

INSTRUCTIONS TO BIDDERS

The Tulalip Tribes of Washington hereby invite you to submit a Bid Proposal for this project.

Article 1	Contract Information
Article 2	Bidding Procedures
Article 3	Bid Opening & Consideration of Bids
Article 4	Withdrawal of Bid
Article 5	Bid Estimate
Article 6	Bid Guaranty and Contract Bond
Article 7	Contract Award and Execution
Article 8	Applicable Law and Forum

ARTICLE 1 – CONTRACT INFORMATION

1.1 PROJECT BID REQUIREMENTS

- 1.1.1 The Tulalip Tribes of Washington's Board of Directors has the authority to require those employers subject to The Tulalip Code, Chapter 9.05 – TERO Code and applicable federal laws and guidelines, to give preference to Indians in hiring promotions, training and all other aspects of employment contracting and subcontracting, and to give preference to Indians in contracting goods and services. Bidders must comply with The Tulalip Code, Chapter 9.05 – TERO Code and the rules, regulations and orders of the TERO Commission.
- 1.1.2 With respect to each Project / Contract of \$10,000 or more, operating within the exterior boundaries of the Tulalip Reservation or on Tribal Projects off the Reservation, the Contractor shall pay a onetime Fee of 1.75% of the total Project / Contract cost, i.e., equipment labor, materials and operations and any increase of the Contract / Project or Subcontract amount. If the Contractor initially enters into a Contract of less than the \$10,000, but subsequent changes in the Work increases the total Contract / Project amount to \$10,000 or more, the TERO Fee shall apply to the total amount including increases.
- 1.1.3 The General Contractor shall be responsible for paying all TERO fees, including those attributable to the subcontractors. The fee shall be due in full prior to commencement of any work under the Contract / Project. However, where good cause is shown, the TERO Representative may authorize the General Contractor to pay said fee in installments over the course of the contract, when:
 - 1.1.3.1 The decision whether to authorize an alternative arrangement, which, if allowed, shall be in writing, shall rest solely with the discretion of the TERO Representative.
- 1.1.4 Whenever an employer or union would be required by any provision of The Tulalip Code, Chapter 9.05 – TERO Code to give preference in employment, such

preference shall be given to the following persons in the following enumerated order:

- a) Enrolled Tulalip Tribal Members
- b) Spouses, Parent of a tribal member child, biological child born to an enrolled Tulalip Tribal Member, current legal guardian of a Tribal Member dependent child (with a proper letter of temporary or permanent legal guardianship from a court), or a tribal member in a domestic partner relationship (with documentation).
- c) Other Natives/Indians shall mean any member of a federally recognized Indian tribe, nation or band, including members of federally recognized Alaskan Native villages or communities.
- d) Spouse of federally recognized Native American
- e) Regular current employees of the all Tulalip Tribal entities
- f) Other

Where prohibited by applicable Federal law or contractual agreements, the above order of preference shall not apply. In such cases, preference shall be given in accordance with the applicable Federal law or contract.

- 1.1.5 The preference requirements contained in The Tulalip Code, Chapter 9.05 – TERO Code shall be binding on all contractors and subcontractors, regardless of tier, and shall be deemed a part of all resulting contract agreements.
- 1.1.6 For more information about The Tulalip Code, Chapter 9.05 – TERO Code, contact the Tulalip Tribes’ TERO Department at 6406 Marine Drive, Tulalip, Washington 98271, Office (360) 716-4747 or Facsimile (360) 716-0249. The Tulalip TERO Code is available for review on the Tulalip TERO website: <http://www.tulaliptero.com>.
- 1.1.7 The following requirements apply to the Bid Award Criteria and Procedures for the Project:
 - 1.1.7.1 Bidding is not restricted to certified Native American Owned Businesses.
 - 1.1.7.2 The Contract will be awarded based on the “Weight of Award” point system pursuant to paragraph IB 3.5.2.
 - 1.1.7.3 Minimum TERO Participation Requirements for Employment:
 - 1.1.7.3.1 A minimum of fifteen percent (15%) of the entire project work force and (15%) including each subcontractor shall be “Preferred Employees” as defined in The Tulalip Code, Chapter 9.05 – TERO Code.
 - 1.1.7.3.2 The total number of “Preferred Employees” employed by the Bidder, and those employed by its subcontractors shall be used to determine if Bidder satisfies the minimum requirement.
 - 1.1.7.3.3 Bidders are encouraged to exceed the minimum requirement for employment.
 - 1.1.7.4 Minimum TERO Participation Requirements in contracting with Tulalip Tribal Member NAOB Subcontractors and Suppliers:

- 1.1.7.4.1 Bidder shall contract with a minimum number of five (5) certified Tulalip Tribal Member NAOB firms with individual contract values greater than \$50,000 to be considered responsive and responsible.
- 1.1.7.4.2 The total value of NAOB contracted work shall be a minimum of twenty percent (20%) of the total Bid Proposal Price, and the total value of Tulalip Tribal Member NAOB contracted work shall be a minimum of fifteen percent (15%) of the total Bid Proposal Price.
- 1.1.7.4.3 Bidders are encouraged to exceed the minimum requirements for Tulalip Tribal Member NAOB Subcontractors and Suppliers.
- 1.1.7.4.4 Bidders shall list their Tulalip Tribal Member NAOB Subcontractors and Suppliers on the Bid Form in Section IV A, pursuant to paragraph IB 3.5.6.
- 1.1.7.5 Minimum TERO Participation Requirements in contracting with NAOB Subcontractors and Suppliers:
 - 1.1.7.5.1 Bidders are encouraged to contract with NAOB Subcontractors and Suppliers.
 - 1.1.7.5.2 Bidders shall list their NAOB Subcontractors and Suppliers on the Bid Form in Section IV B, pursuant to paragraph IB 3.5.6.
- 1.1.7.6 Bidder shall be considered nonresponsive if they do not meet the minimum requirements contained in this paragraph IB 1.1.7.

1.2 NOT USED.

1.3 GIVING NOTICE

- 1.3.1 Whenever any provision of the Contract Documents requires the giving of notice, such notice shall be deemed to have been validly given if delivered personally to the individual or to a member of the entity for whom the notice is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address of such individual or entity known to the giver of the notice.
 - 1.3.1.1 All notices provided to the Bidder from the Construction Manager shall be copied to the Engineer.
 - 1.3.1.2 All notices provided to the Bidder from the Engineer shall be copied to the Construction Manager.
 - 1.3.1.3 All notices provided to the Engineer from the Bidder shall be copied to the Construction Manager.
 - 1.3.1.4 All notices provided to the Construction Manager from the Bidder shall be copied to the Engineer.
- 1.3.2 When any period of time is referred to in the Contract Documents by days, it shall be computed to exclude the first, and include the last, day of such period. If the last day of any such period falls on a Saturday, Sunday, or a legal holiday, such day will be omitted from the computation and such period shall be deemed to end on the next succeeding day which is not a Saturday, Sunday, or legal holiday.

- 1.3.3 The effective date of any and all notices, regardless of the method of delivery, shall be the date of receipt.

1.4 USE OF FACSIMILE TRANSMISSION

- 1.4.1 Any notice required to be given by the Contract Documents may be given by facsimile transmission, provided the original signed notice is delivered pursuant to paragraph IB 1.3.1.
- 1.4.2 Notice of withdrawal of a bid may be given by facsimile transmission provided an original signed document is received within three (3) business days of the facsimile transmission.

ARTICLE 2 - BIDDING PROCEDURES

2.1 EXAMINATION OF CONTRACT DOCUMENTS AND PROJECT SITE

- 2.1.1 The Bidder shall examine all Contract Documents, including without limitation the Drawings and Specifications for all divisions of Work for the Project, noting particularly all requirements which will affect the Bidder's Work in any way. In addition, the Bidder must carefully examine all Contract Documents because laws and rules applicable to other Tribal projects are not necessarily applicable to this Project.
- 2.1.2 Failure of a Bidder to be acquainted with the extent and nature of Work required to complete any applicable portion of the Work, in conformity with all requirements of the Project as a whole wherever set forth in the Contract Documents, will not be considered as a basis for additional compensation.
- 2.1.3 The Bidder shall evaluate the Project site and related Project conditions where the Work will be performed, including without limitation the following:
- 2.1.3.1 The condition, layout and nature of the Project site and surrounding area;
 - 2.1.3.2 The availability and cost of labor;
 - 2.1.3.3 The availability and cost of materials, supplies and equipment;
 - 2.1.3.4 The cost of temporary utilities required in the bid;
 - 2.1.3.5 The cost of any permit or license required by a local or regional authority having jurisdiction over the Project;
 - 2.1.3.6 The generally prevailing climatic conditions;
 - 2.1.3.7 Conditions bearing upon transportation, disposal, handling, and storage of materials.
- 2.1.4 Unless otherwise specified in the Contract Documents, borings, test excavations and other subsurface information, if any, are provided solely to share information available to the Tulalip Tribes of Washington and any use of, or reliance upon, such items by the Bidder is at the risk of the Bidder. The Bidder shall be afforded access to the Project site to obtain the Bidder's own borings, test excavations and other subsurface information upon request made to the Construction Manager not less than ten (10) days prior to the opening of the bids.

2.2 PRE-BID MEETING

- 2.2.1 The Bidder is not required to attend any pre-bid meetings, but one will be scheduled, where the Engineer and the Construction Manager will answer questions regarding the Contract Documents.
- 2.2.2 The Construction Manager, with the assistance of the Engineer, shall prepare minutes of the pre-bid meeting for the Project record, which will be provided to a Bidder upon request.
- 2.2.3 Failure of the Bidder to attend the pre-bid meeting, or to obtain the minutes thereof, which results in the Bidder not being fully acquainted with the requirements of the Project, will not be considered as a basis for additional compensation.
- 2.2.4 If not given in the Notice to Bidders, notice of the time and place of any pre-bid meeting to be held will be given by the Engineer to each person of record holding Contract Documents.

2.3 INTERPRETATION

- 2.3.1 If the Bidder finds any perceived ambiguity, conflict, error, omission or discrepancy on or between any of the Contract Documents, including without limitation the Drawings and Specifications, or between any of the Contract Documents and any applicable provision of law, including without limitation, the current International Building Code, the Bidder shall submit a written request to the Engineer, through the Construction Manager, for an interpretation or clarification.
 - 2.3.1.1 The Bidder shall be responsible for prompt delivery of such request.
 - 2.3.1.2 In order to prevent an extension of the bid opening, the Bidder is encouraged to make all requests for interpretation or clarification a minimum of seven (7) days before the bid opening.
- 2.3.2 If the Engineer determines that an interpretation or clarification is warranted, the Engineer shall issue an Addendum and the Construction Manager shall provide a copy to each person of record holding Contract Documents in accordance with paragraph IB 1.3. Any Addendum shall be deemed to have been validly given if it is delivered via facsimile, issued and mailed, or otherwise furnished to each person of record holding the Contract Documents. If any Addendum is issued within 72 hours prior to the published time for the bid opening, excluding Saturdays, Sundays and legal holidays, the bid opening shall automatically be extended one (1) week, with no further advertising required.
- 2.3.3 Any interpretation or clarification of the Contract Documents made by any person other than the Engineer, or in any manner other than a written Addendum, shall not be binding and the Bidder shall not rely upon any such interpretation or clarification.
- 2.3.4 The Bidder shall not, at any time after the execution of the Contract, be compensated for a claim alleging insufficient data, incomplete, ambiguous, conflicting or erroneous Contract Documents, any discrepancy on or between Contract Documents, or incorrectly assumed conditions regarding the nature or character of the Work, if no request for interpretation or clarification regarding such matter was made by the Bidder prior to the bid opening.

2.4 STANDARDS

- 2.4.1 The articles, devices, materials, equipment, forms of construction, fixtures and other items named in the Specifications to denote kind quality or performance requirement shall be known as Standards and all bids shall be based upon those Standards.
- 2.4.2 Where two or more Standards are named, the Bidder may furnish any one of those Standards.

2.5 NOT USED.

2.6 BID FORM

- 2.6.1 Each bid shall be submitted on the Bid Form and sealed in an envelope clearly marked as containing a bid, indicating the Project name, the Contractor scope of work, and the date of the bid opening on the envelope.
 - 2.6.1.1 Any change, alteration or addition in the wording of the Bid Form by a Bidder may cause the Bidder to be rejected as not responsible for award of a Contract.
 - 2.6.1.2 Unless the Bidder withdraws the bid as provided in IB Article 4, the Bidder will be required to comply with all requirements of the Contract Documents, regardless of whether the Bidder had actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.
- 2.6.2 The Bidder shall fill in all relevant blank spaces in the Bid Form in ink or by typewriting and not in pencil.
 - 2.6.2.1 The Bidder shall show bid amounts for the Total Base Bid and any Alternate(s) in both words and figures. In the case of a conflict between the words and figures, the amount shown in words shall govern, where such words are not ambiguous. When the Bidder's intention and the meaning of the words are clear, omissions or misspellings of words will not render the words ambiguous.
 - 2.6.2.2 Any alteration or erasure of items filled in on the Bid Form shall be initialed by the Bidder in ink.
- 2.6.3 When an Alternate is listed on the Bid Form, the Bidder shall fill in the applicable blank with an increased or decreased bid amount. The Tulalip Tribes of Washington reserves the right to accept or reject any or all bids on Alternates, in whole or in part, and in any order. Voluntary Alternates submitted by a Bidder are prohibited from becoming the basis of the Contract award.
 - 2.6.3.1 If no change in the bid amount is required, indicate "No Change" or "\$0 dollars".
 - 2.6.3.2 Failure to make an entry or an entry of "No Bid," "N/A," or similar entry for any Alternate by a Bidder may cause the Bidder to be rejected as nonresponsive only if that Alternate is selected.
 - 2.6.3.3 If an Alternate is not selected, an entry by a Bidder as listed in paragraph IB 2.6.3.2 on that Alternate will not, by itself, render a Bidder nonresponsive.

- 2.6.3.4 In a combined bid, a blank entry or an entry of "No Bid," "N/A," or similar entry on an Alternate will cause the bid to be rejected as nonresponsive only if that Alternate applies to the combined bid and that Alternate is selected.
- 2.6.4 Each bid shall contain the name of every person interested therein. If the Bidder is a corporation, partnership, sole proprietorship, or limited liability company, an officer, partner or principal of the Bidder, as applicable, shall print or type the legal name of the Bidder on the line provided and sign the Bid Form. If the Bidder is a joint venture, an officer, partner or principal, as applicable, of each member of the joint venture shall print or type the legal name of the applicable member on the line provided and sign the Bid Form on behalf of that member. All signatures must be original.
- 2.6.5 Subject to the provisions of this paragraph IB 2.6, the completed Bid Form of the Bidder with whom the Tulalip Tribes of Washington executes a Contract Form shall be incorporated into the Contract Form as if fully rewritten therein.

2.7 REQUIRED SUBMITTALS WITH BID FORM

- 2.7.1 A Bidder shall be rejected as nonresponsive if the Bidder fails to submit the following submittals with the Bid Form in a sealed envelope:
- 2.7.1.1 If the Bid is restricted to certified Tulalip Tribal Member NAOBs or NAOBs, then Bidder shall submit evidence of certification from the Tulalip Tribes' TERO office as being a certified NAOB for the identified NAOB category.
- 2.7.1.2 A Bid Guaranty as provided in paragraph IB 6.1.
- 2.7.1.3 A Power of Attorney of the agent signing for a Surety which is licensed in Washington, when a Bid Guaranty and Contract Bond is submitted.
- 2.7.1.4 Native American Owned Business Written Confirmation Documentation for each Tulalip Tribal Member NAOB and NAOB firm listed on the Bidder's Bid Form.

2.8 UNIT PRICES

- 2.8.1 When Unit Prices are requested on the Bid Form, the scheduled quantities listed are to be considered as approximate and are to be used only for the comparison of bids for purposes of award of the Contract and to determine the maximum quantity to be provided without a Change Order. If Unit Prices are stated to be sought only for informational purposes, they shall not be used for comparison of bids.
- 2.8.2 Unless otherwise specified in the Contract Documents, the Unit Prices set forth shall include all materials, equipment, labor, delivery, installation, overhead, profit and any other cost or expense, in connection with or incidental to, the performance of that portion of the Work to which the Unit Prices apply. The Bidder shall submit Unit Prices for all items listed unless other instructions are stated on the Bid Form.
- 2.8.3 Where there is a conflict between a Unit Price and the extension thereof made by the Bidder, the Unit Price shall govern and a corrected extension of such Unit Price shall be made and such corrected extension shall be used for the comparison of the bids and to determine the maximum quantity to be provided without a Change Order.

- 2.8.4 The Bidder agrees that the Tulalip Tribes of Washington may increase, decrease or delete entirely the scheduled quantities of Work to be done and materials to be furnished after execution of the Contract Form.
- 2.8.5 Payments, except for lump sum items in Unit Price Contracts, will be made to the Contractor only for the actual quantities of Work performed or materials furnished in accordance with the Contract Documents.
- 2.8.6 If the cost of an item for which a Unit Price is stated in the Contract changes substantially so that application of the Unit Price to the quantities of Work proposed will create an undue hardship on the Tulalip Tribes of Washington or the Contractor, the applicable Unit Price may be equitably adjusted by Change Order.

2.9 CHANGE IN THE BID AMOUNT

- 2.9.1 Any change to a previously submitted bid shall be made in writing and must be received by the Tulalip Tribes of Washington before the time scheduled for the bid opening, as determined by the employee or agent of the Tulalip Tribes of Washington designated to open the bids.
- 2.9.2 Changes shall provide an amount to be added or subtracted from the bid amount, so that the final bid amount can be determined only after the sealed envelope is opened.
- 2.9.3 If the Bidder's written instruction reveals the bid amount in any way prior to the bid opening, the bid shall not be opened or considered for award of a Contract.

2.10 COPIES OF THE DRAWINGS AND SPECIFICATIONS

- 2.10.1 The Contractor shall maintain at the Project site the permits and one (1) complete set of Drawings and Specifications approved by the Tribes, city, local or state building department having lawful jurisdiction over the project.
- 2.10.2 Unless otherwise specified in the Contract Documents, the Engineer, through the Construction Manager, shall furnish to the Contractor, free of charge, four (4) sets of Drawings and Specifications if the Contract price is \$500,000 or less, and seven (7) sets of Drawings and Specifications if the Contract price is in excess of \$500,000.

ARTICLE 3 – BID OPENING AND CONSIDERATION OF BIDS

3.1 DELIVERY OF BIDS

- 3.1.1 It is the responsibility of the Bidder to submit the bid to the Tulalip Tribes of Washington at the designated location prior to the time scheduled for bid opening.
- 3.1.2 If the bid envelope is enclosed in another envelope for the purpose of delivery, the exterior envelope shall be clearly marked as containing a bid with the Project name, the scope of Work or Contract and the date of the bid opening shown on the envelope.
- 3.1.3 No bid shall be considered if it arrives after the time set for the bid opening as determined by the employee or agent of the Tulalip Tribes of Washington designated to open the bids.

3.2 BID OPENING

- 3.2.1 Sealed bids will be received at the office designated in the Notice to Bidders until the time stated when all bids will be opened, read aloud and the tabulation made public.
- 3.2.2 The public opening and reading of bids is for informational purposes only and is not to be construed as an acceptance or rejection of any bid submitted.
- 3.2.3 The contents of the bid envelope shall be a public record and open for inspection, upon request, at any time after the bid opening.

3.3 BID OPENING EXTENSION

- 3.3.1 If any Addendum is issued within 72 hours prior to the published time for the bid opening, excluding Saturdays, Sundays and legal holidays, the bid opening shall automatically be extended one (1) week, with no further advertising required.

3.4 BID EVALUATION CRITERIA

- 3.4.1 The Tulalip Tribes of Washington reserves the right to accept or reject any bid or bids and to award the Contract to any remaining Bidder the Tulalip Tribes of Washington determines to be the lowest responsive and responsible Bidder pursuant to paragraph IB 3.5.1 or the most responsive and responsible Bidder pursuant to paragraph IB 3.5.2 The Tulalip Tribes of Washington reserves the right to accept or reject any or all Alternates, in whole or in part, and the right to reject any Alternate or Alternates and to accept any remaining Alternate or Alternates. Alternates may be accepted or rejected in any order.
- 3.4.2 The Tulalip Tribes of Washington may reject the bid of any Bidder who has engaged in collusive bidding.
- 3.4.3 The Tulalip Tribes of Washington reserves the right to waive, or to allow any Bidder a reasonable opportunity to cure, a minor irregularity or technical deficiency in a bid, provided the irregularity or deficiency does not affect the bid amount or otherwise give the Bidder a competitive advantage. Noncompliance with any requirement of the Contract Documents may cause a Bidder to be rejected.
- 3.4.4 The Tulalip Tribes of Washington may reject all bids for one or more bid packages, prior to, during or after evaluation of Bidders pursuant to paragraph IB 3.5.8, and may advertise for other bids, using the original estimate or an amended estimate, for such time, in such form and in such newspapers as the Tulalip Tribes of Washington may determine.

3.5 BID EVALUATION PROCEDURE

- 3.5.1 The Contract will be awarded to the lowest responsive and responsible Bidder as determined in the discretion of the Tulalip Tribes of Washington, unless Bidders are advised during the bidding process award will be made pursuant to paragraph IB 3.5.2, or all bids will be rejected in accordance with applicable Tribal Ordinances or Codes.
 - 3.5.1.1 In determining which Bidder is lowest responsive and responsible, the Tulalip Tribes of Washington shall consider the Base Bid, the bids for any Alternate or Alternates and the bids for any Unit Price or Unit Prices which the Tulalip Tribes of Washington determines to accept.

- 3.5.1.2 If the Request for Bid Proposal is not restricted to certified NAOB firms preference in the Bid Award will be given to the certified NAOB firm with the lowest responsive bid if that bid is within budgetary limits established for the project or activity for which the bids are being taken and no more than "X" higher than the bid prices of the lowest responsive bid from any certified non-NAOB bidder as set forth in The Tulalip Code, Chapter 9.05 – TERO Code paragraph 9.05.340 (3).
- 3.5.1.3 The total of the bids for accepted Alternate(s) and Unit Price(s) will be added to the Base Bid for the purpose of determining the lowest Bidder.
- 3.5.1.4 If two or more Bidders submit the same bid amount and are determined to be responsive and responsible, the Tulalip Tribes of Washington reserves the right to select one Bidder in the following manner:
 - 3.5.1.4.1 If the Request for Bid Proposal is restricted to NAOB Firms and a majority of the funds used to pay the contract or subcontract are derived from Tulalip tribal resources preference shall be given to the certified Tulalip Tribal Member NAOB Firms; otherwise, selection shall be by lot in the presence of all such Bidders in such a manner as the Construction Manager shall determine and such selection shall be final.
 - 3.5.1.4.2 If the Request for Bid Proposal is restricted to Tulalip Tribal Member Owned NAOB Firms selection shall be by lot in the presence of all such Bidders in such a manner as the Construction Manager shall determine and such selection shall be final.
 - 3.5.1.4.3 If the Request for Bid Proposal is not restricted to NAOB Firms selection shall be by lot in the presence of all such Bidders in such a manner as the Construction Manager shall determine and such selection shall be final.
- 3.5.2 When listing "Preferred Employees" related to Section I – KEY EMPLOYEES OF BIDDER shall only list KEY "Preferred Employees" committed to be employed by Bidder in the performance of Bidder's self-performed scope of work.
 - 3.5.2.1 Key Employees are employees who are in a top supervisory position or performs a critical function such that an employer would risk likely financial damage or loss if that task were assigned to a person unknown to the employer.
 - 3.5.2.2 To be eligible for the award of points under this section Preferred Key Employees of Bidder shall be employed by the Bidder on the Project for 100% of the time the Bidder has crews on site performing work. Company owners are not eligible for the award of points under this section.
- 3.5.3 When listing "Preferred Employees" related to Section II – PREFERRED EMPLOYEES Bidder shall only list the number of "Preferred Employees" by each trade committed to be employed by Bidder in the performance of Bidder's self-performed scope of work.

- 3.5.3.1 To be eligible for the award of points under this section Preferred Employees shall be employed by the Bidder on the Project for a minimum of 80% of the time the Bidder has crews on site performing work. Company owners are not eligible for the award of points under this section.
- 3.5.4 Bidder shall not list the name of a "Preferred Employee" in more than one section. Should a "Preferred Employee" be listed in more than one section (i.e., Section I or II) the so named "Preferred Employee" will only be considered under Section I – KEY EMPLOYEES as a basis for award of points.
- 3.5.5 When listing lower tiered subcontractors and or suppliers related to Section IV – LIST OF LOWER TIERED SUBCONTRACTOR(S) AND OR SUPPLIER(S) Bidder shall identify the type of enterprise or organization Bidder intends to contract with in the columns titled "Type of Lower-Tier". If Bidder intends to subcontract a certain portion of the work with a certified NAOB subcontractor, Bidder shall so designate by placing an "X" in the column titled "SUB" (abbreviated for subcontractor). If Bidder intends to purchase a certain portion of the work through a certified NAOB material supplier, Bidder shall so designate by placing an "X" in the column titled "SUP" (abbreviated for supplier). Bidder shall be awarded 100% of the value of the work subcontracted with a certified NAOB and ten-percent (10%) of the value of the work purchased through a certified NAOB material supplier in the determination of awarded points related to Section IV.
 - 3.5.5.1 It is the expressed intent of paragraph IB 3.5.6 to encourage Bidders to contract with certified NAOB Firms in which the Bidder and enterprise or organization have no proprietary relationship ("Unrelated NAOB"). Points will only be awarded for contracting with Unrelated NAOB Firms.
 - 3.5.5.2 In determining the award of points under paragraph IB 3.5.6, Lower tiered NAOB Firms shall have no proprietary relationship with other lower tiered NAOB Firms.
 - 3.5.5.3 In determining the award of points under paragraph IB 3.5.6, equipment (unoperated) and tool rentals shall be considered as a supplier. Trucking (Dump, Low-boy, Long haul, etc.) and Operated Equipment Rental shall be considered as a subcontractor.
 - 3.5.5.4 When Section IV – LIST OF LOWER TIERED SUBCONTRACTOR(S) AND OR SUPPLIER(S) is further defined by paragraph IB 1.1.7, which may include minimum requirements for contracting with Tulalip Tribal Member NAOB firms and NAOB firms, the provisions of paragraph IB 3.5.6 shall be applied to Tulalip Tribal Member NAOB and NAOB categories as defined by The Tulalip Code, Chapter 9.05 – TERO Code.
- 3.5.6 In determining whether a Bidder is responsible, factors to be considered include, without limitation:
 - 3.5.6.1 Whether the Bidder's bid responds to the Contract Documents in all material respects and contains no irregularities or deviations from the Contract Documents which would affect the amount of the bid or otherwise give the Bidder a competitive advantage.
 - 3.5.6.2 Preference to Indians in hiring promotions, training and all other aspects of employment contracting and subcontracting;

- 3.5.6.3 Preferences required by Tribal Ordinances, Codes, or Laws;
- 3.5.6.4 The experience of the Bidder;
- 3.5.6.5 The financial condition of the Bidder;
- 3.5.6.6 The conduct and performance of the Bidder on previous contracts;
- 3.5.6.7 The facilities of the Bidder;
- 3.5.6.8 The management skills of the Bidder;
- 3.5.6.9 The ability of the Bidder to execute the Contract properly;
- 3.5.6.10 The evaluation of a bid below the median of other bids pursuant to paragraph IB 5.2.
- 3.5.6.11 Bidder's commitment to Safety and worker training.
- 3.5.7 The Construction Manager may obtain from the lowest or most responsive and responsible Bidder, as applicable, and such other Bidders as the Construction Manager determines to be appropriate any information appropriate to the consideration of factors showing responsibility, including without limitation the following:
 - 3.5.7.1 The two most responsive and responsible bidders will be requested to submit further documentation for both TERO Preferred Employment and the Tulalip Tribal Member NAOB and NAOB Subcontractor and Suppliers utilization commitments listed on the Bidder's Bid Form.
 - 3.5.7.1.1 Supplemental Documentation to be submitted to for each TERO Preferred Employee listed on the Bid Proposal Forms includes, but is not limited to:
 - 3.5.7.1.1.1 Proof of Enrollment issued by a Federally Recognized Indian Tribe or Alaska Native Corporation; or
 - 3.5.7.1.1.2 A signed letter issued by the Tulalip TERO Office certifying that the listed individuals are Preferred Employees.
 - 3.5.7.1.1.3 Bidders shall provide a project staffing plan or a manpowered loaded schedule for the project identifying when the Preferred Employees will be employed on the project and the duration thereof.
 - 3.5.7.1.2 Additional information to be submitted to for each NAOB listed on the Bid Form includes, but is not limited to:
 - 3.5.8.1.2.1 Correct business name, federal employee identification number (if available), and mailing address.
 - 3.5.7.1.2.2 List of all bid items assigned to each successful Tulalip Tribal Member NAOB or NAOB firm, including unit prices and extensions (if applicable).

- 3.5.7.1.2.3 Description of partial items (if any) to be sublet to each successful Tulalip Tribal Member NAOB or NAOB firm specifying the distinct elements of work to be performed by the Tulalip Tribal Member NAOB or NAOB firm and including the dollar value of the Tulalip Tribal Member NAOB or NAOB firm's portion.
- 3.5.7.1.2.4 Submit evidence of certification for the Tulalip Tribal Member NAOB or NAOB.
- 3.5.7.1.3 Total amounts shown for each Tulalip Tribal Member NAOB or NAOB firm shall not be less than the amount shown on the Bid Form. This submittal, showing the Tulalip Tribal Member NAOB or NAOB firm work item breakdown, when accepted by the Contracting Agency and resulting in contract execution, shall become a part of the contract. A breakdown that does not conform to the Tulalip Tribal Member NAOB or NAOB utilization certified on the Bid Form or that demonstrates a lesser amount of Tulalip Tribal Member NAOB or NAOB participation than that included on the Bid Form will be returned for correction. The contract will not be executed by the Contracting Agency until a satisfactory breakdown has been submitted.
- 3.5.7.2 Overall experience of the Bidder, including number of years in business under present and former business names;
- 3.5.7.3 Complete listing of all ongoing and completed public and private construction projects of the Bidder in the last three years, including the nature and value of each contract and a name/address/phone number for each owner;
- 3.5.7.4 Complete listing of any public or private construction projects for which the Bidder has been declared in default; also, any EPA, OSHA, WISHA or other regulating entity issues or citations in the last ten (10) years;
- 3.5.7.5 Certified financial statement and bank references;
- 3.5.7.6 Description of relevant facilities of the Bidder;
- 3.5.7.7 Description of the management experience of the Bidder's project manager(s) and superintendent(s);
- 3.5.7.8 Complete list of subcontractors which the Bidder proposes to employ on the Project;
- 3.5.7.9 Current Washington Workers' Compensation Certificate or other similar type documentation supporting workers' compensation coverage;
- 3.5.7.10 Worker's Compensation Rating for current and previous 5 years; and
- 3.5.7.11 If the Bidder is a foreign corporation, i.e., not incorporated under the laws of Washington, a Certificate of Good Standing from the Secretary of State showing the right of the Bidder to do business in the State; or, if the Bidder is a person or partnership, the Bidder has filed with the Secretary of State a Power of Attorney designating the Secretary of State as the

Bidder's agent for the purpose of accepting service of summons in any action brought under this Contract.

- 3.5.8 Each such Bidder's information shall be considered separately and not comparatively. If the lowest or most responsive Bidder, as applicable, is responsible, the Contract shall be awarded to such Bidder or all bids are rejected.
- 3.5.9 If the lowest or most responsive Bidder, as applicable, is not responsible, and all bids are not rejected, the Tulalip Tribes of Washington shall follow the procedure set forth in paragraph IB 3.5.8 with each next lowest or most responsive Bidder, as applicable, until the Contract is awarded, all bids are rejected or all Bidders are determined to be not responsible unless award of the Contract was based upon a "Weight of Award" points system as defined in paragraph 3.5.2.

3.6 REJECTION OF BID BY THE TULALIP TRIBES OF WASHINGTON

- 3.6.1 If the lowest or most responsive Bidder, as applicable, is not responsible, the Tulalip Tribes of Washington shall reject such Bidder and notify the Bidder in writing by certified mail of the finding and the reasons for the finding.
- 3.6.2 A Bidder who is notified in accordance with paragraph IB 3.6.1 may object to such Bidder's rejection by filing a written protest which must be received by the Tulalip Tribes of Washington, through the Construction Manager, within five (5) days of the notification provided pursuant to paragraph IB 3.6.1.
- 3.6.3 Upon receipt of a timely protest, representatives of the Tulalip Tribes of Washington shall meet with the protesting Bidder to hear the Bidder's objections.
 - 3.6.3.1 No award of the Contract shall become final until after the representatives of the Tulalip Tribes of Washington have met with all Bidders who have timely filed protests and the award of the Contract is affirmed by the Tulalip Tribes of Washington.
 - 3.6.3.2 If all protests are rejected in the Tulalip Tribes of Washington's discretion the award of the Contract shall be affirmed by the Tulalip Tribes of Washington or all bids shall be rejected.

3.7 NOTICE OF INTENT TO AWARD

- 3.7.1 The Tulalip Tribes of Washington shall notify the apparent successful Bidder that upon satisfactory compliance with all conditions precedent for execution of the Contract Form, within the time specified, the Bidder will be awarded the Contract.
- 3.7.2 The Tulalip Tribes of Washington reserves the right to rescind any Notice of Intent to Award if the Tulalip Tribes of Washington determines the Notice of Intent to Award was issued in error.

ARTICLE 4 – WITHDRAWAL OF BID

4.1 WITHDRAWAL PRIOR TO BID OPENING

- 4.1.1 A Bidder may withdraw a bid after the bid has been received by the Tulalip Tribes of Washington, provided the Bidder makes a request in writing and the request is received by the Tulalip Tribes of Washington prior to the time of the bid opening, as determined by the employee or agent of the Tulalip Tribes of Washington designated to open bids.

4.2 WITHDRAWAL AFTER BID OPENING

- 4.2.1 All bids shall remain valid and open for acceptance for a period of, at least, 60 days after the bid opening; provided, however, that within two (2) business days after the bid opening, a Bidder may withdraw a bid from consideration if the bid amount was substantially lower than the amounts of other bids, provided the bid was submitted in good faith, and the reason for the bid amount being substantially lower was a clerical mistake, as opposed to a judgment mistake, and was actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of Work, labor or material made directly in the compilation of the bid amount.
- 4.2.1.1 Notice of a request to withdraw a bid must be made in writing filed with the Tulalip Tribes of Washington, through the Construction Manager, within two (2) business days after the bid opening.
- 4.2.1.2 No bid may be withdrawn under paragraph IB 4.2.1 when the result would be the awarding of the Contract on another bid to the same Bidder.
- 4.2.2 If a bid is withdrawn under paragraph IB 4.2.1, the Tulalip Tribes of Washington may award the Contract to another Bidder the Tulalip Tribes of Washington determines to be the next lowest or most responsive and responsible Bidder, as applicable, or reject all bids and advertise for other bids. If the Tulalip Tribes of Washington advertises for other bids, the withdrawing Bidder shall pay the costs, in connection with the rebidding, of printing new Contract Documents, required advertising and printing and mailing notices to prospective Bidders, if the Tulalip Tribes of Washington finds that such costs would not have been incurred but for such withdrawal.
- 4.2.3 A Bidder may withdraw the Bidder's bid at any time after the period described in paragraph IB 4.2.1 by written notice to the Tulalip Tribes of Washington.

4.3 REFUSAL BY TULALIP TRIBES OF WASHINGTON TO ACCEPT WITHDRAWAL

- 4.3.1 If the Tulalip Tribes of Washington intends to contest the right of a Bidder to withdraw a bid pursuant to paragraph IB 4.2.1, a hearing shall be held by one or more representatives of the Tulalip Tribes of Washington within ten (10) days after the bid opening and an order shall be issued by the Tulalip Tribes of Washington allowing or denying the claim of such right within five (5) days after such hearing is concluded. The Tulalip Tribes of Washington, through the Construction Manager, shall give the withdrawing Bidder timely notice of the time and place of any such hearing.
- 4.3.1.1 The Tulalip Tribes of Washington shall make a stenographic record of all testimony, other evidence, and rulings on the admissibility of evidence presented at the hearing. The Bidder shall pay the costs of the hearing.

4.4 REFUSAL BY BIDDER TO PERFORM

- 4.4.1 If the Tulalip Tribes of Washington denies the claim for withdrawal and the Bidder elects to appeal or otherwise refuses to perform the Contract, the Tulalip Tribes of Washington may reject all bids or award the Contract to the next lowest or most responsive and responsible Bidder, as applicable.

4.5 EFFECT OF WITHDRAWAL

- 4.5.1 No Bidder who is permitted, pursuant to paragraph IB 4.2.1, to withdraw a bid, shall for compensation supply any material or labor to, or perform any subcontract or other work agreement for, the person to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the Project for which the withdrawn bid was submitted, without the written approval of the Tulalip Tribes of Washington.
- 4.5.2 The person to whom the Contract is awarded and the withdrawing Bidder shall be jointly liable to the Tulalip Tribes of Washington in an amount equal to any compensation paid to or for the benefit of the withdrawing Bidder without such approval.

ARTICLE 5 – BID ESTIMATE

5.1 BID TOTALS

- 5.1.1 No Contract shall be entered into if the price of the Contract, or if the Project involves multiple Contracts where the total price of all Contracts for the Project, is in excess of ten (10) percent above the entire estimate.

5.2 SUBSTANTIALLY LOW BID

- 5.2.1 No Bidder shall be responsible if the Bidder's bid is more than twenty (20) percent below the median of all higher bids received for a Contract where the estimate is \$100,000 or more, and no Bidder shall be responsible if the Bidder's bid is more than twenty-five (25) percent below the median of all higher bids received for a Contract where the estimate is less than \$100,000, unless the following procedures are followed.
 - 5.2.1.1 The Construction Manager and the Engineer conduct an interview with the Bidder to determine what, if anything, has been overlooked in the bid, and to analyze the process planned by the Bidder to complete the Work. The Construction Manager and the Engineer shall submit a written summary of the interview to the Tulalip Tribes of Washington.
 - 5.2.1.2 The Tulalip Tribes of Washington reviews and approves the Bidder's responsibility pursuant to paragraph IB 3.5.8.
 - 5.2.1.3 The Construction Manager notifies the Bidder's Surety, if applicable, in writing that the Bidder with whom the Tulalip Tribes of Washington intends to enter a Contract submitted a bid determined to be substantially lower than the median of all higher bids.

ARTICLE 6 – BID GUARANTY AND CONTRACT BOND

6.1 BID GUARANTY

- 6.1.1 The Bidder must file with the bid a Bid Guaranty, payable to the Tulalip Tribes of Washington, in the form of either:
 - 6.1.1.1 The signed Bid Guaranty and Contract Bond contained in the Contract Documents for the amount of the Base Bid plus add Alternates; or
 - 6.1.1.2 The signed Bid Proposal Bond contained in the Contract Documents for the amount of the Base Bid plus add Alternates; or

- 6.1.1.3 A cashier's check in the amount of five (5) percent of the Base Bid plus add Alternates.
- 6.1.1.4 If Bidder elects to file with the bid a Bid Guaranty under paragraph IB 6.1.1.3 Bidder shall also file with the bid a signed Statement of Intended Surety contained in the Contract Documents.
- 6.1.2 The Bid Guaranty shall be in form and substance satisfactory to the Tulalip Tribes of Washington and shall serve as an assurance that the Bidder will, upon acceptance of the bid, comply with all conditions precedent for execution of the Contract Form, within the time specified in the Contract Documents. Any Bid Guaranty must be payable to the Tulalip Tribes of Washington.
- 6.1.3 If the blank line on the Bid Guaranty and Contract Bond or Bid Proposal Bond is not filled in, the penal sum will automatically be the full amount of the Base Bid plus add Alternates. If the blank line is filled in, the amount must not be less than the full amount of the Base Bid plus add Alternates, stated in dollars and cents. A percentage is not acceptable.
- 6.1.4 The Bid Guaranty and Contract Bond or Bid Proposal Bond must be signed by an authorized agent, with Power of Attorney, from the Surety. The Bid Guaranty and Contract Bond or Bid Proposal Bond must be issued by a Surety licensed to transact business in the State of Washington.
- 6.1.5 Bid Guaranties will be returned to all unsuccessful Bidders 90 days after the bid opening. If used, the cashier's check will be returned to the successful Bidder upon compliance with all conditions precedent for execution of the Contract Form.

6.2 FORFEITURE

- 6.2.1 If for any reason, other than as authorized by paragraph IB 4.2.1 or paragraph IB 6.3, the Bidder fails to execute the Contract Form, and the Tulalip Tribes of Washington awards the Contract to another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, the Bidder who failed to enter into a Contract shall be liable to the Tulalip Tribes of Washington for the difference between such Bidder's bid and the bid of the next lowest or most responsible Bidder, as applicable, or for a penal sum not to exceed five (5) percent of the bid amount, whichever is less.
- 6.2.2 If the Tulalip Tribes of Washington then awards a Contract to another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, and such Bidder also fails or refuses to execute the Contract Form, the liability of such lowest or most responsive and responsible Bidder, as applicable, shall, except as provided in paragraph IB 6.3, be the amount of the difference between the bid amounts of such lowest or most responsible Bidder, as applicable, and another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, but not in excess of the liability specified in paragraph IB 6.2.1. Liability on account of an award to each succeeding lowest or most responsive and responsible Bidder, as applicable, shall be determined in like manner.
- 6.2.3 If the Tulalip Tribes of Washington does not award the Contract to another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, but resubmits the Project for

bidding, the Bidder failing to execute the Contract Form shall, except as provided in paragraph IB 6.3, be liable to the Tulalip Tribes of Washington for a penal sum not to exceed five (5) percent of such Bidder's bid amount or the costs in connection with the resubmission, of printing new Contract Documents, required advertising and printing and mailing notices to prospective Bidders, whichever is less.

6.3 EXCEPTION TO FORFEITURE

- 6.3.1 A Bidder for a Contract costing less than \$500,000 may withdraw a bid from consideration if the Bidder's bid for some other Contract costing less than \$500,000 has already been accepted, if the Bidder certifies in good faith that the total price of all such Bidder's current contracts is less than \$500,000, and if the Bidder's Surety, if applicable, certifies in good faith that the Bidder is unable to perform the subsequent contract because to perform such Contract would exceed the Bidder's bonding capacity.
- 6.3.2 If a bid is withdrawn pursuant to paragraph IB 6.3.1, the Tulalip Tribes of Washington may award the Contract to another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, or reject all bids and resubmit the Project for bidding, and neither the withdrawing Bidder nor such Bidder's Surety, as applicable, shall be liable for the difference between the Bidder's bid and that of another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, for a penal sum, or for the costs of printing new Contract Documents, required advertising and printing and mailing notices to prospective Bidders.

6.4 CONTRACT BOND

- 6.4.1 If the Bidder executes the Contract Form, the Bidder shall, at the same time, provide a Bond meeting the requirements of the Contract Documents, unless the Bidder provided an acceptable Bid Guaranty and Contract Bond at the time of the bid opening. A "A- VII" or better Best Rated Surety Company shall issue the required bond.
- 6.4.2 The Bond shall be in the full amount of the Contract to indemnify the Tulalip Tribes of Washington against all direct and consequential damages suffered by failure of the Contractor to perform according to the provisions of the Contract and in accordance with the plans, details, specifications and bills of material therefore and to pay all lawful claims of Subcontractors, Material Suppliers, and laborers for labor performed or materials furnished in carrying forward, performing or completing the Contract.
- 6.4.3 The Bond shall be supported by a Power of Attorney of the agent signing for a Surety. The Bond shall be supported by a current and signed Certificate of Compliance or Certificate of Authority showing the Surety is licensed to do business in Washington.

6.5 NOT USED

ARTICLE 7 – CONTRACT AWARD AND EXECUTION

7.1 NONCOMPLIANCE WITH CONDITIONS PRECEDENT

- 7.1.1 The award of the Contract and the execution of the Contract Form are based upon the expectation that the lowest or most responsive and responsible Bidder, as applicable, will comply with all conditions precedent for execution of the Contract Form within ten (10) days of the date of the Notice of Intent to Award.
 - 7.1.1.1 Noncompliance with the conditions precedent for execution of the Contract Form within ten (10) days of the date of the Notice of Intent to Award shall be cause for the Tulalip Tribes of Washington to cancel the Notice of Intent to Award for the Bidder's lack of responsibility and award the Contract to another Bidder which the Tulalip Tribes of Washington determines is the next lowest or most responsive and responsible Bidder, as applicable, or resubmit the Contract for bidding, at the discretion of the Tulalip Tribes of Washington.
 - 7.1.1.2 The Tulalip Tribes of Washington may extend the time for submitting the conditions precedent for execution of the Contract Form for good cause shown. No extension shall operate as a waiver of the conditions precedent for execution of the Contract Form.

7.2 TIME LIMITS

- 7.2.1 The failure to award the Contract and to execute the Contract Form within 60 days of the bid opening invalidates the entire bid process and all bids submitted, unless the time is extended by written consent of the Bidder whose bid is accepted by the Tulalip Tribes of Washington and with respect to whom the Tulalip Tribes of Washington awards and executes a Contract.
 - 7.2.1.1 If the Contract is awarded and the Contract Form is executed within 60 days of the bid opening, any increases in material, labor and subcontract costs shall be borne by the Bidder without alteration of the amount of the bid.
 - 7.2.1.2 If the cause of the failure to execute the Contract within 60 days of the bid opening is due to matters for which the Tulalip Tribes of Washington is solely responsible, the Contractor shall be entitled to a Change Order authorizing payment of verifiable increased costs in materials, labor or subcontracts.
 - 7.2.1.3 If the cause of the failure to execute the Contract within 60 days of the bid opening is due to matters for which the Contractor is responsible, no request for increased costs will be granted.

7.3 CONDITIONS PRECEDENT FOR EXECUTION OF CONTRACT FORM

- 7.3.1 Bond, if required. To support the Bond, a current and signed Certificate of Compliance or Certificate of Authority showing the Surety is licensed to do business in Washington;
- 7.3.2 Current Washington Workers' Compensation Certificate or other similar type documentation supporting workers' compensation coverage;
- 7.3.3 Certificate of Insurance (ISO general liability form CG 2010 11/85 edition or equivalent form is acceptable) and copy of additional insured endorsement. The

certificate shall clearly state The Tulalip Tribes of Washington, Consolidated Borough of Quil Ceda Village, and the State of Washington are named as "Additional Insureds" to the General Liability, Automobile Liability, and Excess Liability Policies. Workers Compensation coverage includes a waiver of subrogation against the Tulalip Tribes of Washington and Consolidated Borough of Quil Ceda Village." The wording "endeavor to" and "but failure to" under CANCELLATION shall be stricken from the certificate. The Tulalip Tribes of Washington reserves the right to request a certified copy of the Contractor's insurance policies meeting the requirements of GC Article 12;

- 7.3.4 If the Bidder is a foreign corporation, i.e., not incorporated under the laws of Washington, a Certificate of Good Standing from the Secretary of State showing the right of the Bidder to do business in the State; or, if the Bidder is a person or partnership, the Bidder has filed with the Secretary of State a Power of Attorney designating the Secretary of State as the Bidder's agent for the purpose of accepting service of summons in any action brought under this Contract;
- 7.3.5 Contractor signed Contract Form;
- 7.3.6 Completed and approved TERO Contracting and Subcontracting Compliance plan;
- 7.3.7 Current Tulalip Tribes Business License; and
- 7.3.8 Completed and signed Confidentiality Agreement.

7.4 NOTICE TO PROCEED AND SUBMITTALS

- 7.4.1 The Tulalip Tribes of Washington shall issue to the Contractor a Notice to Proceed, which shall establish the date for Contract Completion. The Contractor shall, within ten (10) days of the date of the Notice to Proceed, furnish the Construction Manager with the following submittals:
 - 7.4.1.1 Contract Cost Breakdown;
 - 7.4.1.2 Preliminary schedule of Shop Drawings and Submittals;
 - 7.4.1.3 Outline of qualifications of the proposed superintendent; and
 - 7.4.1.4 Acknowledgement by a TERO Representative the Project related TERO fee has been paid or an agreement has been reached to pay the fee in installments over the course of the Contract.

ARTICLE 8 – APPLICABLE LAW AND FORUM

8.1 FORUM FOR EQUITABLE RELIEF

- 8.1.1 The Tribal Court of the Tulalip Tribes of Washington shall have exclusive jurisdiction over any action or proceeding for any injunction or declaratory judgment concerning any agreement or performance under the Contract Documents or in connection with the Project. Any such action or proceeding arising out of or related in any way to the Contract or performance thereunder shall be brought only in the Tribal Court of the Tulalip Tribes of Washington and the Contractor irrevocably consents to such jurisdiction and venue. The Contract shall be governed by the law of the State of Washington.

8.2 FORUM FOR MONEY DAMAGES

- 8.2.1 The Tribal Court of the Tulalip Tribes of Washington shall be the exclusive jurisdiction for any action or proceeding for any injunction or declaratory judgment

concerning any agreement or performance under the Contract Documents or in connection with the Project. The Tribal Court of the Tulalip Tribes of Washington shall be the exclusive jurisdiction for any action or proceeding by the Contractor or the Contractor's Surety, if applicable, for any money damages concerning any agreement or performance under the Contract Documents or in connection with the Project.

8.3 FEDERAL ACQUISITION REGULATIONS

8.3.1 Applicable sections of the Federal Acquisition Regulations (FAR) are a part of this Contract by reference. Access the entire FAR regulations at the following website:

<http://acquisition.gov/far/>

The FAR sections are applicable to the work covered in the Proposal and include:

- 52.203-15 Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009.
- 52.204-6 Data Universal Numbering System (DUNS) Number.
- 52.204-7 Central Contractor Registration.
- 52.204.10 Reporting Subcontractor Awards
- 52.225-21 Required use of American Iron, Steel and Other Manufactured Goods – Buy American Act – Construction Materials

The Tulalip Tribes of Washington

BID PROPOSAL FORM

Project Name: I-5/116th Street NE
Interchange Improvements
Phase 4 Ramps

Date of Bid: _____

Location of Project: 8802 27th Ave NE
Tulalip, WA 98271

COMPANY NAME OF BIDDER: _____

CERTIFIED NATIVE AMERICAN OWNED BUSINESS:

YES _____ If Yes, Percentage (%) of Indian Ownership: _____ **NO** _____

Having read and examined the Contract Documents, including without limitation the Drawings and Specifications, prepared by the Engineer and the Tulalip Tribes of Washington for the above-referenced Project, and the following Addenda:

ADDENDA ACKNOWLEDGED (Enter Addenda Number and Date of Addenda below):

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |

The undersigned Bidder proposes to perform all Work for the applicable Contract, in accordance with the Contract Documents, for the following sums:

BASE BID FOR PACKAGE #17-007

**I-5/116th Street NE Interchange
Improvements Phase 4 Ramps**

**Refer to Division 0, TERO Code, and Special Provisions, Section 1-07.2 State Taxes,
for application of TERO and Taxes on all schedules**

Bid Schedules

<div style="text-align: center;"> <h3>Schedule A</h3> <p>Work within the Tribal Reservation Boundary</p> </div>						
BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	7.3		
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	12.0		
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1.0		
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	1.0	\$ 9,500	\$ 9,500
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	12,070		
7	0145	L.F.	REMOVING CONC. BARRIER	2,307		
8	0170	L.F.	REMOVING GUARDRAIL	2,450		
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	3.0		
10		L.F.	REMOVING DRAINAGE PIPE	1,002		
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	3,820		
12	0405	C.Y.	COMMON BORROW INCL. HAUL	7.0		
13	0431	TON	GRAVEL BORROW INCL. HAUL	113,550		
14	0470	C.Y.	EMBANKMENT COMPACTION	47,410		
15		C.Y.	POND EXCAVATION INCL. HAUL	2,060		
16		C.Y.	COMPACTED TILL	551		
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	762		
18	1054	EACH	GRATE INLET TYPE 2	6.0		
19	1086	TON	QUARRY SPALLS	55		
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	55		
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	130		
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	34		
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	1.0		
24	3091	EACH	CATCH BASIN TYPE 1	10		
25		EACH	TEMPORARY CATCH BASIN TYPE 1	1.0		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	3.0		
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	1.0		
28	3151	L.F.	TESTING STORM SEWER PIPE	2,302		
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	757		
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	1,291		
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	97		
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	157		
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	0.0	\$ 0.00	\$ 0.00
34		EACH	2" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	0.0	\$ 0.00	\$ 0.00
36		EACH	1" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	775		
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	10,870		
39	4166	C.Y.	LEAN CONCRETE	3.0		
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	49		
41	4117	L.F.	PEDESTRIAN BARRIER	4.0		
42	4119	L.F.	SEW TRAFFIC BARRIER	270		
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	163		
44	4456	S.Y.	SCARIFYING CONC. SURFACE	2.0		
45	7169	S.F.	STRUCTURAL EARTH WALL	7,095		
46		EACH	CORE DRILLED BRIDGE DECK	0.0	\$ 0.00	\$ 0.00
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	281		
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	8030		
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	8,270		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64-22	67		
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	11,795		
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	1.0	\$ 28,308.00	\$ 28,308.00
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	1.0	\$ 18,872.00	\$ 18,872.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	1.0	\$ 840.00	\$ 840.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	289		
56	6453	S.Y.	COMPOST BLANKET	75		
57	6463	L.F.	CHECK DAM	40		
58	6471	EACH	INLET PROTECTION	50		
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	1,890		
60	6470	HR	STREET CLEANING	708		
61	6479	L.F.	WATTLE	900		
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	1.0	\$218,400.00	\$218,400.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	5.05		
64	6405	C.Y.	TOPSOIL TYPE A	1,661		
65	6545	EST.	WEED AND PEST CONTROL	1.0	\$ 4,200	\$ 4,200
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	135		
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	14		
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	332		
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	147		
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	238		
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	661		
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	661		
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	440		
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	661		
75	6552	EACH	PSIPE-ROSA NUTKAN/NOOTKA ROSE (#1 CONT / 12" HT)	661		
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	1,321		
77		C.Y.	FINE COMPOST	18		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
78		EACH	WATER BAGS	149		
79		ACRE	SOIL DECOMPACTION	3.0		
80	6529	C.Y.	SOIL AMENDMENT	5.6		
81	6579	ACRE	WOOD CHIP MULCH	1.7		
82	6630	L.F.	HIGH VISIBILITY FENCE	2,170		
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	1,340		
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	1,225		
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	1,073		
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	1,007		
87	6727	L.F.	EXTRUDED CURB	113		
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	1,704		
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	42		
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	2,551		
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	4.0		
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	4.0		
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	5.0		
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	1.0		
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	1.0		
96	6832	EACH	FLEXIBLE GUIDE POST	104		
97	6830	EACH	BARRIER DELINEATOR	14		
98	6807	L.F.	PLASTIC LINE	11,686		
99	6809	L.F.	PROFIED PLASTIC LINE	8,047		
100	6845	L.F.	PROFIED PLASTIC WIDE LANE LINE	5,323		
101	6818	L.F.	PLASTIC WIDE LINE	2,520		
102	6857	S.F.	PLASTIC CROSSWALK LINE	816		
103	6859	L.F.	PLASTIC STOP LINE	194		
104	6833	EACH	PLASTIC TRAFFIC ARROW	36		
105	6871	EACH	PLASTIC TRAFFIC LETTER	25		
106	6881	EACH	PLASTIC DRAINAGE MARKING	47		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	0.0	\$ 0.00	\$ 0.00
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	0.0	\$ 0.00	\$ 0.00
109	6890	L.S.	PERMANENT SIGNING	1.0		
110	6897	L.S.	SIGN BRIDGE NO. 1	1.0		
111	6897	L.S.	SIGN BRIDGE NO. 2	1.0		
112	6897	L.S.	SIGN BRIDGE NO. 3	0.0	\$ 0.00	\$ 0.00
113	6904	L.S.	ILLUMINATION SYSTEM	1.0		
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	1.0		
115	6914	L.S.	ITS	1.0		
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	1.0		
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	1.0		
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	843		
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	5,280		
120	7029	EACH	PLUGGING EXISTING PIPE	3.0		
121	7037	L.S.	STRUCTURE SURVEYING	1.0		
122	7038	L.S.	ROADWAY SURVEYING	1.0		
123	7040	EST.	LICENSED SURVEYING	1.0	\$ 15,000.00	\$ 15,000.00
124		L.S.	ADA FEATURES SURVEYING	1.0		
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	10		
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	2		
127	7080	L.F.	CABLE FENCE	375		
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	40		
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	4.0		
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	1.0		
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	7.0		
132	3100	EACH	ADJUST CATCH BASIN	1.0		
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	1.0		
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	1.0		
135	7400	HR	TRAINING	1,350		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
136	7480	EST.	ROADSIDE CLEANUP	1.0	\$ 24,000.00	\$ 24,000.00
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	1.0	\$ 10,000.00	\$ 10,000.00
138	7728	EST.	MINOR CHANGE	1.0	\$ 50,000.00	\$ 50,000.00
139	7736	L.S.	SPCC PLAN	1.0		
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	140		
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	0.0	\$ 0.00	\$ 0.00
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	3,227		
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	9,450		
144		EACH	INSTALL RECTANGULAR VANED GRATE	9.0		
Sub Total Schedule A						
TERO Fee 1.75%						
Total Schedule A						

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	1.2		
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	2.0		
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1.0		
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	3,400		
7	0145	L.F.	REMOVING CONC. BARRIER	70		
8	0170	L.F.	REMOVING GUARDRAIL	620		
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	0.0	\$ 0.00	\$ 0.00
10		L.F.	REMOVING DRAINAGE PIPE	129		
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	30		
12	0405	C.Y.	COMMON BORROW INCL. HAUL	7		
13	0431	TON	GRAVEL BORROW INCL. HAUL	220		
14	0470	C.Y.	EMBANKMENT COMPACTION	1,170		
15		C.Y.	POND EXCAVATION INCL. HAUL	10,260		
16		C.Y.	COMPACTED TILL	1,143		
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	269		
18	1054	EACH	GRATE INLET TYPE 2	0.0	\$ 0.00	\$ 0.00
19	1086	TON	QUARRY SPALLS	63		
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	60		
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	0.0	\$ 0.00	\$ 0.00
24	3091	EACH	CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
25		EACH	TEMPORARY CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	0.0	\$ 0.00	\$ 0.00

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	1.0		
28	3151	L.F.	TESTING STORM SEWER PIPE	177		
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	177		
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	0.0	\$ 0.00	\$ 0.00
34		EACH	2" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	0.0	\$ 0.00	\$ 0.00
36		EACH	1" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	52		
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	0.0	\$ 0.00	\$ 0.00
39	4166	C.Y.	LEAN CONCRETE	0.0	\$ 0.00	\$ 0.00
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	0.0	\$ 0.00	\$ 0.00
41	4117	L.F.	PEDESTRIAN BARRIER	0.0	\$ 0.00	\$ 0.00
42	4119	L.F.	SEW TRAFFIC BARRIER	86		
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
44	4456	S.Y.	SCARIFYING CONC. SURFACE	0.0	\$ 0.00	\$ 0.00
45	7169	S.F.	STRUCTURAL EARTH WALL	0.0	\$ 0.00	\$ 0.00
46		EACH	CORE DRILLED BRIDGE DECK	0.0	\$ 0.00	\$ 0.00
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	0.0	\$ 0.00	\$ 0.00
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	290		
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	2,100		
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64- 22	161		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	480		
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	1.0	\$ 1,152.00	\$ 1,152.00
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	1.0	\$ 768.00	\$ 768.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	1.0	\$ 420.00	\$ 420.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	33		
56	6453	S.Y.	COMPOST BLANKET	25		
57	6463	L.F.	CHECK DAM	30		
58	6471	EACH	INLET PROTECTION	5.0		
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	1,300		
60	6470	HR	STREET CLEANING	236		
61	6479	L.F.	WATTLE	0.0	\$ 0.00	\$ 0.00
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	1.0	\$ 40,950.00	\$ 40,950.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	1.29		
64	6405	C.Y.	TOPSOIL TYPE A	18		
65	6545	EST.	WEED AND PEST CONTROL	1.0	\$ 2,100.00	\$ 2,100.00
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	26		
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	11		
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	127		
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	57		
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	99		
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	339		
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	339		
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	226		
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	339		
75	6552	EACH	PSIPE-ROSA NUTKAN/NOOTKA ROSE (#1 CONT / 12" HT)	339		
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	678		
77		C.Y.	FINE COMPOST	5.0		
78		EACH	WATER BAGS	37		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
79		ACRE	SOIL DECOMPACTION	1.5		
80	6529	C.Y.	SOIL AMENDMENT	2.1		
81	6579	ACRE	WOOD CHIP MULCH	0.8		
82	6630	L.F.	HIGH VISIBILITY FENCE	360		
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	0.0	\$ 0.00	\$ 0.00
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	321		
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	272		
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	0.0	\$ 0.00	\$ 0.00
87	6727	L.F.	EXTRUDED CURB	0.0	\$ 0.00	\$ 0.00
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	492		
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	0.0	\$ 0.00	\$ 0.00
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	0.0	\$ 0.00	\$ 0.00
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	0.0	\$ 0.00	\$ 0.00
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	0.0	\$ 0.00	\$ 0.00
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	0.0	\$ 0.00	\$ 0.00
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	0.0	\$ 0.00	\$ 0.00
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	0.0	\$ 0.00	\$ 0.00
96	6832	EACH	FLEXIBLE GUIDE POST	1.0		
97	6830	EACH	BARRIER DELINEATOR	1.0		
98	6807	L.F.	PLASTIC LINE	724		
99	6809	L.F.	PROFILED PLASTIC LINE	685		
100	6845	L.F.	PROFILED PLASTIC WIDE LANE LINE	446		
101	6818	L.F.	PLASTIC WIDE LINE	0.0	\$ 0.00	\$ 0.00
102	6857	S.F.	PLASTIC CROSSWALK LINE	0.0	\$ 0.00	\$ 0.00
103	6859	L.F.	PLASTIC STOP LINE	0.0	\$ 0.00	\$ 0.00
104	6833	EACH	PLASTIC TRAFFIC ARROW	5.0		
105	6871	EACH	PLASTIC TRAFFIC LETTER	0.0	\$ 0.00	\$ 0.00
106	6881	EACH	PLASTIC DRAINAGE MARKING	4.0		
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	15		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	2.6		
109	6890	L.S.	PERMANENT SIGNING	1.0		
110	6897	L.S.	SIGN BRIDGE NO. 1	0.0	\$ 0.00	\$ 0.00
111	6897	L.S.	SIGN BRIDGE NO. 2	0.0	\$ 0.00	\$ 0.00
112	6897	L.S.	SIGN BRIDGE NO. 3	1.0		
113	6904	L.S.	ILLUMINATION SYSTEM	1.0		
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	0.0	\$ 0.00	\$ 0.00
115	6914	L.S.	ITS	0.0	\$ 0.00	\$ 0.00
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	1.0		
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	0.0	\$ 0.00	\$ 0.00
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	239		
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	1,530		
120	7029	EACH	PLUGGING EXISTING PIPE	0.0	\$ 0.00	\$ 0.00
121	7037	L.S.	STRUCTURE SURVEYING	0.0	\$ 0.00	\$ 0.00
122	7038	L.S.	ROADWAY SURVEYING	1.0		
123	7040	EST.	LICENSED SURVEYING	0.0	\$ 0.00	\$ 0.00
124		L.S.	ADA FEATURES SURVEYING	0.0	\$ 0.00	\$ 0.00
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	0.0	\$ 0.00	\$ 0.00
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	0.0	\$ 0.00	\$ 0.00
127	7080	L.F.	CABLE FENCE	0.0	\$ 0.00	\$ 0.00
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	0.0	\$ 0.00	\$ 0.00
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	0.0	\$ 0.00	\$ 0.00
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	0.0	\$ 0.00	\$ 0.00
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
132	3100	EACH	ADJUST CATCH BASIN	0.0	\$ 0.00	\$ 0.00
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	0.0	\$ 0.00	\$ 0.00
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
135	7400	HR	TRAINING	0.0	\$ 0.00	\$ 0.00
136	7480	EST.	ROADSIDE CLEANUP	1.0	\$ 4,500.00	\$ 4,500.00

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	1.0	\$ 5,000.00	\$ 5,000.00
138	7728	EST.	MINOR CHANGE	1.0	\$ 25,000.00	\$ 25,000.00
139	7736	L.S.	SPCC PLAN	1.0		
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	20		
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	100		
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	197		
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	0.0	\$ 0.00	\$ 0.00
144		EACH	INSTALL RECTANGULAR VANED GRATE	5.0		
Sub Total Schedule B						
TERO Fee 1.75%						
Total Schedule B						

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	0.3		
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1.0		
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	90		
7	0145	L.F.	REMOVING CONC. BARRIER	0.0	\$ 0.00	\$ 0.00
8	0170	L.F.	REMOVING GUARDRAIL	0.0	\$ 0.00	\$ 0.00
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	0.0	\$ 0.00	\$ 0.00
10		L.F.	REMOVING DRAINAGE PIPE	0.0	\$ 0.00	\$ 0.00
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
12	0405	C.Y.	COMMON BORROW INCL. HAUL	0.0	\$ 0.00	\$ 0.00
13	0431	TON	GRAVEL BORROW INCL. HAUL	30		
14	0470	C.Y.	EMBANKMENT COMPACTION	0.0	\$ 0.00	\$ 0.00
15		C.Y.	POND EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
16		C.Y.	COMPACTED TILL	0.0	\$ 0.00	\$ 0.00
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	22		
18	1054	EACH	GRATE INLET TYPE 2	0.0	\$ 0.00	\$ 0.00
19	1086	TON	QUARRY SPALLS	0.0	\$ 0.00	\$ 0.00
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	0.0	\$ 0.00	\$ 0.00
24	3091	EACH	CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
25		EACH	TEMPORARY CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	0.0	\$ 0.00	\$ 0.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	0.0	\$ 0.00	\$ 0.00
28	3151	L.F.	TESTING STORM SEWER PIPE	0.0	\$ 0.00	\$ 0.00
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	0.0	\$ 0.00	\$ 0.00
34		EACH	2" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	0.0	\$ 0.00	\$ 0.00
36		EACH	1" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	0.0	\$ 0.00	\$ 0.00
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	0.0	\$ 0.00	\$ 0.00
39	4166	C.Y.	LEAN CONCRETE	0.0	\$ 0.00	\$ 0.00
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	0.0	\$ 0.00	\$ 0.00
41	4117	L.F.	PEDESTRIAN BARRIER	0.0	\$ 0.00	\$ 0.00
42	4119	L.F.	SEW TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
44	4456	S.Y.	SCARIFYING CONC. SURFACE	0.0	\$ 0.00	\$ 0.00
45	7169	S.F.	STRUCTURAL EARTH WALL	0.0	\$ 0.00	\$ 0.00
46		EACH	CORE DRILLED BRIDGE DECK	0.0	\$ 0.00	\$ 0.00
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	0.0	\$ 0.00	\$ 0.00
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	130		
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	970		
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64-22	161		

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	50		
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	1.0	\$ 120.00	\$ 120.00
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	1.0	\$ 80.00	\$ 80.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	1.0	\$ 140.00	\$ 140.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	64		
56	6453	S.Y.	COMPOST BLANKET	0.0	\$ 0.00	\$ 0.00
57	6463	L.F.	CHECK DAM	15		
58	6471	EACH	INLET PROTECTION	2.0		
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	0.0	\$ 0.00	\$ 0.00
60	6470	HR	STREET CLEANING	319		
61	6479	L.F.	WATTLE	0.0	\$ 0.00	\$ 0.00
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	1.0	\$ 13,650.00	\$ 13,650.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	0.16		
64	6405	C.Y.	TOPSOIL TYPE A	0.0	\$ 0.00	\$ 0.00
65	6545	EST.	WEED AND PEST CONTROL	1.0	\$ 700.00	\$ 700.00
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	19		
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	9		
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	15		
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	52		
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	52		
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	34		
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	52		
75	6552	EACH	PSIPE-ROSA NUTKANA/NOOTKA ROSE (#1 CONT / 12" HT)	52		
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	103		
77		C.Y.	FINE COMPOST	0.0	\$ 0.00	\$ 0.00
78		EACH	WATER BAGS	0.0	\$ 0.00	\$ 0.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
79		ACRE	SOIL DECOMPACTION	0.5		
80	6529	C.Y.	SOIL AMENDMENT	0.3		
81	6579	ACRE	WOOD CHIP MULCH	0.1		
82	6630	L.F.	HIGH VISIBILITY FENCE	220		
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	0.0	\$ 0.00	\$ 0.00
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	216		
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	0.0	\$ 0.00	\$ 0.00
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	0.0	\$ 0.00	\$ 0.00
87	6727	L.F.	EXTRUDED CURB	0.0	\$ 0.00	\$ 0.00
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	664		
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	31		
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	0.0	\$ 0.00	\$ 0.00
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	0.0	\$ 0.00	\$ 0.00
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	0.0	\$ 0.00	\$ 0.00
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	0.0	\$ 0.00	\$ 0.00
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	0.0	\$ 0.00	\$ 0.00
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	0.0	\$ 0.00	\$ 0.00
96	6832	EACH	FLEXIBLE GUIDE POST	0.0	\$ 0.00	\$ 0.00
97	6830	EACH	BARRIER DELINEATOR	0.0	\$ 0.00	\$ 0.00
98	6807	L.F.	PLASTIC LINE	1,600		
99	6809	L.F.	PROFILED PLASTIC LINE	658		
100	6845	L.F.	PROFILED PLASTIC WIDE LANE LINE	361		
101	6818	L.F.	PLASTIC WIDE LINE	0.0	\$ 0.00	\$ 0.00
102	6857	S.F.	PLASTIC CROSSWALK LINE	0.0	\$ 0.00	\$ 0.00
103	6859	L.F.	PLASTIC STOP LINE	0.0	\$ 0.00	\$ 0.00
104	6833	EACH	PLASTIC TRAFFIC ARROW	2.0		
105	6871	EACH	PLASTIC TRAFFIC LETTER	0.0	\$ 0.00	\$ 0.00
106	6881	EACH	PLASTIC DRAINAGE MARKING	1.0		
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	0.0	\$ 0.00	\$ 0.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	0.0	\$ 0.00	\$ 0.00
109	6890	L.S.	PERMANENT SIGNING	1.0		
110	6897	L.S.	SIGN BRIDGE NO. 1	0.0	\$ 0.00	\$ 0.00
111	6897	L.S.	SIGN BRIDGE NO. 2	0.0	\$ 0.00	\$ 0.00
112	6897	L.S.	SIGN BRIDGE NO. 3	1.0		
113	6904	L.S.	ILLUMINATION SYSTEM	1.0		
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	0.0	\$ 0.00	\$ 0.00
115	6914	L.S.	ITS	0.0	\$ 0.00	\$ 0.00
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	1.0		
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	0.0	\$ 0.00	\$ 0.00
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	12		
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	0.0	\$ 0.00	\$ 0.00
120	7029	EACH	PLUGGING EXISTING PIPE	0.0	\$ 0.00	\$ 0.00
121	7037	L.S.	STRUCTURE SURVEYING	0.0	\$ 0.00	\$ 0.00
122	7038	L.S.	ROADWAY SURVEYING	1.0		
123	7040	EST.	LICENSED SURVEYING	0.0	\$ 0.00	\$ 0.00
124		L.S.	ADA FEATURES SURVEYING	0.0	\$ 0.00	\$ 0.00
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	0.0	\$ 0.00	\$ 0.00
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	0.0	\$ 0.00	\$ 0.00
127	7080	L.F.	CABLE FENCE	0.0	\$ 0.00	\$ 0.00
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	0.0	\$ 0.00	\$ 0.00
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	0.0	\$ 0.00	\$ 0.00
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	0.0	\$ 0.00	\$ 0.00
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
132	3100	EACH	ADJUST CATCH BASIN	0.0	\$ 0.00	\$ 0.00
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	0.0	\$ 0.00	\$ 0.00
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
135	7400	HR	TRAINING	0.0	\$ 0.00	\$ 0.00
136	7480	EST.	ROADSIDE CLEANUP	1.0	\$ 1,500.00	\$ 1,500.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	1.0	\$ 5,000.00	\$ 5,000.00
138	7728	EST.	MINOR CHANGE	0.0	\$ 0.00	\$ 0.00
139	7736	L.S.	SPCC PLAN	0.0	\$ 0.00	\$ 0.00
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	0.0	\$ 0.00	\$ 0.00
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	0.0	\$ 0.00	\$ 0.00
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	0.0	\$ 0.00	\$ 0.00
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	0.0	\$ 0.00	\$ 0.00
144		EACH	INSTALL RECTANGULAR VANED GRATE	1.0		
Sub Total Schedule C						
TERO Fee 1.75%						
Total Schedule C						

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	0.0	\$ 0.00	\$ 0.00
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	0.0	\$ 0.00	\$ 0.00
7	0145	L.F.	REMOVING CONC. BARRIER	0.0	\$ 0.00	\$ 0.00
8	0170	L.F.	REMOVING GUARDRAIL	0.0	\$ 0.00	\$ 0.00
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	0.0	\$ 0.00	\$ 0.00
10		L.F.	REMOVING DRAINAGE PIPE	0.0	\$ 0.00	\$ 0.00
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
12	0405	C.Y.	COMMON BORROW INCL. HAUL	0.0	\$ 0.00	\$ 0.00
13	0431	TON	GRAVEL BORROW INCL. HAUL	0.0	\$ 0.00	\$ 0.00
14	0470	C.Y.	EMBANKMENT COMPACTION	0.0	\$ 0.00	\$ 0.00
15		C.Y.	POND EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
16		C.Y.	COMPACTED TILL	0.0	\$ 0.00	\$ 0.00
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
18	1054	EACH	GRATE INLET TYPE 2	0.0	\$ 0.00	\$ 0.00
19	1086	TON	QUARRY SPALLS	0.0	\$ 0.00	\$ 0.00
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	0.0	\$ 0.00	\$ 0.00
24	3091	EACH	CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
25		EACH	TEMPORARY CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
28	3151	L.F.	TESTING STORM SEWER PIPE	0.0	\$ 0.00	\$ 0.00
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	155		
34		EACH	2" COMBINATION AIR RELEASE VALVE	1.0		
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	309		
36		EACH	1" COMBINATION AIR RELEASE VALVE	2.0		
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	0.0	\$ 0.00	\$ 0.00
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	0.0	\$ 0.00	\$ 0.00
39	4166	C.Y.	LEAN CONCRETE	0.0	\$ 0.00	\$ 0.00
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	0.0	\$ 0.00	\$ 0.00
41	4117	L.F.	PEDESTRIAN BARRIER	0.0	\$ 0.00	\$ 0.00
42	4119	L.F.	SEW TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
44	4456	S.Y.	SCARIFYING CONC. SURFACE	0.0	\$ 0.00	\$ 0.00
45	7169	S.F.	STRUCTURAL EARTH WALL	0.0	\$ 0.00	\$ 0.00
46		EACH	CORE DRILLED BRIDGE DECK	3.0		
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	0.0	\$ 0.00	\$ 0.00
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	0.0	\$ 0.00	\$ 0.00
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	0.0	\$ 0.00	\$ 0.00
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64- 22	0.0	\$ 0.00	\$ 0.00
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	0.0	\$ 0.00	\$ 0.00
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	0.0	\$ 0.00	\$ 0.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	0.0	\$ 0.00	\$ 0.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	0.0	\$ 0.00	\$ 0.00
56	6453	S.Y.	COMPOST BLANKET	0.0	\$ 0.00	\$ 0.00
57	6463	L.F.	CHECK DAM	0.0	\$ 0.00	\$ 0.00
58	6471	EACH	INLET PROTECTION	0.0	\$ 0.00	\$ 0.00
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	0.0	\$ 0.00	\$ 0.00
60	6470	HR	STREET CLEANING	0.0	\$ 0.00	\$ 0.00
61	6479	L.F.	WATTLE	0.0	\$ 0.00	\$ 0.00
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	0.0	\$ 0.00	\$ 0.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	0.0	\$ 0.00	\$ 0.00
64	6405	C.Y.	TOPSOIL TYPE A	0.0	\$ 0.00	\$ 0.00
65	6545	EST.	WEED AND PEST CONTROL	0.0	\$ 0.00	\$ 0.00
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	0.0	\$ 0.00	\$ 0.00
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	0.0	\$ 0.00	\$ 0.00
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	0.0	\$ 0.00	\$ 0.00
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
75	6552	EACH	PSIPE-ROSA NUTKANA/NOOTKA ROSE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
77		C.Y.	FINE COMPOST	0.0	\$ 0.00	\$ 0.00
78		EACH	WATER BAGS	0.0	\$ 0.00	\$ 0.00
79		ACRE	SOIL DECOMPACTION	0.0	\$ 0.00	\$ 0.00
80	6529	C.Y.	SOIL AMENDMENT	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
81	6579	ACRE	WOOD CHIP MULCH	0.0	\$ 0.00	\$ 0.00
82	6630	L.F.	HIGH VISIBILITY FENCE	0.0	\$ 0.00	\$ 0.00
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	0.0	\$ 0.00	\$ 0.00
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	0.0	\$ 0.00	\$ 0.00
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	0.0	\$ 0.00	\$ 0.00
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	0.0	\$ 0.00	\$ 0.00
87	6727	L.F.	EXTRUDED CURB	0.0	\$ 0.00	\$ 0.00
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	0.0	\$ 0.00	\$ 0.00
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	0.0	\$ 0.00	\$ 0.00
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	0.0	\$ 0.00	\$ 0.00
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	0.0	\$ 0.00	\$ 0.00
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	0.0	\$ 0.00	\$ 0.00
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	0.0	\$ 0.00	\$ 0.00
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	0.0	\$ 0.00	\$ 0.00
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	0.0	\$ 0.00	\$ 0.00
96	6832	EACH	FLEXIBLE GUIDE POST	0.0	\$ 0.00	\$ 0.00
97	6830	EACH	BARRIER DELINEATOR	0.0	\$ 0.00	\$ 0.00
98	6807	L.F.	PLASTIC LINE	0.0	\$ 0.00	\$ 0.00
99	6809	L.F.	PROFILED PLASTIC LINE	0.0	\$ 0.00	\$ 0.00
100	6845	L.F.	PROFILED PLASTIC WIDE LANE LINE	0.0	\$ 0.00	\$ 0.00
101	6818	L.F.	PLASTIC WIDE LINE	0.0	\$ 0.00	\$ 0.00
102	6857	S.F.	PLASTIC CROSSWALK LINE	0.0	\$ 0.00	\$ 0.00
103	6859	L.F.	PLASTIC STOP LINE	0.0	\$ 0.00	\$ 0.00
104	6833	EACH	PLASTIC TRAFFIC ARROW	0.0	\$ 0.00	\$ 0.00
105	6871	EACH	PLASTIC TRAFFIC LETTER	0.0	\$ 0.00	\$ 0.00
106	6881	EACH	PLASTIC DRAINAGE MARKING	0.0	\$ 0.00	\$ 0.00
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	0.0	\$ 0.00	\$ 0.00
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	0.0	\$ 0.00	\$ 0.00
109	6890	L.S.	PERMANENT SIGNING	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
110	6897	L.S.	SIGN BRIDGE NO. 1	0.0	\$ 0.00	\$ 0.00
111	6897	L.S.	SIGN BRIDGE NO. 2	0.0	\$ 0.00	\$ 0.00
112	6897	L.S.	SIGN BRIDGE NO. 3	0.0	\$ 0.00	\$ 0.00
113	6904	L.S.	ILLUMINATION SYSTEM	0.0	\$ 0.00	\$ 0.00
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	0.0	\$ 0.00	\$ 0.00
115	6914	L.S.	ITS	0.0	\$ 0.00	\$ 0.00
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	0.0	\$ 0.00	\$ 0.00
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	0.0	\$ 0.00	\$ 0.00
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	0.0	\$ 0.00	\$ 0.00
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	0.0	\$ 0.00	\$ 0.00
120	7029	EACH	PLUGGING EXISTING PIPE	0.0	\$ 0.00	\$ 0.00
121	7037	L.S.	STRUCTURE SURVEYING	0.0	\$ 0.00	\$ 0.00
122	7038	L.S.	ROADWAY SURVEYING	0.0	\$ 0.00	\$ 0.00
123	7040	EST.	LICENSED SURVEYING	0.0	\$ 0.00	\$ 0.00
124		L.S.	ADA FEATURES SURVEYING	0.0	\$ 0.00	\$ 0.00
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	0.0	\$ 0.00	\$ 0.00
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	0.0	\$ 0.00	\$ 0.00
127	7080	L.F.	CABLE FENCE	0.0	\$ 0.00	\$ 0.00
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	0.0	\$ 0.00	\$ 0.00
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	0.0	\$ 0.00	\$ 0.00
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	0.0	\$ 0.00	\$ 0.00
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
132	3100	EACH	ADJUST CATCH BASIN	0.0	\$ 0.00	\$ 0.00
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	0.0	\$ 0.00	\$ 0.00
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
135	7400	HR	TRAINING	0.0	\$ 0.00	\$ 0.00
136	7480	EST.	ROADSIDE CLEANUP	0.0	\$ 0.00	\$ 0.00
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	0.0	\$ 0.00	\$ 0.00
138	7728	EST.	MINOR CHANGE	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
139	7736	L.S.	SPCC PLAN	0.0	\$ 0.00	\$ 0.00
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	0.0	\$ 0.00	\$ 0.00
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	0.0	\$ 0.00	\$ 0.00
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	0.0	\$ 0.00	\$ 0.00
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	0.0	\$ 0.00	\$ 0.00
144		EACH	INSTALL RECTANGULAR VANED GRATE	0.0	\$ 0.00	\$ 0.00
Sub Total Schedule D						
TERO Fee 1.75%						
Total Schedule D						

Schedule A Total: _____

Schedule B Total: _____

Schedule C Total: _____

Schedule D Total: _____

BID TOTAL: _____

BID AMOUNT: _____
 (Write in Words Above Base Bid Amount)

Trench Excavation Safety Provisions (included in Base Bid Amount Above): \$ _____
 (Write in Number Form Above)

TRENCH EXCAVATION SAFETY PROVISIONS: If contracted work contains any work that requires trenching exceeding a depth of four (4) feet, all costs for trench safety shall be included in the Base Bid amount for adequate trench safety systems in compliance with Chapter 39.04 RCW and WAC 296-155-650. The purpose of this provision is to ensure that the bidder agrees to comply with all the relevant trench safety requirements of Chapter 49.17 RCW. This bid amount shall be considered as part of the total Base Bid amount set forth above. ***If trench excavation safety provisions do not pertain to this contracted work, Bidder shall enter N.A. (not applicable) for the dollar amount.***

The following items shall also be considered in the review and award of this Contact. Bidder shall complete each section as applicable. By submission of this bid proposal, Bidder acknowledges their commitment to employ and or contract work to the parties identified below during the performance of Bidder's awarded Work.

SECTION I – KEY EMPLOYEES OF BIDDER (if required, attach additional sheets if needed) –
 (Weight of Award 5 points)

		PREFERRED EMPLOYEE	
NAME	POSITION	Yes	No
1.	1.		
2.	2.		
3.	3.		
4.	4.		
5.	5.		

SECTION II – PREFERRED “TRADE” EMPLOYEES (if required, attach additional sheets if needed) – (Weight of Award 10 points)

NUMBER OF PREFERRED “TRADE” EMPLOYEES	NUMBER OF PREFERRED “TRADE” EMPLOYEES
1.	2.
3.	4.
5.	6.
7.	8.
9.	10.

SECTION III – PEAK WORK FORCE OF ALL EMPLOYEES ANTICIPATED TO BE EMPLOYED BY BIDDER AT THE PROJECT SITE IN THE PERFORMANCE OF THE WORK:

(Insert Number of Employees)

SECTION IV – LIST OF LOWER TIERED SUBCONTRACTOR(S) AND OR SUPPLIER(S)
(Total of Sections IV.A and IV.B) – (Weight of Award 25 points)

(REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

SECTION IV A – LIST OF TULALIP TRIBAL MEMBER NAOB SUBCONTRACTOR(S) AND OR SUPPLIER(S) (if required, attach additional sheets if needed) – (Weight of Award 15 points)

			TYPE OF LOWER-TIER		TULALIP NAOB	
NAME OF SUBCONTRACTOR (SUB) OR SUPPLIER (SUP)	TYPE OF WORK TO BE AWARDED	DOLLAR VALUE OF WORK	SUB	SUP	Yes	No
1.	1.	\$				
2.	2.	\$				
3.	3.	\$				
4.	4.	\$				
5.	5.	\$				
6.	6.	\$				
7.	7.	\$				
8.	8.	\$				
9.	9.	\$				
10.	10.	\$				

SECTION IV B – LIST OF NAOB SUBCONTRACTOR(S) AND OR SUPPLIER(S) (if required, attach additional sheets if needed) – (Weight of Award 10 points)

			TYPE OF LOWER-TIER		NAOB	
NAME OF SUBCONTRACTOR (SUB) OR SUPPLIER (SUP)	TYPE OF WORK TO BE AWARDED	DOLLAR VALUE OF WORK	SUB	SUP	Yes	No
1.	1.	\$				
2.	2.	\$				
3.	3.	\$				
4.	4.	\$				
5.	5.	\$				
6.	6.					
7.	7.					
8.	8.					
9.	9.					
10.	10.	\$				

Should Contractor fail to comply, to the fullest extent possible, with provisions for employment and or contracting as defined in The Tulalip Code, Chapter 9.05 – TERO Code, Contractor may be found to be in breach of Contract. If it is determined that a breach has occurred, Contractor acknowledges that said breach will be grounds to terminate Contractor's Contract agreement without claim against The Tulalip Tribes of Washington or the Project for any additional compensation and or consideration.

BIDDER'S CERTIFICATION

The Bidder hereby acknowledges that the following representations in this bid are material and not mere recitals:

1. The Bidder has read and understands the Contract Documents and agrees to comply with all requirements of the Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.
2. The Bidder represents that the bid is based upon the Standards specified by the Contract Documents.
3. The Bidder acknowledges that all Work shall be completed within the time established in the Contract Documents, and that each applicable portion of the Work shall be completed upon the respective milestone completion dates, unless an extension of time is granted in accordance with the Contract Documents. The Bidder understands that the award of separate contracts for the Project will require sequential, coordinated and interrelated operations which may involve interference, disruption, hindrance or delay in the progress of the Bidder's Work. The Bidder agrees that the Contract price, as amended from time to time by Change Order, shall cover all amounts due from the Tulalip Tribes of Washington resulting from interference, disruption, hindrance or delay caused by or between Contractors or their agents and employees.
4. The Bidder has visited the Project site, become familiar with local conditions and has correlated personal observations with the requirements of the Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the Contract Documents.
5. The Bidder agrees to comply with The Tulalip Code, Chapter 9.05 – TERO Code and give preference to Indians in hiring promotions, training and all other aspects of employment contracting and subcontracting.
6. The Bidder agrees to comply with The Tulalip Code, Chapter 9.05 – TERO Code and give preference to certified Indian-owned enterprises and organizations in the award of contracts and subcontracts.
7. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a joint or combined bid, each party thereto certifies as to such party's entity, under penalty of perjury, that to the best of the undersigned's knowledge and belief: (a) the Base Bid, any Unit Prices and any Alternate Bid in the bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid, Unit Prices or Alternate bid with any other Bidder; (b) unless otherwise required by law, the Base Bid, any Unit Prices and any Alternate bid in the bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid, Unit Prices or Alternate bid; (c) no attempt has been made or will

be made by the Bidder to induce any other individual, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

8. The Bidder will execute the Contract Form with the Tulalip Tribes of Washington, if a Contract is awarded on the basis of this bid, and if the Bidder does not execute the Contract Form for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to the Tulalip Tribes of Washington as provided in Article 6 of the Instructions to Bidders.
9. Bidder agrees to furnish any information requested by the Tulalip Tribes of Washington to evaluate the responsibility of the Bidder.

(REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

The Tulalip Tribes of Washington

NON - COLLUSION DECLARATION

Failure to return this Declaration as part of the bid proposal package will make the bid nonresponsive and ineligible for award.

NON-COLLUSION DECLARATION

I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. **That by signing the signature page of this proposal, I am deemed to have signed and to have agreed to the provisions of this declaration.**

NOTICE TO ALL BIDDERS

To report rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Any modification made to either the bid form or exception taken to the defined scope of work outlined in this bid package may result in the bid proposal being considered non-responsive.

Each bid shall contain the name of every person interested therein. If the Bidder is a corporation, partnership, sole proprietorship, or limited liability corporation, an officer, partner or principal of the Bidder, as applicable, shall print or type the legal name of the Bidder on the line provided and sign the Bid Form. If the Bidder is a joint venture, an officer, partner or principal, as applicable, of each member of the joint venture shall print or type the legal name of the applicable member on the line provided and signs the Bid Form. An unsigned Bid Form will render the Bid as non-responsive.

BIDDER'S NAME (PRINT): _____

Authorized Signature: _____

Title: _____

Company Name: _____

Mailing Address: _____

Telephone Number: (____) _____ Facsimile Number (____) _____

Where Incorporated: _____

Type of Business (circle one): corporationpartnership sole proprietorship limited liability corporation

The Tulalip Tribes Business License Number: _____

State of Washington Contractor's License Number: _____

Federal ID Number: _____

Contact Person for Contract processing: _____

BIDDER'S NAME (PRINT): _____

Authorized Signature: _____

Title: _____

Company Name: _____

Mailing Address: _____

Telephone Number: (____) _____ Facsimile Number (____) _____

Where Incorporated: _____

Type of Business (circle one): corporationpartnership sole proprietorship limited liability corporation

The Tulalip Tribes Business License Number: _____

State of Washington Contractor's License Number: _____

Federal ID Number: _____

Contact Person for Contract processing: _____

END OF BID FORM

The Tulalip Tribes of Washington

NAOB Written Confirmation

**Native American Owned Business (NAOB)
Written Confirmation Document**

As an authorized representative of the Native American Owned Business (NAOB), I confirm that we have been contacted by the referenced bidder with regard to the referenced project and if the bidder is awarded the contract we will enter into an agreement with the bidder to participate in the project consistent with the information provided on the bidder's Bid Proposal Form, Section IV.

Contract Title: _____

Bidder's Business Name: _____

NAOB's Business Name: _____

NAOB Signature: _____

NAOB's Representative _____

Name and Title: _____

Date: _____

The entries must be consistent with what is shown on the bidder's Bid Proposal Form, Section IV. Failure to do so will result in bid rejection. See Instructions to Bidders Section 1.1.7; *Minimum TERO Participation for Subcontractors*.

Description of Work: _____

Amount to be Awarded to NAOB: _____

The Tulalip Tribes of Washington

FORM OF BID GUARANTY & CONTRACT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____ as Principal at _____,
(Address) _____
and _____ as Surety, are hereby held and firmly
bound unto the Tulalip Tribes of Washington, herein referred to as Tulalip Tribes, in the penal
sum of the dollar amount of the bid submitted by the Principal to the Tulalip Tribes on (date)
_____, ____ to undertake the Project known as: _____.

The penal sum, referred to herein, shall be the dollar amount of the Principal's bid to the Tulalip Tribes, incorporating any additive or deductive alternate bids or any additive or deductive allowance bids made by the Principal on the date referred to above to the Tulalip Tribes, which are accepted by the Tulalip Tribes. In no case shall the penal sum exceed the amount of dollars (\$_____). (If the above line is left blank, the penal sum will be the full amount of the Principal's bid, including alternates and unit prices. Alternatively, if completed, the amount stated must not be less than the full amount of the bid, including alternates and allowances, in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above-named Principal has submitted a bid on the above-referred to project;

NOW, THEREFORE, if the Tulalip Tribes accept the bid of the Principal, and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications and bills of material; and in the event the Principal pays to the Tulalip Tribes the difference not to exceed five percent of the penalty hereof between the amount specified in the bid and such larger amount for which the Tulalip Tribes may in good faith contract with the next lowest bidder to perform the work covered by the bid; or resubmits the project for bidding, the Principal will pay the Tulalip Tribes the difference not to exceed five percent of the penalty hereof between the amount specified in the bid, or the costs, in connection with the resubmission, of printing new contract documents, required advertising and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect. If the Tulalip Tribes accept the bid of the Principal, and the Principal, within ten days after the awarding of the contract, enters into a proper contract in accordance with the bid, plans, details, specifications and bills of material, which said contract is made a part of this bond the same as though set forth herein; and

IF THE SAID Principal shall well and faithfully perform each and every condition of such contract; and indemnify the Tulalip Tribes against all damage suffered by failure to perform such contract according to the provisions thereof and in accordance with the plans, details, specifications and bills of material therefore; and shall pay all lawful claims of subcontractors, material suppliers and laborers for labor performed and materials furnished in the carrying forward, performing or completing of said contract; we, agreeing and assenting to, at this undertaking shall be for the benefit of any material supplier or laborer having a just claim, as well as for the Tulalip Tribes herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the

Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions or additions, in or to the terms of said contract or in or to the plans and specifications, therefore, shall in any wise affect the obligations of said Surety on its bond, and it does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the work or to the specifications.

SIGNED this _____ day of _____, _____

PRINCIPAL:

By: _____

Title: _____

SURETY:

Address: _____

Phone: (____) _____

By: _____

Attorney-in-Fact

SURETY AGENT:

Address: _____

Phone: (____) _____

The Tulalip Tribes of Washington

STATEMENT OF INTENDED SURETY

(Required if Bid Deposit is NOT a Surety Bond)

FURNISH WITH BIDDER'S SEALED BID a written statement prepared and signed by Bidder's intended sureties or surety company, to the effect that: _____ (Name of Surety), who meets the requirements of Chapter 48.28 RCW, will promptly provide a surety bond in the amount of 100% of the base bid in the event _____ (Bidder's Name) is awarded a Contract for _____ (Project Description) and that the proposed Construction Contract is acceptable to the Surety.

Surety:

Signature of Authorized Representative

Printed Name / Title of Authorized Representative

This statement, if required, must be included in Bidder's sealed bid for Bidder's Bid to be considered.

By: _____

Title: _____

SURETY:

Address: _____

Phone: (____) _____

By: _____

Attorney-in-Fact

SURETY AGENT:

Address: _____

Phone: (____) _____

The Tulalip Tribes of Washington

BID PROPOSAL BOND

KNOW ALL BY THESE PRESENTS, that (Name of Bidder) _____ a corporation, partnership, or individual) duly organized under the laws of the State of _____ as principal, and (Name of Surety) _____ a corporation duly organized under the laws of the State of _____ and authorized to do business in the State of Washington, as surety, are held and firmly bound unto The Tulalip Tribes of Washington in the full and penal sum of five (5) percent of the total amount of the bid proposal of said principal for the work hereinafter described for the payment of which, well and truly to be made, we bind our heirs, executors, administrators and assigns, and successors and assigns, firmly by these presents.

Said bid and proposal, by reference hereto, being made a part hereof.

NOW, THEREFORE, if the said proposal bid by said principal be accepted, and the contract be awarded to said principal, and if said principal shall duly make and enter into and execute said contract and shall furnish a performance, payment and warranty bond as required by The Tulalip Tribes of Washington within a period of ten (10) days from and after said award, exclusive of the day of such award, then this obligation shall be null and void, otherwise it shall remain and be in full force and effect.

IN TESTIMONY WHEREOF, the principal and surety have caused these presents to be signed and sealed this _____ day of _____, 20____.

Principal _____

(Name) _____

(Address) _____

By _____

(Signature of Authorized Rep)

(Typed Name of Authorized Rep)

Title _____

SURETY

Name _____

By _____
(Attorney-in-fact for Surety)

(Name & Address of local Office or Agent)

*This bond must be accompanied by a fully executed Power of Attorney appointing the attorney-in-fact.

The Tulalip Tribes of Washington

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that we (Name of Contractor) _____,
(Address of Contractor) _____ a _____, hereinafter
called (Corporation, Partnership, or Individual) Principal, and (Name of Surety)
_____, (Address of Surety) _____ hereinafter called
Surety, are held and firmly bound unto (Name of Owner) _____, (Address of
Owner) _____ hereinafter called Owner, in the penal sum of _____
Dollars, (\$_____), in lawful money of the United States, for the payment of which sum well and truly
to be made, we bind ourselves, our heirs, executors, administrators and successors jointly and severally,
firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the owner, dated _____ day of _____, 20____, a copy of
which is hereto _____.

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors,
and corporation furnishing materials for or performing labor in the prosecution of the work provided for in
such contract, and any authorized extension or modification thereof, including all amounts due for
materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed
or used in connection with the construction of such work and all insurance premiums on said work, and
for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be
void; otherwise to remain in full force and effect.

_____	By: _____
Witness of Surety	Attorney-In-Fact
_____	_____
Attorney	Attorney

Note: Date of Bond must not be prior to the date of contract, _____. If Contractor is Partnership, all
partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most
current list (Circular 57 – as amended) and be authorized to transact business in the state where the
project is located.

The Tulalip Tribes of Washington

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that we (Name of Contractor) _____,
(Address of Contractor) _____ a _____, hereinafter
called (Corporation, Partnership, or Individual) Principal, and (Name of Surety)
_____, (Address of Surety) _____ hereinafter called
Surety, are held and firmly bound unto (Name of Owner) _____, (Address of
Owner) _____ hereinafter called Owner, in the penal sum of _____
Dollars, (\$_____), in lawful money of the United States, for the payment of which sum well and truly
to be made, we bind ourselves, our heirs, executors, administrators and successors jointly and severally,
firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the owner, dated _____ day of _____, 20____, a copy of
which is hereto _____.

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors,
and corporation furnishing materials for or performing labor in the prosecution of the work provided for in
such contract, and any authorized extension or modification thereof, including all amounts due for
materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed
or used in connection with the construction of such work and all insurance premiums on said work, and
for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be
void; otherwise to remain in full force and effect.

By:

Witness of Surety

Attorney-In-Fact

Attorney

Attorney

Note: Date of Bond must not be prior to the date of contract, _____. If Contractor is Partnership, all
partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most
current list (Circular 57 – as amended) and be authorized to transact business in the state where the
project is located.

The Tulalip Tribes of Washington

TRIBAL EMPLOYMENT RIGHTS OFFICE (TERO)

TULALIP TERO MISSION STATEMENT

The Tulalip TERO has a mission to help improve the quality of life for Tulalip Tribal members and other Native American families through opportunities that can assist them in pursuing quality jobs or careers with decent wages and by protecting their rights of preferential employment, training, business and economic opportunities on and near the Tulalip Reservation. Also, to assist business in achieving compliance with hiring Native American qualified workers.

Information

6404 Marine Drive, Tulalip, WA 98271

Office: (360) 716-4747

Fax: (360) 716-0612

Alternate Fax: (360) 716-0249

Driving Direction From Seattle:

Go North on highway I-5. At exit 199, turn RIGHT onto Ramp and turn LEFT (West) onto SR-528 [4th St]. Road name changes to Marine Dr. NE. Turn RIGHT (North-East) onto 64th Street NW.

Driving Direction From Mount Vernon:

Go South on highway I-5. At exit 199, turn RIGHT onto Ramp and bear RIGHT (West) onto Marine Dr. NE. Turn RIGHT (North-East) onto 64th Street NW.

On June 20, 2012, the Tulalip Tribes board of Directors enacted the Tribal Employment Rights Office Code which is the preferential employment and contracting laws of the land within the boundaries of the Tulalip Reservation.

Tulalip TERO office requires businesses to:

- Hire TERO qualified and certified workers;
- Give Native owned businesses the opportunity to bid;
- Fill out and negotiate a compliance plan prior to commencing work; and
- Pay 1.75% TERO fee on all construction projects over \$10,000

FREQUENTLY ASKED QUESTIONS

The following presents a list of the most frequently asked questions and inquiries about Native American Preference and Tribal Employment Rights Office (TERO).

1. WHAT IS THE PURPOSE OF TERO?

To access more employment & training opportunities for Native Americans and their families. To provide more business & economic opportunities for businesses owned by Native Americans.

2. WHY IS THERE A NEED FOR TERO?

Since unemployment rate in Native communities remains high, Tribes must take strong actions to protect the employment rights of Native American people.

3. *WHAT ARE THE BASIC REQUIREMENTS OF TERO?*

All employers operating within tribal jurisdiction are required to provide Indian preference in employment, training, contracting, and subcontracting. Following are the major provisions and requirements found in most TERO Codes that employers must adhere too:

- A. To ensure Native preference, employers need to submit and negotiate a detailed compliance plan of employer workforce needs with a TERO Compliance Officer.
- B. To utilize the TERO skills banks for all referrals and consider Native applicants before interviewing or hiring any Non-Native worker.
- C. To negotiate with the TERO Compliance Officer(s) the specific number of Natives in each job classification and to cooperate with tribal training programs to hire a certain number of trainees.
- D. To eliminate all extraneous job qualification criteria or personnel requirements which may act as a barrier to Native employment. TEROs are guided by EEOC guidelines for verifying legitimate Bona-fide Occupational Qualifications (BFOQ's).
- E. To keep in contact with the TERO office in order to resolve any employee problems and issues.
- F. To acknowledge and respect tribal religious beliefs and cultural difference and to cooperate with TERO to provide reasonable accommodations.
- G. All employers who have collective bargaining agreements with one or more unions must secure a written agreement from their unions indicating that they will comply with TERO.
- H. The TERO certified worker shall be treated the same as the other employees. There will be a Zero tolerance to discrimination within the boundaries of the Tulalip Reservation.

The success of TERO programs can be directly attributed to the fact that these programs embody all of the critical elements listed above.

4. *WHAT IS A COMPLIANCE PLAN?*

A Compliance Plan is a written document that provides detailed descriptions of a construction project with all the pertinent information. This is where you list your key personnel and your work force needs. A Key employee is a permanent employee who is in a supervisory or specialized position and without this person an employer would face a financial loss. This document is then negotiated with a TERO Compliance Officer for approval.

5. *WHAT TERO REQUIREMENTS ARE THERE IN CONTRACTING BIDS?*

The TERO Office has a Native American Owned Business Registry (NAOB) in which TERO certifies that the companies are owned by Native Americans. The TERO Code requires that Contractors and or Subcontractors provide opportunities to every NAOB that is qualified to do the work.

6. *IS THERE A DIFFERENCE BETWEEN TRIBAL AND NATIVE AMERICAN PREFERENCE?*

Yes, on Tribally funded projects TERO can require Tribal member preference. This is permissible under Federal law because tribes are exempt from Title VII of the Civil Rights Act, Executive Order 11246 and most other employment rights legislation. Native

American preference is permissible under some federal laws i.e., Indian Self Determination Act, Buy Indian Act and under most federal laws.

7. *WHAT IS THE EXTENT OF TERO JURISDICTION?*

A Tribe has the authority to enact and enforce any Indian employment preference law that is grounded in its inherent sovereign powers of self-government. This legal doctrine is the most basic principle of Indian law and is supported by a host of Supreme Court decisions. The jurisdiction is legally described or defined by treaty or legislation. The exterior boundaries of the reservation including cede territories and lands where jurisdiction has not been extinguished. TERO has a political preference, not a racial preference and does not violate Title VII or any other Federal Employment Law.

8. *ARE THERE ANY EXEMPTIONS TO TERO REQUIREMENTS?*

Yes, there are several exemptions. Direct employment by Federal / State governments, schools, churches and some non-profits are not covered by TERO. Some Tribes also exempt themselves from TERO coverage. It is important to note however, that any contract or sub-contract let by any of these entities is covered by TERO.

9. *WILL TERO INTERRUPT MY DAILY BUSINESS OPERATIONS?*

No. Since TERO is pro-active, the compliance plans are signed by TERO and the employer prior to the commencement of work prevents disputes. The Compliance Officers will monitor the TERO requirements by doing onsite compliance visits that would not be detrimental to business operations. TERO can sanction employers for violations which may shut down operations but only in severe disputes and in accordance with the applicable law.

10. *DOESN'T TERO DO AWAY WITH THE COMPETITIVE BIDDING PROCESS AND FAIR COMPETITION?*

No. It provides preference to certified and qualified Native American businesses on projects on or near the Tulalip Reservation. As with employment contracting preference is permissible or required under Federal, Tribal, State or other Local laws. Preference is not provided to the exclusion of other businesses. Price and quality are still primary considerations.

11. *ARE EMPLOYERS PROTECTED AGAINST UNFAIR TERO VIOLATION CHARGES?*

Yes. The first level of protection comes from the TERO Compliance Officer who handles the charge. These officers are trained to deal with facts and merits of the case before making determinations. Beyond the TERO Commission, grievant can seek relief in the Tribal and Federal Courts.

12. *WHAT SANCTIONS DO EMPLOYERS FACE FOR VIOLATIONS OF TERO?*

Violation of TERO requirements may result in severe sanctions. If the TERO office determines that employers willfully and intentionally breached TERO requirements. TERO may:

- A. Deny such party the right to commence business on the reservation;
- B. Impose a civil fine on such party ranging on most reservations anywhere from \$500.00 to \$5,000.00 per violation;
- C. Terminate or suspend party's operation and deny them the rights to conduct further business on the reservation; and or

- D. Order any party to dismiss any illegally hired Non-Natives, take action to ensure future compliance and to make back payment of any lost wages be paid to the TERO certified Native Americans.

13. CAN SANCTIONS IMPOSED BY THE TERO COMMISSION BE APPEALED?

Yes. Sanctions imposed by the TERO Commission can be appealed in tribal court. Appeals of tribal court decisions can be made to the federal court system.

It is important to note that only one appeal to a TERO commission and tribal court decision has ever been appealed to the federal court. The case ended at the Ninth

Circuit Court of Appeals and Appellate that upheld the TERO complaint and the Tribal Courts decisions.

14. ARE TERO FEES LEGAL?

Yes. Tribal authority to access a fee is equal to that of any government. Taxation, licenses and fees are a valuable source for financing Tribal governmental operations. Tribes therefore consider their social and economic needs and priorities and set the TERO requirements to suit them just as National, State, and other units of government do.

Many contractors without complaint pay taxes and comply with the governmental requirements of states, counties, etc., but openly oppose doing so with Tribes. This "cultural discrimination" is indicative of the lack of knowledge and acceptance of the sovereign authority of the Tribes. Employers can realize a substantial savings since Tribal taxes or fees pre-empt state or other local taxation on the reservation projects often to the benefit of the employer.

The Tulalip Tribes' TERO fee is 1.75% of total cost on any project over \$10,000.

TERO has the responsibility to ensure due process of the employer under the Tribal code and that only qualified and screened referrals are made to the employer.

15. HOW HAVE VARIOUS FEDERAL, STATE AND OTHER AGENCIES VIEWED TERO IN THEIR OPERATION?

When TERO first appeared in the late seventies there was opposition from some and difference from others. Over the past twenty years a great deal of progress has been made, some by direct legal action but most through pro-active, non-adversarial, synergistic effort. The results are Native American preference and TERO provisions, policies and procedures figure prominently in the following:

- A. The Civil Rights Handbook.
- B. The Job Training and Partnership Act.
- C. The Small Business Administration 8(a) Program.
- D. Public Law 93-638, The Indian Education Assistance and Self-Determination Act of 1974.
- E. HUD Regulations.
- F. BIA Acquisition Assistance Agreement 84-1.
- G. EEOC / TERO Contracts.
- H. OFCCP Indian Employment Initiative.
- I. FHWA ISTEA "Indians in Highway Construction Initiative".

- J. Indian Health Service Alaska Native Hiring Agreement.
- K. US DOL/BAT Notice 84-1.
- L. Indian Education Impact and Programs Under PL 81-815 (Construction) and PL 81-874 (OPS/Admin).

CONTRACTORS

The following outlines the TERO expectations and responsibilities placed on all contractors and subcontractors doing work on or near the Tulalip Reservation. This document should be read carefully, along with the TERO Code. If you have any questions or concerns contact a TERO Compliance Officer.

TERO ACKNOWLEDGMENT:

Requirement: The contractor / employer must comply with all rules and regulations as set forth in the TERO Code. This agreement will be affirmed in writing and will be signed and dated by the TERO Manager. Furthermore, if a project is expected to be of one month duration or more, the contractor must arrange a pre-construction meeting with the TERO Manager or TERO Compliance Officers prior to submitting a Compliance Plan to the TERO department.

TERO LIAISON:

Requirement: All contractors and employers must designate a responsible company official to coordinate all employment, training and contracting related activities with the TERO department to ensure that the company is in compliance with the TERO Code during all phases of the project.

NATIVE AMERICAN OWNED BUSINESS REGISTRY:

Requirement: The TERO Office maintains a certified Native American Owned Business Registry. All the businesses on the registry need to be given the opportunity to bid on any projects that they are qualified for. If they are within ten-percent (10%) of the lowest bid, you need to negotiate to see if they can reduce their price. But the fact remains that the bid will be awarded on: price, quality and capability unless other requirements are set forth in the bid documents.

TERO COMPLIANCE PLAN:

Requirement: All contractors, sub-contractors and or employers must have an approved written compliance agreement filed, negotiated and approved by the TERO Office prior to commencement of any construction activities on the Tulalip Reservation. There is a 1.75% TERO fee on any projects over \$10,000 to be paid in full or negotiated with the TERO Compliance Officers.

COMPLIANCE PLAN WORKFORCE/ KEY EMPLOYEE:

Requirement: Contractors and or Employers shall be required to hire and maintain as many TERO / Native American preference employees as apply for and are qualified for each craft or skill.

Exception: Prior to commencing work on the Tulalip Reservation the prospective employer, contractor and subcontractors shall identify key and permanent employees.

Key employee: One who is in a top supervisory position or performs a critical function such that an employer would risk likely financial damage or loss if that task were assigned to a person unknown to the employer. An employee who is hired on a project by project basis may be considered a key employee so long as they are in a top supervisory position or perform a critical function.

Permanent employee: One who is and had been on the employers' or contractors' annual pay roll for a period of one year continuously, working in a regular position for the employer, or is an owner of the firm. An employee who is hired on a project by project basis shall not be considered a permanent employee.

Non-preferred Permanent and Key Employee(s) shall not exceed 20% of the workforce. Permanent and Key employees are subject to TERO approval and TERO may require a position to be opened up to all preference workers.

TERO HIRING HALL & RECRUITMENT EFFORTS:

Requirement: Contractor or employer is required to contact the TERO Office for recruiting and placement services on all non-key positions. The TERO Office shall be given a minimum of (72) seventy-eight hours to furnish a qualified referral. Furthermore contractors and employers are required to provide TERO with a written list of their projected workforce needs, job classifications, openings, hiring policies, rate of pay, experience / skill requirements, employment screening procedures and anticipated duration of employment.

NATIVE PREFERENCE:

Requirement: All contractors, businesses and employers operating within the boundaries of the Reservation, or on Tribal projects off the reservation shall give preference in hiring, promotion, training, layoffs, recall, and all other aspects of employment, unless other contractual agreements or federal requirements restrict the preference specified below. The order of preference shall be given to the following persons in the following enumerated order:

- 1) Enrolled Tulalip Tribal Members
- 2) Spouses, Parent of a tribal member child, biological child born to an enrolled Tulalip Tribal Member, current legal guardian of a Tribal Member dependent child (with a proper letter of temporary or permanent legal guardianship from a court), or a tribal member in a domestic partner relationship (with documentation).
- 3) Other Natives/Indians shall mean any member of a federally recognized Indian tribe, nation or band, including members of federally recognized Alaskan Native villages or communities.
- 4) Spouse of federally recognized Native American
- 5) Regular current employees of the all Tulalip Tribal entities
- 6) Other

Exception: Where prohibited by contractual agreements or federal requirements, the above order of preference set out in subsection 1.8, shall not apply. In such cases preference shall be given in accordance with the applicable contractual agreement, federal requirement, or Federal Law.

Requirement: If the TERO Office is unable to refer an adequate number of qualified, preferred employees for a Contractor, TERO will notify the Contractor who may fill the remaining positions with non-TERO workers. When this occurs, TERO work permits may be valid for one month from the date of issuance and may be renewed. Work permits are non-transferable.

Requirement: When work permits are issued, the contractor is still required to notify the TERO Office of all future job openings on the project so that qualified, preferred employees have an opportunity to be dispatched.

JOB QUALIFICATIONS, PERSONNEL REQUIREMENTS & RELIGIOUS ACCOMMODATIONS:

Requirement: An employer may not use any job qualification criteria or personnel requirements which serve as barriers to the employment of Natives which are not required by business necessity. The TERO department will review the job duties and may require the employer to eliminate the personnel requirements at issue. Employers shall also make reasonable accommodation to the religious beliefs and cultural traditions of Native workers.

TRAINING:

Requirement: Contractors and or Employers may be required to develop on the job training opportunities and or participate in Tribal or local training programs, including upgrading programs, and apprenticeship or other trainee programs relevant to the employer's needs.

LAY-OFFS:

Requirement: TERO preference employees shall not be laid off where non-TERO preference employees are still working. If the employer lays-off employees by crews, classifications or other categories, qualified TERO preference employees shall be transferred to crews or positions that will be retained. This section does not apply to key or permanent employees.

NOTE: The TERO Office is here to help in any way we can. Communication with the TERO Compliance Officers is very important in that it will help ensure the job to run smoothly.

(REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)



THE TULALIP TRIBES OF WASHINGTON CONTRACT AGREEMENT

FOR I-5/116TH STREET NE INTERCHANGE IMPROVEMENTS PHASE 4 RAMPS TULALIP TRIBES BID SOLICITATION No. 17-007

This agreement entered into this ____th day of _____, 2014 between The Tulalip Tribes of Washington, 8802 27th Avenue, Tulalip, WA, 98271 hereinafter referred to as "Tulalip Tribes", and _____, _____ <insert Company name and address> hereinafter referred to as "Contractor".

WITNESSETH, that the Contractor and the Tulalip Tribes for the consideration stated herein mutually agree as follows:

SECTION ONE DESCRIPTION OF WORK

This Contract consists of this written agreement and all appurtenant "contract documents" described in Section Six of this agreement. Contractor shall perform the following described work in accordance with this contract and the Scope of Work, incorporated as Bid Package No. 17-007 – I-5/116th Street NE Interchange Improvements Phase 4 Ramps. This Tulalip Tribes project provides for the improvement of the 116th Street NE Interchange. The project includes new I-5 ramps, structural earth retaining walls, stormwater treatment facilities, signal, illumination, permanent signing, Intelligent Transportation System, and Temporary Erosion and Sediment Control, and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications. The state maintains 116th Street NE from that point to the approximately 100 feet east of the northbound ramps, City of Marysville maintains 116th Street NE the remaining 450 feet to end of the project boundary. The project is located at the interchange of I-5 and 116th Street NE. The project includes I-5 from Milepost (MP) 202.16 to MP 202.74 and is within Sections 8 and 9, Township 30 North, Range 5, East, of the Willamette Meridian, in Snohomish County, Washington. The project is located on the Tulalip Tribes Reservation and within the City of Marysville.

SECTION TWO CONTRACT PRICE

The Tulalip Tribes agrees to pay Contractor for the Work described a total contract price of \$ _____. Payment of this amount is subject to additions or deductions in accordance with the bid unit price amounts listed in the schedule below, provisions of this contract and of any other documents to which this contract is subject. Contractor shall be entitled to full payment when contract work is completed and approved by the Tulalip Tribes. Progress payments shall be made to the Contractor in accordance with the provisions of Section Three of this Contract.

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	7.3		
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	12.0		
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1.0		
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	1.0	\$ 9,500	\$ 9,500
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	12,070		
7	0145	L.F.	REMOVING CONC. BARRIER	2,307		
8	0170	L.F.	REMOVING GUARDRAIL	2,450		
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	3.0		
10		L.F.	REMOVING DRAINAGE PIPE	1,002		
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	3,820		
12	0405	C.Y.	COMMON BORROW INCL. HAUL	7.0		
13	0431	TON	GRAVEL BORROW INCL. HAUL	113,550		
14	0470	C.Y.	EMBANKMENT COMPACTION	47,410		
15		C.Y.	POND EXCAVATION INCL. HAUL	2,060		
16		C.Y.	COMPACTED TILL	551		
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	762		
18	1054	EACH	GRATE INLET TYPE 2	6.0		
19	1086	TON	QUARRY SPALLS	55		
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	55		
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	130		
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	34		
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	1.0		
24	3091	EACH	CATCH BASIN TYPE 1	10		
25		EACH	TEMPORARY CATCH BASIN TYPE 1	1.0		
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	3.0		
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	1.0		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
28	3151	L.F.	TESTING STORM SEWER PIPE	2,302		
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	757		
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	1,291		
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	97		
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	157		
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	0.0	\$ 0.00	\$ 0.00
34		EACH	2" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	0.0	\$ 0.00	\$ 0.00
36		EACH	1" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	775		
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	10,870		
39	4166	C.Y.	LEAN CONCRETE	3.0		
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	49		
41	4117	L.F.	PEDESTRIAN BARRIER	4.0		
42	4119	L.F.	SEW TRAFFIC BARRIER	270		
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	163		
44	4456	S.Y.	SCARIFYING CONC. SURFACE	2.0		
45	7169	S.F.	STRUCTURAL EARTH WALL	7,095		
46		EACH	CORE DRILLED BRIDGE DECK	0.0	\$ 0.00	\$ 0.00
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	281		
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	8030		
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	8,270		
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64- 22	67		
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	11,795		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	1.0	\$ 28,308.00	\$ 28,308.00
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	1.0	\$ 18,872.00	\$ 18,872.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	1.0	\$ 840.00	\$ 840.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	289		
56	6453	S.Y.	COMPOST BLANKET	75		
57	6463	L.F.	CHECK DAM	40		
58	6471	EACH	INLET PROTECTION	50		
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	1,890		
60	6470	HR	STREET CLEANING	708		
61	6479	L.F.	WATTLE	900		
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	1.0	\$218,400.00	\$218,400.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	5.05		
64	6405	C.Y.	TOPSOIL TYPE A	1,661		
65	6545	EST.	WEED AND PEST CONTROL	1.0	\$ 4,200	\$ 4,200
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	135		
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	14		
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	332		
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	147		
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	238		
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	661		
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	661		
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	440		
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	661		
75	6552	EACH	PSIPE-ROSA NUTKANA/NOOTKA ROSE (#1 CONT / 12" HT)	661		
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	1,321		
77		C.Y.	FINE COMPOST	18		
78		EACH	WATER BAGS	149		
79		ACRE	SOIL DECOMPACTION	3.0		

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
80	6529	C.Y.	SOIL AMENDMENT	5.6		
81	6579	ACRE	WOOD CHIP MULCH	1.7		
82	6630	L.F.	HIGH VISIBILITY FENCE	2,170		
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	1,340		
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	1,225		
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	1,073		
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	1,007		
87	6727	L.F.	EXTRUDED CURB	113		
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	1,704		
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	42		
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	2,551		
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	4.0		
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	4.0		
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	5.0		
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	1.0		
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	1.0		
96	6832	EACH	FLEXIBLE GUIDE POST	104		
97	6830	EACH	BARRIER DELINEATOR	14		
98	6807	L.F.	PLASTIC LINE	11,686		
99	6809	L.F.	PROFIED PLASTIC LINE	8,047		
100	6845	L.F.	PROFIED PLASTIC WIDE LANE LINE	5,323		
101	6818	L.F.	PLASTIC WIDE LINE	2,520		
102	6857	S.F.	PLASTIC CROSSWALK LINE	816		
103	6859	L.F.	PLASTIC STOP LINE	194		
104	6833	EACH	PLASTIC TRAFFIC ARROW	36		
105	6871	EACH	PLASTIC TRAFFIC LETTER	25		
106	6881	EACH	PLASTIC DRAINAGE MARKING	47		
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	0.0	\$ 0.00	\$ 0.00
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	0.0	\$ 0.00	\$ 0.00

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
109	6890	L.S.	PERMANENT SIGNING	1.0		
110	6897	L.S.	SIGN BRIDGE NO. 1	1.0		
111	6897	L.S.	SIGN BRIDGE NO. 2	1.0		
112	6897	L.S.	SIGN BRIDGE NO. 3	0.0	\$ 0.00	\$ 0.00
113	6904	L.S.	ILLUMINATION SYSTEM	1.0		
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	1.0		
115	6914	L.S.	ITS	1.0		
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	1.0		
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	1.0		
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	843		
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	5,280		
120	7029	EACH	PLUGGING EXISTING PIPE	3.0		
121	7037	L.S.	STRUCTURE SURVEYING	1.0		
122	7038	L.S.	ROADWAY SURVEYING	1.0		
123	7040	EST.	LICENSED SURVEYING	1.0	\$ 15,000.00	\$ 15,000.00
124		L.S.	ADA FEATURES SURVEYING	1.0		
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	10		
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	2		
127	7080	L.F.	CABLE FENCE	375		
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	40		
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	4.0		
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	1.0		
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	7.0		
132	3100	EACH	ADJUST CATCH BASIN	1.0		
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	1.0		
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	1.0		
135	7400	HR	TRAINING	1,350		
136	7480	EST.	ROADSIDE CLEANUP	1.0	\$ 24,000.00	\$ 24,000.00
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	1.0	\$ 10,000.00	\$ 10,000.00

Schedule A

Work within the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
138	7728	EST.	MINOR CHANGE	1.0	\$ 50,000.00	\$ 50,000.00
139	7736	L.S.	SPCC PLAN	1.0		
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	140		
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	0.0	\$ 0.00	\$ 0.00
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	3,227		
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	9,450		
144		EACH	INSTALL RECTANGULAR VANED GRATE	9.0		
Sub Total Schedule A						
TERO Fee 1.75%						
Total Schedule A						

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	1.2		
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	2.0		
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1.0		
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	3,400		
7	0145	L.F.	REMOVING CONC. BARRIER	70		
8	0170	L.F.	REMOVING GUARDRAIL	620		
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	0.0	\$ 0.00	\$ 0.00
10		L.F.	REMOVING DRAINAGE PIPE	129		
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	30		
12	0405	C.Y.	COMMON BORROW INCL. HAUL	7		
13	0431	TON	GRAVEL BORROW INCL. HAUL	220		
14	0470	C.Y.	EMBANKMENT COMPACTION	1,170		
15		C.Y.	POND EXCAVATION INCL. HAUL	10,260		
16		C.Y.	COMPACTED TILL	1,143		
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	269		
18	1054	EACH	GRATE INLET TYPE 2	0.0	\$ 0.00	\$ 0.00
19	1086	TON	QUARRY SPALLS	63		
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	60		
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	0.0	\$ 0.00	\$ 0.00
24	3091	EACH	CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
25		EACH	TEMPORARY CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	1.0		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
28	3151	L.F.	TESTING STORM SEWER PIPE	177		
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	177		
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	0.0	\$ 0.00	\$ 0.00
34		EACH	2" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	0.0	\$ 0.00	\$ 0.00
36		EACH	1" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	52		
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	0.0	\$ 0.00	\$ 0.00
39	4166	C.Y.	LEAN CONCRETE	0.0	\$ 0.00	\$ 0.00
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	0.0	\$ 0.00	\$ 0.00
41	4117	L.F.	PEDESTRIAN BARRIER	0.0	\$ 0.00	\$ 0.00
42	4119	L.F.	SEW TRAFFIC BARRIER	86		
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
44	4456	S.Y.	SCARIFYING CONC. SURFACE	0.0	\$ 0.00	\$ 0.00
45	7169	S.F.	STRUCTURAL EARTH WALL	0.0	\$ 0.00	\$ 0.00
46		EACH	CORE DRILLED BRIDGE DECK	0.0	\$ 0.00	\$ 0.00
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	0.0	\$ 0.00	\$ 0.00
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	290		
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	2,100		
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64- 22	161		
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	480		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	1.0	\$ 1,152.00	\$ 1,152.00
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	1.0	\$ 768.00	\$ 768.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	1.0	\$ 420.00	\$ 420.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	33		
56	6453	S.Y.	COMPOST BLANKET	25		
57	6463	L.F.	CHECK DAM	30		
58	6471	EACH	INLET PROTECTION	5.0		
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	1,300		
60	6470	HR	STREET CLEANING	236		
61	6479	L.F.	WATTLE	0.0	\$ 0.00	\$ 0.00
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	1.0	\$ 40,950.00	\$ 40,950.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	1.29		
64	6405	C.Y.	TOPSOIL TYPE A	18		
65	6545	EST.	WEED AND PEST CONTROL	1.0	\$ 2,100.00	\$ 2,100.00
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	26		
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	11		
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	127		
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	57		
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	99		
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	339		
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	339		
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	226		
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	339		
75	6552	EACH	PSIPE-ROSA NUTKANA/NOOTKA ROSE (#1 CONT / 12" HT)	339		
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	678		
77		C.Y.	FINE COMPOST	5.0		
78		EACH	WATER BAGS	37		
79		ACRE	SOIL DECOMPACTION	1.5		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
80	6529	C.Y.	SOIL AMENDMENT	2.1		
81	6579	ACRE	WOOD CHIP MULCH	0.8		
82	6630	L.F.	HIGH VISIBILITY FENCE	360		
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	0.0	\$ 0.00	\$ 0.00
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	321		
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	272		
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	0.0	\$ 0.00	\$ 0.00
87	6727	L.F.	EXTRUDED CURB	0.0	\$ 0.00	\$ 0.00
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	492		
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	0.0	\$ 0.00	\$ 0.00
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	0.0	\$ 0.00	\$ 0.00
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	0.0	\$ 0.00	\$ 0.00
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	0.0	\$ 0.00	\$ 0.00
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	0.0	\$ 0.00	\$ 0.00
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	0.0	\$ 0.00	\$ 0.00
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	0.0	\$ 0.00	\$ 0.00
96	6832	EACH	FLEXIBLE GUIDE POST	1.0		
97	6830	EACH	BARRIER DELINEATOR	1.0		
98	6807	L.F.	PLASTIC LINE	724		
99	6809	L.F.	PROFILED PLASTIC LINE	685		
100	6845	L.F.	PROFILED PLASTIC WIDE LANE LINE	446		
101	6818	L.F.	PLASTIC WIDE LINE	0.0	\$ 0.00	\$ 0.00
102	6857	S.F.	PLASTIC CROSSWALK LINE	0.0	\$ 0.00	\$ 0.00
103	6859	L.F.	PLASTIC STOP LINE	0.0	\$ 0.00	\$ 0.00
104	6833	EACH	PLASTIC TRAFFIC ARROW	5.0		
105	6871	EACH	PLASTIC TRAFFIC LETTER	0.0	\$ 0.00	\$ 0.00
106	6881	EACH	PLASTIC DRAINAGE MARKING	4.0		
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	15		
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	2.6		

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
109	6890	L.S.	PERMANENT SIGNING	1.0		
110	6897	L.S.	SIGN BRIDGE NO. 1	0.0	\$ 0.00	\$ 0.00
111	6897	L.S.	SIGN BRIDGE NO. 2	0.0	\$ 0.00	\$ 0.00
112	6897	L.S.	SIGN BRIDGE NO. 3	1.0		
113	6904	L.S.	ILLUMINATION SYSTEM	1.0		
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	0.0	\$ 0.00	\$ 0.00
115	6914	L.S.	ITS	0.0	\$ 0.00	\$ 0.00
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	1.0		
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	0.0	\$ 0.00	\$ 0.00
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	239		
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	1,530		
120	7029	EACH	PLUGGING EXISTING PIPE	0.0	\$ 0.00	\$ 0.00
121	7037	L.S.	STRUCTURE SURVEYING	0.0	\$ 0.00	\$ 0.00
122	7038	L.S.	ROADWAY SURVEYING	1.0		
123	7040	EST.	LICENSED SURVEYING	0.0	\$ 0.00	\$ 0.00
124		L.S.	ADA FEATURES SURVEYING	0.0	\$ 0.00	\$ 0.00
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	0.0	\$ 0.00	\$ 0.00
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	0.0	\$ 0.00	\$ 0.00
127	7080	L.F.	CABLE FENCE	0.0	\$ 0.00	\$ 0.00
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	0.0	\$ 0.00	\$ 0.00
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	0.0	\$ 0.00	\$ 0.00
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	0.0	\$ 0.00	\$ 0.00
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
132	3100	EACH	ADJUST CATCH BASIN	0.0	\$ 0.00	\$ 0.00
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	0.0	\$ 0.00	\$ 0.00
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
135	7400	HR	TRAINING	0.0	\$ 0.00	\$ 0.00
136	7480	EST.	ROADSIDE CLEANUP	1.0	\$ 4,500.00	\$ 4,500.00
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	1.0	\$ 5,000.00	\$ 5,000.00

Schedule B

Work within the WSDOT Right of Way, Outside the Tribal Reservation Boundary

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
138	7728	EST.	MINOR CHANGE	1.0	\$ 25,000.00	\$ 25,000.00
139	7736	L.S.	SPCC PLAN	1.0		
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	20		
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	100		
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	197		
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	0.0	\$ 0.00	\$ 0.00
144		EACH	INSTALL RECTANGULAR VANED GRATE	5.0		
Sub Total Schedule B						
TERO Fee 1.75%						
Total Schedule B						

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	0.3		
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1.0		
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	90		
7	0145	L.F.	REMOVING CONC. BARRIER	0.0	\$ 0.00	\$ 0.00
8	0170	L.F.	REMOVING GUARDRAIL	0.0	\$ 0.00	\$ 0.00
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	0.0	\$ 0.00	\$ 0.00
10		L.F.	REMOVING DRAINAGE PIPE	0.0	\$ 0.00	\$ 0.00
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
12	0405	C.Y.	COMMON BORROW INCL. HAUL	0.0	\$ 0.00	\$ 0.00
13	0431	TON	GRAVEL BORROW INCL. HAUL	30		
14	0470	C.Y.	EMBANKMENT COMPACTION	0.0	\$ 0.00	\$ 0.00
15		C.Y.	POND EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
16		C.Y.	COMPACTED TILL	0.0	\$ 0.00	\$ 0.00
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	22		
18	1054	EACH	GRATE INLET TYPE 2	0.0	\$ 0.00	\$ 0.00
19	1086	TON	QUARRY SPALLS	0.0	\$ 0.00	\$ 0.00
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	0.0	\$ 0.00	\$ 0.00
24	3091	EACH	CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
25		EACH	TEMPORARY CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	0.0	\$ 0.00	\$ 0.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	0.0	\$ 0.00	\$ 0.00
28	3151	L.F.	TESTING STORM SEWER PIPE	0.0	\$ 0.00	\$ 0.00
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	0.0	\$ 0.00	\$ 0.00
34		EACH	2" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	0.0	\$ 0.00	\$ 0.00
36		EACH	1" COMBINATION AIR RELEASE VALVE	0.0	\$ 0.00	\$ 0.00
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	0.0	\$ 0.00	\$ 0.00
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	0.0	\$ 0.00	\$ 0.00
39	4166	C.Y.	LEAN CONCRETE	0.0	\$ 0.00	\$ 0.00
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	0.0	\$ 0.00	\$ 0.00
41	4117	L.F.	PEDESTRIAN BARRIER	0.0	\$ 0.00	\$ 0.00
42	4119	L.F.	SEW TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
44	4456	S.Y.	SCARIFYING CONC. SURFACE	0.0	\$ 0.00	\$ 0.00
45	7169	S.F.	STRUCTURAL EARTH WALL	0.0	\$ 0.00	\$ 0.00
46		EACH	CORE DRILLED BRIDGE DECK	0.0	\$ 0.00	\$ 0.00
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	0.0	\$ 0.00	\$ 0.00
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	130		
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	970		
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64-22	161		
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	50		

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	1.0	\$ 120.00	\$ 120.00
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	1.0	\$ 80.00	\$ 80.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	1.0	\$ 140.00	\$ 140.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	64		
56	6453	S.Y.	COMPOST BLANKET	0.0	\$ 0.00	\$ 0.00
57	6463	L.F.	CHECK DAM	15		
58	6471	EACH	INLET PROTECTION	2.0		
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	0.0	\$ 0.00	\$ 0.00
60	6470	HR	STREET CLEANING	319		
61	6479	L.F.	WATTLE	0.0	\$ 0.00	\$ 0.00
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	1.0	\$ 13,650.00	\$ 13,650.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	0.16		
64	6405	C.Y.	TOPSOIL TYPE A	0.0	\$ 0.00	\$ 0.00
65	6545	EST.	WEED AND PEST CONTROL	1.0	\$ 700.00	\$ 700.00
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	19		
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	9		
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	15		
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	52		
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	52		
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	34		
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	52		
75	6552	EACH	PSIPE-ROSA NUTKANA/NOOTKA ROSE (#1 CONT / 12" HT)	52		
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	103		
77		C.Y.	FINE COMPOST	0.0	\$ 0.00	\$ 0.00
78		EACH	WATER BAGS	0.0	\$ 0.00	\$ 0.00
79		ACRE	SOIL DECOMPACTION	0.5		

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
80	6529	C.Y.	SOIL AMENDMENT	0.3		
81	6579	ACRE	WOOD CHIP MULCH	0.1		
82	6630	L.F.	HIGH VISIBILITY FENCE	220		
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	0.0	\$ 0.00	\$ 0.00
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	216		
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	0.0	\$ 0.00	\$ 0.00
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	0.0	\$ 0.00	\$ 0.00
87	6727	L.F.	EXTRUDED CURB	0.0	\$ 0.00	\$ 0.00
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	664		
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	31		
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	0.0	\$ 0.00	\$ 0.00
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	0.0	\$ 0.00	\$ 0.00
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	0.0	\$ 0.00	\$ 0.00
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	0.0	\$ 0.00	\$ 0.00
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	0.0	\$ 0.00	\$ 0.00
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	0.0	\$ 0.00	\$ 0.00
96	6832	EACH	FLEXIBLE GUIDE POST	0.0	\$ 0.00	\$ 0.00
97	6830	EACH	BARRIER DELINEATOR	0.0	\$ 0.00	\$ 0.00
98	6807	L.F.	PLASTIC LINE	1,600		
99	6809	L.F.	PROFIED PLASTIC LINE	658		
100	6845	L.F.	PROFIED PLASTIC WIDE LANE LINE	361		
101	6818	L.F.	PLASTIC WIDE LINE	0.0	\$ 0.00	\$ 0.00
102	6857	S.F.	PLASTIC CROSSWALK LINE	0.0	\$ 0.00	\$ 0.00
103	6859	L.F.	PLASTIC STOP LINE	0.0	\$ 0.00	\$ 0.00
104	6833	EACH	PLASTIC TRAFFIC ARROW	2.0		
105	6871	EACH	PLASTIC TRAFFIC LETTER	0.0	\$ 0.00	\$ 0.00
106	6881	EACH	PLASTIC DRAINAGE MARKING	1.0		
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	0.0	\$ 0.00	\$ 0.00
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	0.0	\$ 0.00	\$ 0.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
109	6890	L.S.	PERMANENT SIGNING	1.0		
110	6897	L.S.	SIGN BRIDGE NO. 1	0.0	\$ 0.00	\$ 0.00
111	6897	L.S.	SIGN BRIDGE NO. 2	0.0	\$ 0.00	\$ 0.00
112	6897	L.S.	SIGN BRIDGE NO. 3	1.0		
113	6904	L.S.	ILLUMINATION SYSTEM	1.0		
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	0.0	\$ 0.00	\$ 0.00
115	6914	L.S.	ITS	0.0	\$ 0.00	\$ 0.00
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	1.0		
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	0.0	\$ 0.00	\$ 0.00
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	12		
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	0.0	\$ 0.00	\$ 0.00
120	7029	EACH	PLUGGING EXISTING PIPE	0.0	\$ 0.00	\$ 0.00
121	7037	L.S.	STRUCTURE SURVEYING	0.0	\$ 0.00	\$ 0.00
122	7038	L.S.	ROADWAY SURVEYING	1.0		
123	7040	EST.	LICENSED SURVEYING	0.0	\$ 0.00	\$ 0.00
124		L.S.	ADA FEATURES SURVEYING	0.0	\$ 0.00	\$ 0.00
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	0.0	\$ 0.00	\$ 0.00
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	0.0	\$ 0.00	\$ 0.00
127	7080	L.F.	CABLE FENCE	0.0	\$ 0.00	\$ 0.00
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	0.0	\$ 0.00	\$ 0.00
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	0.0	\$ 0.00	\$ 0.00
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	0.0	\$ 0.00	\$ 0.00
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
132	3100	EACH	ADJUST CATCH BASIN	0.0	\$ 0.00	\$ 0.00
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	0.0	\$ 0.00	\$ 0.00
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
135	7400	HR	TRAINING	0.0	\$ 0.00	\$ 0.00
136	7480	EST.	ROADSIDE CLEANUP	1.0	\$ 1,500.00	\$ 1,500.00
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	1.0	\$ 5,000.00	\$ 5,000.00

Schedule C

Work within the City of Marysville, Outside WSDOT Right of Way

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
138	7728	EST.	MINOR CHANGE	0.0	\$ 0.00	\$ 0.00
139	7736	L.S.	SPCC PLAN	0.0	\$ 0.00	\$ 0.00
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	0.0	\$ 0.00	\$ 0.00
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	0.0	\$ 0.00	\$ 0.00
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	0.0	\$ 0.00	\$ 0.00
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	0.0	\$ 0.00	\$ 0.00
144		EACH	INSTALL RECTANGULAR VANED GRATE	1.0		
Sub Total Schedule C						
TERO Fee 1.75%						
Total Schedule C						

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
SECTION 1: PREPARATION						
1	0001	L.S.	MOBILIZATION	1.0		
2	0025	ACRE	CLEARING AND GRUBBING	0.0	\$ 0.00	\$ 0.00
3	0049	EACH	REMOVING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
4	0050	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
5	0258	EST.	REMOVING SIGN STRUCTURE SHAFT OBSTRUCTIONS	0.0	\$ 0.00	\$ 0.00
6	0120	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	0.0	\$ 0.00	\$ 0.00
7	0145	L.F.	REMOVING CONC. BARRIER	0.0	\$ 0.00	\$ 0.00
8	0170	L.F.	REMOVING GUARDRAIL	0.0	\$ 0.00	\$ 0.00
9	0182	EACH	REMOVING GUARDRAIL ANCHOR	0.0	\$ 0.00	\$ 0.00
10		L.F.	REMOVING DRAINAGE PIPE	0.0	\$ 0.00	\$ 0.00
SECTION 2: GRADING						
11	0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
12	0405	C.Y.	COMMON BORROW INCL. HAUL	0.0	\$ 0.00	\$ 0.00
13	0431	TON	GRAVEL BORROW INCL. HAUL	0.0	\$ 0.00	\$ 0.00
14	0470	C.Y.	EMBANKMENT COMPACTION	0.0	\$ 0.00	\$ 0.00
15		C.Y.	POND EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
16		C.Y.	COMPACTED TILL	0.0	\$ 0.00	\$ 0.00
SECTION 4: DRAINAGE						
17	1030	C.Y.	DITCH EXCAVATION INCL. HAUL	0.0	\$ 0.00	\$ 0.00
18	1054	EACH	GRATE INLET TYPE 2	0.0	\$ 0.00	\$ 0.00
19	1086	TON	QUARRY SPALLS	0.0	\$ 0.00	\$ 0.00
20	1182	L.F.	SCHEDULE A CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
21	1188	L.F.	SCHEDULE B CULV. PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
22	1292	L.F.	CL. V REINF. CONC. CULV. PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 5: STORM SEWER						
23	3090	EACH	CATCH BASIN TYPE 1L	0.0	\$ 0.00	\$ 0.00
24	3091	EACH	CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
25		EACH	TEMPORARY CATCH BASIN TYPE 1	0.0	\$ 0.00	\$ 0.00
26	3105	EACH	CATCH BASIN TYPE 2 48 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
27		EACH	CATCH BASIN TYPE 2 48 IN. DIAM. W/ DEBRIS CAGE	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
28	3151	L.F.	TESTING STORM SEWER PIPE	0.0	\$ 0.00	\$ 0.00
29	3480	L.F.	CL. V REINF. CONC. STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
30	3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
31	3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
32	3550	L.F.	SCHEDULE B STORM SEWER PIPE 12 IN. DIAM.	0.0	\$ 0.00	\$ 0.00
SECTION 6: SANITARY SEWER						
33		L.F.	8 IN. SANITARY SEWER FORCE MAIN ON BRIDGE	155		
34		EACH	2" COMBINATION AIR RELEASE VALVE	1.0		
SECTION 7: WATER LINES						
35		L.F.	8 IN. WATER LINE ON BRIDGE	309		
36		EACH	1" COMBINATION AIR RELEASE VALVE	2.0		
SECTION 8: STRUCTURE						
37	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	0.0	\$ 0.00	\$ 0.00
38	4147	LB.	EPOXY-COATED ST. REINF. BAR	0.0	\$ 0.00	\$ 0.00
39	4166	C.Y.	LEAN CONCRETE	0.0	\$ 0.00	\$ 0.00
40	4202	C.Y.	CONC. CLASS 4000 FOR TRAFFIC ISLAND	0.0	\$ 0.00	\$ 0.00
41	4117	L.F.	PEDESTRIAN BARRIER	0.0	\$ 0.00	\$ 0.00
42	4119	L.F.	SEW TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
43	4121	L.F.	GEOSYNTHETIC WALL SINGLE SLOPE TRAFFIC BARRIER	0.0	\$ 0.00	\$ 0.00
44	4456	S.Y.	SCARIFYING CONC. SURFACE	0.0	\$ 0.00	\$ 0.00
45	7169	S.F.	STRUCTURAL EARTH WALL	0.0	\$ 0.00	\$ 0.00
46		EACH	CORE DRILLED BRIDGE DECK	3.0		
47		C.Y.	TEXTURED CEMENT CONCRETE PAVEMENT CLASS 4000	0.0	\$ 0.00	\$ 0.00
SECTION 9: SURFACING						
48	5100	TON	CRUSHED SURFACING BASE COURSE	0.0	\$ 0.00	\$ 0.00
SECTION 14: HOT MIX ASPHALT						
49	5711	S.Y.	PLANING BITUMINOUS PAVEMENT	0.0	\$ 0.00	\$ 0.00
50	5717	TON	HMA FOR PRELEVELING CL. 1/2 IN. PG 64- 22	0.0	\$ 0.00	\$ 0.00
51	5767	TON	HMA CL. 1/2 IN. PG 64-22	0.0	\$ 0.00	\$ 0.00
52	5830	CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
53	5835	CALC	COMPACTION PRICE ADJUSTMENT	0.0	\$ 0.00	\$ 0.00
54	5837	CALC	ASPHALT COST PRICE ADJUSTMENT	0.0	\$ 0.00	\$ 0.00
SECTION 17: EROSION CNTL AND ROADSIDE RESTORATION						
55	6403	DAY	ESC LEAD	0.0	\$ 0.00	\$ 0.00
56	6453	S.Y.	COMPOST BLANKET	0.0	\$ 0.00	\$ 0.00
57	6463	L.F.	CHECK DAM	0.0	\$ 0.00	\$ 0.00
58	6471	EACH	INLET PROTECTION	0.0	\$ 0.00	\$ 0.00
59	6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	0.0	\$ 0.00	\$ 0.00
60	6470	HR	STREET CLEANING	0.0	\$ 0.00	\$ 0.00
61	6479	L.F.	WATTLE	0.0	\$ 0.00	\$ 0.00
62	6490	EST.	EROSION/WATER POLLUTION CONTROL	0.0	\$ 0.00	\$ 0.00
63	6414	ACRE	SEEDING, FERTILIZING, AND MULCHING	0.0	\$ 0.00	\$ 0.00
64	6405	C.Y.	TOPSOIL TYPE A	0.0	\$ 0.00	\$ 0.00
65	6545	EST.	WEED AND PEST CONTROL	0.0	\$ 0.00	\$ 0.00
66	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
67	6552	EACH	PSIPE-THUJA PLICATA/WESTERN REDCEDAR (#2 CONT/ 24" HT)	0.0	\$ 0.00	\$ 0.00
68	6552	EACH	PSIPE-PSEUDOTSUGA MENZIESII/DOUGLAS FIR (#1 CONT / 16" HT)	0.0	\$ 0.00	\$ 0.00
69	6552	EACH	PSIPE-RHAMNUS PURSHIANA/CASCARA (#1 CONT / 30" HT)	0.0	\$ 0.00	\$ 0.00
70	6552	EACH	PSIPE-THUJA PLICATA/WESTERN RED CEDAR (#1 CONT / 16" HT)	0.0	\$ 0.00	\$ 0.00
71	6552	EACH	PSIPE-ACER CIRCINATUM/VINE MAPLE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
72	6552	EACH	PSIPE-CORYLUS CORNUTA/BEAKED HAZELNUT (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
73	6552	EACH	PSIPE-MAHONIA AQUIFOLIUM/TALL OREGON GRAPE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
74	6552	EACH	PSIPE-PHILADELPHUS LEWISII/MOCK ORANGE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
75	6552	EACH	PSIPE-ROSA NUTKANA/NOOTKA ROSE (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
76	6552	EACH	PSIPE-SYMPHORICARPOS ALBUS/SNOWBERRY (#1 CONT / 12" HT)	0.0	\$ 0.00	\$ 0.00
77		C.Y.	FINE COMPOST	0.0	\$ 0.00	\$ 0.00
78		EACH	WATER BAGS	0.0	\$ 0.00	\$ 0.00
79		ACRE	SOIL DECOMPACTION	0.0	\$ 0.00	\$ 0.00
80	6529	C.Y.	SOIL AMENDMENT	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
81	6579	ACRE	WOOD CHIP MULCH	0.0	\$ 0.00	\$ 0.00
82	6630	L.F.	HIGH VISIBILITY FENCE	0.0	\$ 0.00	\$ 0.00
83	6635	L.F.	HIGH VISIBILITY SILT FENCE	0.0	\$ 0.00	\$ 0.00
84	6455	S.Y.	BIODEGRADABLE EROSION CONTROL BLANKET	0.0	\$ 0.00	\$ 0.00
SECTION 18: TRAFFIC						
85	6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	0.0	\$ 0.00	\$ 0.00
86	6701	L.F.	CEMENT CONC. TRAFFIC CURB	0.0	\$ 0.00	\$ 0.00
87	6727	L.F.	EXTRUDED CURB	0.0	\$ 0.00	\$ 0.00
88	6840	L.F.	PRECAST SLOPED MOUNTABLE CURB	0.0	\$ 0.00	\$ 0.00
89	6841	L.F.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	0.0	\$ 0.00	\$ 0.00
90	6757	L.F.	BEAM GUARDRAIL TYPE 31	0.0	\$ 0.00	\$ 0.00
91	6760	EACH	BEAM GUARDRAIL TRANSITION SECTION TYPE 21	0.0	\$ 0.00	\$ 0.00
92	6719	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	0.0	\$ 0.00	\$ 0.00
93	6766	EACH	BEAM GUARDRAIL ANCHOR TYPE 10	0.0	\$ 0.00	\$ 0.00
94	6779	EACH	CAST-IN-PLACE CONC. BARRIER LIGHT STANDARD SECTION	0.0	\$ 0.00	\$ 0.00
95	7442	EACH	PERMANENT IMPACT ATTENUATOR	0.0	\$ 0.00	\$ 0.00
96	6832	EACH	FLEXIBLE GUIDE POST	0.0	\$ 0.00	\$ 0.00
97	6830	EACH	BARRIER DELINEATOR	0.0	\$ 0.00	\$ 0.00
98	6807	L.F.	PLASTIC LINE	0.0	\$ 0.00	\$ 0.00
99	6809	L.F.	PROFILED PLASTIC LINE	0.0	\$ 0.00	\$ 0.00
100	6845	L.F.	PROFILED PLASTIC WIDE LANE LINE	0.0	\$ 0.00	\$ 0.00
101	6818	L.F.	PLASTIC WIDE LINE	0.0	\$ 0.00	\$ 0.00
102	6857	S.F.	PLASTIC CROSSWALK LINE	0.0	\$ 0.00	\$ 0.00
103	6859	L.F.	PLASTIC STOP LINE	0.0	\$ 0.00	\$ 0.00
104	6833	EACH	PLASTIC TRAFFIC ARROW	0.0	\$ 0.00	\$ 0.00
105	6871	EACH	PLASTIC TRAFFIC LETTER	0.0	\$ 0.00	\$ 0.00
106	6881	EACH	PLASTIC DRAINAGE MARKING	0.0	\$ 0.00	\$ 0.00
107	9238	EACH	PLASTIC YIELD LINE SYMBOL	0.0	\$ 0.00	\$ 0.00
108	6884	HUND	RAISED PAVEMENT MARKER TYPE 2	0.0	\$ 0.00	\$ 0.00
109	6890	L.S.	PERMANENT SIGNING	0.0	\$ 0.00	\$ 0.00
110	6897	L.S.	SIGN BRIDGE NO. 1	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
111	6897	L.S.	SIGN BRIDGE NO. 2	0.0	\$ 0.00	\$ 0.00
112	6897	L.S.	SIGN BRIDGE NO. 3	0.0	\$ 0.00	\$ 0.00
113	6904	L.S.	ILLUMINATION SYSTEM	0.0	\$ 0.00	\$ 0.00
114	6912	L.S.	TRAFFIC SIGNAL SYSTEM	0.0	\$ 0.00	\$ 0.00
115	6914	L.S.	ITS	0.0	\$ 0.00	\$ 0.00
116	6971	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	0.0	\$ 0.00	\$ 0.00
SECTION 19: OTHER ITEMS						
117	7003	L.S.	TYPE B PROGRESS SCHEDULE	0.0	\$ 0.00	\$ 0.00
118	7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	0.0	\$ 0.00	\$ 0.00
119	7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	0.0	\$ 0.00	\$ 0.00
120	7029	EACH	PLUGGING EXISTING PIPE	0.0	\$ 0.00	\$ 0.00
121	7037	L.S.	STRUCTURE SURVEYING	0.0	\$ 0.00	\$ 0.00
122	7038	L.S.	ROADWAY SURVEYING	0.0	\$ 0.00	\$ 0.00
123	7040	EST.	LICENSED SURVEYING	0.0	\$ 0.00	\$ 0.00
124		L.S.	ADA FEATURES SURVEYING	0.0	\$ 0.00	\$ 0.00
125	7058	EACH	CEMENT CONC. CURB RAMP TYPE A	0.0	\$ 0.00	\$ 0.00
126	7058	EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION MODIFIED	0.0	\$ 0.00	\$ 0.00
127	7080	L.F.	CABLE FENCE	0.0	\$ 0.00	\$ 0.00
128	7088	L.F.	COATED CHAIN LINK FENCE TYPE 4	0.0	\$ 0.00	\$ 0.00
129	7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	0.0	\$ 0.00	\$ 0.00
130	7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	0.0	\$ 0.00	\$ 0.00
131	9605	EACH	CONNECTION TO DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
132	3100	EACH	ADJUST CATCH BASIN	0.0	\$ 0.00	\$ 0.00
133	3110	EACH	LOCKING SOLID METAL COVER AND FRAME FOR CATCH BASIN	0.0	\$ 0.00	\$ 0.00
134	7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE	0.0	\$ 0.00	\$ 0.00
135	7400	HR	TRAINING	0.0	\$ 0.00	\$ 0.00
136	7480	EST.	ROADSIDE CLEANUP	0.0	\$ 0.00	\$ 0.00
137	7725	EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE	0.0	\$ 0.00	\$ 0.00
138	7728	EST.	MINOR CHANGE	0.0	\$ 0.00	\$ 0.00
139	7736	L.S.	SPCC PLAN	0.0	\$ 0.00	\$ 0.00

Schedule D

TULALIP TRIBES Utilities

BID ITEM #	STD ITEM #	UNIT	ITEM	Total Quantity	UNIT PRICE	TOTAL COST
140	7535	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	0.0	\$ 0.00	\$ 0.00
141	7550	S.Y.	CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	0.0	\$ 0.00	\$ 0.00
142	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	0.0	\$ 0.00	\$ 0.00
143	7565	S.F.	TEMPORARY GEOSYNTHETIC RETAINING WALL	0.0	\$ 0.00	\$ 0.00
144		EACH	INSTALL RECTANGULAR VANED GRATE	0.0	\$ 0.00	\$ 0.00
Sub Total Schedule D						
TERO Fee 1.75%						
Total Schedule D						

Schedule A Total:

Schedule B Total:

Schedule C Total:

Schedule D Total:

BID TOTAL:

SECTION THREE PAYMENTS

The Tulalip Tribes shall make payment for a phase of the work to the Contractor no later than thirty (30) days after the Tulalip Tribes' accounting department begins processing Contractor's invoice for that work. Such processing shall begin after Contractor presents the invoices and deliverables to the Tulalip Tribes' authorized representative and the authorized representative submits written approval to the accounting department for payment based on an inspection of the work. Payment by the Tulalip Tribes does not constitute a waiver of any claims by the Tulalip Tribes against Contractor concerning or arising out of this agreement. Acceptance of final payment by Contractor constitutes a waiver of all claims by Contractor.

Contractor agrees to maintain for inspection by the Tulalip Tribes for three years after final payment all books, records, documents, and other evidence pertaining to the costs and expenses of this agreement, hereinafter collectively called, "records", to the extent and in such detail as will properly reflect all net costs, direct and indirect, of labor, supplies, and services, and other costs of whatever nature for which reimbursement is claimed under the provisions of this agreement.

In the event payment for work performed under this agreement is made from federal or state funds, Contractor shall abide by all applicable federal and state laws and regulations governing such funds which laws and regulations are hereby incorporated by reference. Any rights of the Contractor are subject to the limitations on and availability of such funds to the Tulalip Tribes.

Contractor shall not be entitled to any interest on any amount found due and owing hereunder, whether before or after judgment, but shall, at most, only be entitled to the amount specified in Section Two – CONTRACT PRICE.

SECTION FOUR STARTING AND COMPLETION DATES

The date of commencement of the work shall be the date of this agreement unless a different date is made for the date to be fixed in a notice to proceed issued by the Tulalip Tribes. This agreement shall become effective upon its signing by the Tulalip Tribes and Contractor.

The contract time shall be measured from the date of commencement.

The Contractor shall diligently prosecute the Work and shall complete all Work so that Contract Completion can occur on or before two hundred (200) working days from the date of the Notice to Proceed, unless the Contractor timely requests and the Tulalip Tribes grants an extension of time in accordance with the Contract Documents.

It is understood and agreed that all Work shall be completed within the established time for Contract Completion, and that each applicable portion of the Work shall be completed upon the respective milestone completion date(s), unless the Contractor timely requests and the Tulalip Tribes grants an extension of time in accordance with the Contract Documents.

SECTION FIVE LIQUIDATED DAMAGES

Upon failure to have all Work completed within the period of time above specified, or failure to have the applicable portion of the Work completed upon any milestone completion date, the Tulalip Tribes shall be entitled to retain or recover from the Contractor, as Liquidated Damages, and not as a penalty, the applicable amount set forth in the 2016 WSDOT Standard Specifications and the Special Provisions for each and every day or portion of a day thereafter until Contract Completion, unless the Contractor timely requests and the Tulalip Tribes grants an extension of time in accordance with the Contract Documents.

The amount of Liquidated Damages is agreed upon by and between the Contractor and the Tulalip Tribes because of the impracticality and extreme difficulty of ascertaining the actual amount of damage the Tulalip Tribes would sustain.

SECTION SIX CONTRACT DOCUMENTS

The contract documents includes the following, which are incorporated by reference as if fully set forth herein (not in order of precedence), on which the agreement between the Tulalip Tribes and Contractor is based, in accordance with which the work is to be done, are as follows:

- a. This agreement, together with such supplementary agreements and conditions as are attached hereto;
- b. Proposal (Form of Bid);
- c. Table of Contents;
- d. Division 0 – Bidding Requirements, Contract Forms, and Conditions of the Contract complete;
- e. Division 1 – General Requirements complete;
- f. Technical Specifications complete;
- g. Special Provision Complete;
- h. Amendments to the 2016 WSDOT Standard Specifications (8/7/17);
- i. 2016 WSDOT Standard Specifications;
- j. Contract Plans as listed in the Index on pages IN-1 & IN-2 of the Drawing Set complete
Volume 3 contains sheets 1-238;
- k. Appendix A Wage Rates
- l. Appendix B Permits
- m. Appendix C Geotechnical Reports –
 - Geotechnical Report I-5, 116th Street NE Interchange Improvements prepared by PanGEO Incorporated dated November 30, 2011.
 - Supplemented Final Geotechnical Report I-5, 116th Street NE Interchange Improvements prepared by PanGEO Incorporated dated July 18, 2012.
 - Final Geotechnical Report, Bridge Only - I-5 116th Street NE Interchange Improvements prepared by PanGEO Incorporated dated July 10, 2013These are for reference use only and are provided solely to share information available to the Contracting Agency and any use of, or reliance upon, such items by the Contractor is at the risk of the Contractor
- n. The Tulalip Code, Chapter 9.05 – TERO Code;
- o. Addendum No. _____ dated _____, 20____; and
- p. Addendum No. _____ dated _____, 20_____.

These contract documents together form the contract for the work herein described. The parties intend that the documents include provisions for all labor, materials, equipment, supplies, and other items necessary for the execution and completion of the work and all terms and conditions of payment. The documents also include all work and procedures not expressly indicated therein which are necessary for the proper execution of the project.

This agreement, including its referenced appendices, represents the entire and complete agreement between the parties and supersedes all prior negotiations, representations, or agreements either written or oral and may be amended or modified only in writing signed by both parties. Nothing whatsoever in this agreement constitutes or shall be construed as a waiver of the Tulalip Tribes of Washington's sovereign immunity. This agreement shall not be valid unless each and every signature designated below is affixed.

SECTION SEVEN AUTHORITY OF TULALIP TRIBES' REPRESENTATIVE(S)

The Tulalip Tribes' representative designated as Construction Manager authorized to administer and implement the terms and conditions of this agreement is _____.

The Tulalip Tribes' representative designated as Project Engineer authorized to directly supervise the engineering and administration of the construction project is _____ [<insert Company name and address>](#).

The Tulalip Tribes' representative designated as Inspector authorized to inspect Contract performance in detail is _____ [<insert Company name and address>](#).

The Tulalip Tribes' authorized representatives shall be allowed to observe any work done by the Contractor which is covered by this agreement.

SECTION EIGHT RESPONSIBILITIES OF CONTRACTOR

Contractor's duties and rights in connection with the project herein are as follows:

- a. Responsibility for and supervision of work. Contractor represents that he has inspected and is familiar with the work site and the local conditions under which the work is to be performed. Contractor shall be solely responsible for all construction and installation in accordance with the contract, including the techniques, sequences, procedures, and means for coordination of all work. Contractor shall properly supervise and direct the work of the employees and subcontractors, and shall give all attention necessary for such proper direction. Contractor represents that he is bonded in sufficient amount to cover Contractor's liability occasioned by Contractor's performance of this contract.
- b. Discipline and employment. Contractor shall maintain at all times strict discipline among his workers and agrees not to employ for work on the project any person unfit or without sufficient skill to perform the job for which he was employed.
- c. Furnishing of labor, materials, etc. Contractor shall provide and pay for all labor, materials and equipment, including but not limited to tools, construction equipment, machinery, utilities including water, transportation, and all other facilities and services necessary for the proper completion of the work on the project in accordance with the contract documents.
- d. Manufacturer's instructions. Contractor shall comply with manufacturer's installation instructions and recommendations to the extent that those instruction and recommendations are more explicit or stringent than requirements contained within the Contract documents.
- e. Payment of taxes, procurement of license and permits. Contractor shall pay any taxes required by law in connection with work on the project and shall secure all licenses and permits necessary for proper completion of the work, paying the fees therefore.

The Tulalip Tribes of Washington is a federally recognized Indian Tribal government with a constitution and bylaws approved by the United States Secretary of the Interior. See: 65 Federal Register 13298, 13301 (March 13, 2000). As a recognized tribal government, the Tulalip Tribes of Washington and all of its governmental agencies, is a tax exempt entity. See: 26 USC §7871, and Washington Administrative Code Excise Tax Rule 192 (WAC 458-20-192). Portions of this project are Tax Exempt from all Sales and/or Use Taxes for all materials and supplies incorporated in construction of the work that become a permanent part of the Project. Upon request a Tax Exemption form may be obtained from the Tulalip Tribes. WAC 458-20-192(5)(a)(ii) states that retail sales tax is not imposed if the retail service (e.g. construction services) is performed for the member or tribe in Indian country. In the case of retail service that is performed on and off Indian country, only the portion of the contract that relates to work done in Indian country is excluded from tax. The work done for a tribe or Indian outside of Indian country, for example a road work that extends outside of Indian country, is subject to retail sales tax.

- f. Compliance with laws and regulations. Contractor shall comply with all applicable laws and ordinances, and rules, regulations, or orders of all public authorities relating to the performance of the work herein. If any of the contract documents

are at variance therewith, he shall notify the Tulalip Tribes, through the Construction Manager, promptly on discovery of such variance.

- g. Responsibility for negligence of employees and subcontractors. Contractor assumes full responsibility for acts, negligence, or omissions of all other persons doing work under a contract with him.
- h. Warranty of fitness of equipment and materials. Contractor represents and warrants to the Tulalip Tribes that all equipment and materials used in the work and made a part of any structure thereon, or placed permanently in connection therewith, will be new unless otherwise specified in the contract documents, of good quality, free of defects, and in conformity with the contract documents. It is understood between the parties that all equipment and materials that are not so in conformity are defective.
- i. Cleaning and protection. Contractor shall during handling and installation clean and protect construction in progress and adjoining materials in place. Contractor shall apply protective covering where required ensuring protection from damage or deterioration.
- j. Furnishing of design and engineering plans. Upon request Contractor shall furnish the Tulalip Tribes or Construction Manager all design and engineering plans for consideration and approval as to conformance with the specifications of the Contract documents.
- k. Clean-up. Contractor agrees to keep the work premises and adjoining way free of waste materials and rubbish caused by his work or that of his subcontractors, and further shall remove all such waste materials and rubbish on termination of the project, together with all his tools, equipment and machinery.
- l. Indemnity and hold harmless agreement. Contractor agrees to indemnify and hold harmless the Tulalip Tribes, its employees, and their agents from and against all claims, damages, losses, and expenses including reasonable attorney fees in case it shall be necessary for the Tulalip Tribes to commence or defend any action arising out of or associated in any way with performance of the work herein, which is:
 - 1. For bodily injury, illness or death, property damage including loss of use, or other damage, and
 - 2. Caused in whole or part by Contractor's negligent act or omission, or that of a subcontractor, or that of anyone employed by them or for whose acts Contractor or subcontractor may be liable.
- m. Contractor shall defend, indemnify and hold harmless the Tulalip Tribes, its employees, and their agents against all loss, damage, liability, claims, lawsuits demands, or costs arising in connection with this agreement. Contractor shall reimburse the Tulalip Tribes for all costs reasonably incurred to defend the Tulalip Tribes against such claims through attorneys of the Tulalip Tribes' choice.
- n. Contractor shall promptly notify the Tulalip Tribes, through the Construction Manager, of any litigation arising from or affecting its operations under this agreement, including any bankruptcy or insolvency proceedings of Contractor or of its assignees or subcontractors. Contractor shall not assign its rights under this agreement without first obtaining the Tulalip Tribes' written approval.

- o. Payment of royalties and license fees; hold harmless agreements. Contractor agrees to pay all royalties and license fees necessary for the work and to defend all actions and settle all claims for infringement of copyright or patent rights, and to save the Tulalip Tribes harmless therefrom.
- p. The Contractor will be required as part of this contract to provide weekly certified payrolls and be in compliance with the Tribal Employment Rights Office (TERO) requirements. The Contractor shall be required to schedule a meeting with TERO prior to the start of work on this project and provide a signed approved copy of their Compliance Plan to the Construction Manager.
- q. Archaeological and Historical Objects. Archaeological or historical objects, which may be encountered by the Contractor, shall not be further disturbed. The Contractor shall immediately notify the Construction Manager of any such finds. The Construction Manager will contact the Tribal Natural Resource and Cultural Resource Department who will determine the nature of the object(s). The Contractor may be required to stop work in the vicinity of the discovery until such determination is made. If the Tribal representative determines that the object(s) are to be surveyed, the Tribal representative may require the Contractor to stop work in the vicinity of the discovery until the survey is accomplished.
- r. Excess material. All excess material shall become the property of the Tulalip Tribes.
- s. The Contractor shall, whether or not federal or state funds are involved, without additional expense to the Tulalip Tribes, comply with all applicable laws and obtain all required licenses and permits necessary to execute the provisions of this agreement. Contractor shall file all required returns and notices.
- t. When working within the exterior boundaries of the Tulalip Indian Reservation, Contractor shall comply with all Tribal laws. Before commencing work, Contractor shall obtain all required Tribal licenses and permits. Contractor shall indemnify and hold the Tulalip Tribes, its employees, and their agents harmless from any and all costs, liabilities, or obligations by reason of the failure of Contractor or his or her employees, agents, subcontractors or assigns to comply with any applicable law.
- u. Contractor shall not discriminate against any employee or applicant for employment on the basis of race, color, religion, age, sex, national origin, or handicap, with regard to employment "upgrading, demotion, transfer, recruitment, advertising, layoff, termination, rates of pay, or other forms of compensation and selection for training. Notwithstanding the foregoing, Contractor shall provide preference in employment and subcontracting in accordance with The Tulalip Code, Chapter 9.05 – TERO Code as it now exists or may be hereafter amended.

SECTION NINE

TIME OF ESSENCE – EXTENSION OF TIME

All times stated herein or in the contract documents are of the essence hereof. Contract times may be extended by a change order from the Tulalip Tribes, through the Construction Manager, for such reasonable time as the Tulalip Tribes may determine when in their opinion Contractor is delayed in work progress by changes ordered, labor disputes, fire, prolonged transportation delays, injuries, or other causes beyond Contractor's control or which justify delay.

Any request by the Contractor for an extension of time shall be made in writing to the Tulalip Tribes, through the Construction Manager, no more than ten (10) days after the initial

occurrence of any condition which, in the Contractor's opinion, entitles the Contractor to an extension of time. Failure to timely provide such notice to the Tulalip Tribes shall constitute a waiver by the Contractor of any claim for extension, damages or mitigation of Liquidated Damages, to the fullest extent permitted by law.

SECTION TEN CORRECTING NON-CONFORMING WORK

If a portion of the work is covered contrary to the Construction Manager's request or to requirements specifically expressed in the Contract documents, it must, if requested in writing by the Construction Manager, be uncovered for the Construction Manager's and or Architect's examination and be replaced at the Contractor's expense without change in the Contract time.

If a portion of the Work has been covered which the Construction Manager has not specifically requested to examine prior to its being covered, the Construction Manager may request to see such work and it shall be uncovered by the Contractor. If it is determined that such work has been performed in accordance with the Contract documents all costs incurred by Contractor to uncover and replace the work shall, by appropriate change order, be reimbursed by the Tulalip Tribes. If such work is found not to be in accordance with the Contract documents, any and all required corrections shall be assigned to the Contractor unless the condition was caused by the Tulalip Tribes or a separate contractor in which event the Tulalip Tribes shall be responsible for payment of such costs.

When it appears to any authorized representative of the Tulalip Tribes or Contractor during the course of construction that any work does not conform to the provisions of the contract documents, Contractor shall make necessary corrections so that such work will so conform, and in addition Contractor will correct any defects caused by him or by a subcontractor, appearing within one year from the date of issuance of a certificate of Contract completion by the Tulalip Tribes, or within such longer period as may be prescribed by law or as may be provided for by applicable special guarantees in the contract documents.

SECTION ELEVEN CHANGES IN THE WORK

The Tulalip Tribes reserves the right to order changes in the work in the nature of additions, deletions or modifications, without invalidating the Contract, and agrees to make corresponding adjustments in the Contract price and time for completion, if justified. Any such changes will be authorized by a written change order signed by an authorized representative of the Tulalip Tribes. The change order will include conforming changes in the Contract and completion time. Work shall be changed, and Contract price and completion time shall be modified only as out in the written change order. Any adjustment in the Contract price resulting in a deductive credit or a charge to the Tulalip Tribes shall be determined by the mutual agreement of the parties to the Contract.

SECTION TWELVE TERMINATION

The Tulalip Tribes may terminate this agreement on ten (10) days written notice and in such case Contractor shall only be entitled to payment for work performed prior to receipt of said

notice. Additionally, the Tulalip Tribes may immediately suspend operations under this agreement by written notice of any breach. Suspension shall continue until the Tulalip Tribes' authorized representative certifies in writing that the breach is remedied. If Contractor is still in breach after seven (7) days from the notice of suspension, the Tulalip Tribes may, without further notice, terminate all rights of Contractor under this agreement.

Any failure by the Tulalip Tribes to suspend or terminate this agreement in case of breach shall not waive Contractor's duty to perform strictly in accordance with this agreement. Failure by Contractor to perform on its part any duty, term or condition herein shall constitute a breach.

Any notice sent under this Section may either be sent by personally giving a copy thereof to Contractor or its agents, employer or contractors or mailing a copy to the address set forth herein.

SECTION THIRTEEN DISPUTES

Tulalip Tribes' Limited Waiver of Sovereign Immunity; Consent to Jurisdiction. By signing this contract, The Tulalip Tribes neither waives, limits, nor modifies its sovereign immunity from any lawsuit, except as expressly provided in this Section Thirteen. The Tulalip Tribes hereby expressly and irrevocably waives its sovereign immunity (and any defense based thereon) for arbitration of Claims arising out of or related to this contract, but only pursuant to subsections (b), (c), (d), (e) and (f) below, and to that extent, irrevocably consents to and submits itself to the jurisdiction of the tribal court of The Tulalip Tribes ("Tribal Court") for the purposes of compelling arbitration of a Claim, confirming an arbitration award or collecting sums due and owing pursuant to and otherwise enforcing any award or judgment. This limited waiver and consent are expressly limited to the following limitations and qualifications:

- a. If the parties do not resolve any dispute through direct negotiation, either party shall submit the matter to mediation with a professional mediation service mutually agreed upon by the parties, as a condition precedent to arbitration. Persons with authority to resolve the dispute shall be present at the mediation. If the parties do not otherwise agree on a mediation service to conduct the mediation, the mediation shall be conducted in accordance with the Construction Industry Mediation Rules of the American Arbitration Association. The parties shall share the mediator's fee, filing fees and associated costs equally.
- b. If, within 30 days of any such submission by either party, the mediation has not resulted in a resolution of the dispute, either party may submit the dispute to binding arbitration in accordance with the Construction Industry Rules of the American Arbitration Association and the Federal Arbitration Act; provided, however, that the party demanding arbitration shall serve upon the other party, personally or by registered mail, a written notice of intention to arbitrate. Such notice must state in substance that unless within (20) twenty days after its service, the party served therewith shall file a motion to stay the arbitration, such party shall thereafter be barred from putting in issue the existence or validity of the Agreement or the agreement to arbitrate.
 1. The Construction Industry Rules of the American Arbitration Association, R-51(c) shall be amended to read: "parties to these rules will be deemed

to have consented that judgment upon the arbitration award may be entered in the Tulalip Tribal Court;”

- c. In the event arbitration to resolve a dispute is necessary, the party seeking arbitration shall send a written notice that shall contain a detailed written statement of the claim and the parties shall meet as soon as practicable but not less than thirty (30) days after receipt of the written notice and attempt to agree on an arbitrator to decide the matter at issue.
- d. Selection of the arbitrators shall be pursuant to the following:
 - 1. Any such arbitration shall take place before a single arbitrator if the aggregate value of the Claim and any counterclaim is less than \$200,000, exclusive of costs and attorney fees. The parties shall endeavor to mutually agree on the arbitrator. Either party may specify and require that the arbitrator selected be an attorney licensed to practice law in the State of Washington and shall be experienced in the field of construction. If the parties are unable to agree upon the selection of an arbitrator within twenty (20) days of their first meeting, the parties shall each select an arbitrator and the two selected arbitrators shall together select a third arbitrator who alone shall decide the matter in dispute. For any Claim and counterclaim having an aggregate value of \$200,000 or more, a panel of three (3) arbitrators shall be appointed unless both parties mutually agree to a single arbitrator. Each of the parties shall designate one arbitrator and the third arbitrator, who shall be a lawyer with experience in construction disputes, shall be selected by the arbitrators designated by the parties. If the two selected arbitrators are unable to agree on a third arbitrator, the third arbitrator shall be appointed by the Chief Judge of the Tulalip Tribal Court.
- e. Following the initiation of arbitration, the parties shall cooperate in the exchange of information relating to the Claim, being guided by the scope of the applicable rules of discovery under the Federal Rules of Civil Procedure for the Federal District Courts including the local rules adopted by the Western District of Washington. Discovery shall not include interrogatories or requests for admission. The parties shall freely exchange documents relevant to the Claim and depositions shall be limited to those reasonably necessary for each party to prepare for or defend against the Claim. Disputes regarding discovery shall be resolved by the arbitrator or, where there is an arbitration panel, by the Chair.
- f. Arbitration may include by consolidation, joinder or in any other matter, an additional person or entity who is, or may be involved in, the Claim, including but not limited to the Designer of Record, lower-tiered contractors and/or suppliers, and consultants retained by the Designer of Record or Contractor. In order to effectuate the purposes of this Section Eleven, (f), the Contractor shall incorporate by reference the provisions of this Section Eleven, (f) in each lower-tiered contract.
- g. In the event of arbitration between the parties hereto, declaratory or otherwise relating to the Contract Documents, and notwithstanding any other provisions therein, (1) each party shall bear its own costs and attorneys’ fees if the aggregate value of the Claim and any counterclaim is less than \$200,000 and (2) the losing party shall pay all costs and attorneys’ fees actually incurred by the substantially prevailing party if the aggregate value of the Claim and any counterclaim is \$200,000 or more. The parties covenant and agree that they intend by clause (2)

of the preceding sentence to award the amount of attorney's fees actually incurred by the prevailing party, and that said clause (2) shall constitute an instruction to the Arbitrator that such fees shall be deemed reasonable.

- h. A demand for arbitration shall be made within the time limits specified in this Section Thirteen as applicable, and in other cases within a reasonable time after the Claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations as determined pursuant to subsections (h.1), (h.2) and (h.3) below:
 - 1. Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;
 - 2. Between Substantial Completion and Final Certificate for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and
 - 3. After Final Certificate for Payment. As to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any Contract Warranty provisions, the date of any correction of the Work or failure to correct the Work by the Contractor under the Contract Corrections of the Work provisions, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Tulalip Tribes, whichever occurs last.
- i. Claims and Timely Assertion of Claims. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.
- j. Judgment on Final Award. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in the tribal court of The Tulalip Tribes of Washington.
- k. This limited waiver of sovereign immunity is solely for the benefit of the Contractor (and Subcontractors whose claims are sponsored by the Contractor, if any) and surety, and The Tulalip Tribes, by granting this limited waiver to the Contractor and surety, does not otherwise waive its sovereign immunity.
- l. The award rendered by the arbitrator shall be final. Judgment on any arbitration award may be entered in and enforced by the Tribal Court as provided in this section. The Contractor and The Tulalip Tribes shall comply with the arbitration award and shall not seek further remedy or appeal.

SECTION FOURTEEN EMPLOYMENT PREFERENCE

Contractor recognizes and agrees that Contractor and Contractor's subcontractors are bound by The Tulalip Code, Chapter 9.05 – TERO Code.

SECTION FIFTEEN CONTRACTING PREFERENCE

Contractor recognizes and agrees that Contractor and Contractor's subcontractors are bound by The Tulalip Code, Chapter 9.05 – TERO Code.

SECTION SIXTEEN CONTRACT INSURANCE

CONTRACTOR'S LIABILITY INSURANCE

Contractor shall purchase and maintain such liability and other insurance as will protect the Tulalip Tribes, WSDOT, and the Contractor from claims or losses which may arise out of or result from the Contractor's performance or obligations under the contract documents, whether due to action or inaction by the Contractor or any person for whom the Contractor is responsible. Contractor shall provide insurance coverage and limits as indicated in the Special Provisions, Section 1-07.18 Public Liability and Property Damage Insurance

CONTRACTOR'S WORKER'S COMPENSATION

All employees of Contractor and subcontractor(s) are to be insured, including qualified self-insured plans, under Washington State Industrial Insurance as well as in compliance with any Federal workers compensation regulations including USL&H and Jones Act Coverages. Employees not subject to the State Act are to be insured under Employer's Contingent Liability (Stop Gap) \$1,000,000 on accident and aggregate.

Such evidence of insurance shall be in the form of an Insurance Certificate issued by the State of Washington Department of Labor and Industries or an insurer satisfactory to the Tulalip Tribes and shall provide for not less than thirty (30) days prior written notice to the Contracting Agency of cancellation or reduction in coverage.

BUILDER'S RISK

The Tulalip Tribes shall provide and maintain, during the progress of the work and until the execution of the certificate of Contract Completion, a Builder's Risk Insurance policy to cover all on-site work in the course of construction including false work, temporary buildings and structures and materials used in the construction process. The amount of coverage is based upon the total completed value of the project (including the value of permanent fixtures and decorations.) Such insurance shall be on a special cause of loss form and may include such other coverage extension as the Tulalip Tribes deem appropriate. Unless otherwise provided for through agreement, the contractor experiencing any loss claimed under the Builder's Risk policy shall be responsible for up to \$10,000 of that loss. Contractor may provide its own builder's risk or installation insurance coverage for amounts up to the \$10,000 deductible. Contractor is responsible for insuring their property in transit, in temporary storage away from the site as well as their own tools, equipment and any employee tools.

Incidents related to pollution and contamination are specifically excluded from the Builders Risk Insurance policy.

To be eligible to make a claim under the Tulalip Tribes' Builders Risk Insurance policy, Contractor shall be responsible to secure all materials and or equipment stored on the project site in a secured fenced area.

SECTION SEVENTEEN OTHER PROVISIONS

Any and all reports, data, findings or other materials or deliverables under this agreement shall become the property of and remain under the sole proprietorship of the Tulalip Tribes. Contractor will keep all information learned under this agreement confidential and will not release any such information, either orally or in writing, to parties other than the Tulalip Tribes, its agents, contractors or employees without the express written permission of the Tulalip Tribes.

The Tulalip Tribes and Contractor each binds themselves and their partners, agents, assigns, successors and legal representatives of such other party to this agreement and to the partners, successors and legal representatives of such other party with respect to all terms and conditions of this agreement.

Neither the Tulalip Tribes nor Contractor shall delegate, assign, sublet or transfer their duties or interest in this agreement without the written consent of the other party. Any such assignment, sublet, delegation or transfer shall be subject to the same terms and conditions as this agreement.

The negotiation and execution of this agreement shall be deemed by the parties to have occurred within the exterior boundaries of the Tulalip Indian Reservation and any interpretation thereof shall be in accordance with the laws of the Tulalip Tribes of Washington.

The failure of the Tulalip Tribes to assert any claim or right at any time under this agreement shall not waive its right to assert any claim or right at a later time.

(REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

IN WITNESS WHEREOF, the parties have executed this agreement at the Tulalip Indian Reservation, Washington, on the date first above written.

APPROVED BY CONTRACTOR:

(Company Name)

(Print Name & Title)

By: _____

(Authorized Signature)

APPROVED BY THE TULALIP TRIBES OF WASHINGTON:

(Print Name & Title)

By: _____

(Authorized Signature)

The Tulalip Tribes of Washington

I-5/116th Street NE Interchange Improvements Phase 4 Ramps Project

INTERIM WAIVER AND RELEASE OF CLAIMS

TO THE TULALIP TRIBES OF WASHINGTON ("OWNER"):

_____ (the "Releasing Party") has furnished labor or services, or supplied materials or equipment (collectively, the "Work") for construction on the I-5/116th Street NE Interchange Improvements Phase 4 Ramps (the "Project"), located at the intersection of I-5 and 116th Street NE, Tulalip, WA 98271.

Upon receipt of payment by the Releasing Party of \$_____, whether in cash, by check or by joint check, the Releasing Party represents and certifies to Owner that: (i) Releasing Party and all of its subcontractors are in compliance with the terms of their respective contracts; (ii) all due and payable bills with respect to the Work have been paid to date or are included in the amount requested in the current Application for Payment and there is no known basis for the filing of any claim in respect of the Work except for (a) any claim that the Releasing Party has previously provided written notice to Owner about such claim, and (b) amounts owed to Releasing Party and/or any subcontractor or supplier that are considered Cost of the Work but have been withheld by the Owner; and (iii) waivers and releases from all Subcontractors and/or Suppliers being billed under a Releasing Party Subcontract Agreement or Purchase Agreement have been obtained in form substantially similar hereto as to constitute an effective waiver and release of all known claims. Notwithstanding the foregoing, this Interim Waiver and Release of Claims shall not apply to any amounts owed for Work which has been provided to the Project during a billing period prior to the date hereof where Releasing Party and/or any subcontractor or supplier has not yet requested reimbursement for the cost of the Work provided to the Project.

If any claim covered by this Interim Waiver and Release of Claims is made or filed by the Releasing Party or any of its lower tier consultants, subcontractors, suppliers, vendors or materialmen at any tier against or with respect to Owner or the Project then the Releasing Party (1) shall immediately release and discharge, or secure the release or discharge of, such claim and (2) shall indemnify, defend and hold harmless Owner and the Project from and against any and all costs, damages, expenses, court costs and attorney fees arising from such claim or any litigation resulting from such claim.

(the Releasing Party)

DATED: _____

By: _____

Printed Name: _____

Its: _____

[Notary Seal]

State of: _____ County of: _____

Subscribed and sworn to before me this _____ day of _____

Notary Public: _____

My Commission expires: _____

The Tulalip Tribes of Washington
I-5/116th Street NE Interchange Improvements Phase 4 Ramps Project

FINAL WAIVER AND RELEASE OF CLAIMS

TO THE TULALIP TRIBES OF WASHINGTON ("OWNER"):

Upon receipt of payment of \$_____, whether in cash, by check or by joint check, _____ (the "Releasing Party") has furnished labor or services, or supplied materials or equipment for construction on the I-5/116th Street NE Interchange Improvements Phase 4 Ramps (the "Project"), located at located at the intersection of I-5 and 116th Street NE, Tulalip, WA 98271.

The Releasing Party hereby unconditionally waives and releases any and all claims, stop notices, rights to submit stop notices, suits, demands, protests, damages, losses and expenses of any nature whatsoever (whether under statute, in equity or otherwise and whether received through assignment or otherwise) (each, individually, a "Claim") against or with respect to The Tulalip Tribes of Washington, which is referred to as the Owner in the Contract Documents, or any other party holding an interest in the Property (collectively, the "Released Parties"), or against or with respect to the Project, the Property, improvements to the Property and materials, fixtures, apparatus and machinery furnished for the Property (collectively, the "Released Properties").

Upon the receipt of the aforesaid amount, the Releasing Party expressly acknowledges that it has been paid all amounts due and owing to it for work, services, material or equipment in connection with the Work and the Releasing Party represents and warrants that all amounts due and owing to consultants, subcontractors and suppliers below the Releasing Party in connection with this Project have been paid, unless noted herewith as approved by Owner.

If any Claim is made or filed by the Releasing Party or any of its lower tier consultants, subcontractors, suppliers or laborers at any tier against or with respect to any of the Released Parties or any of the Released Properties, then the Releasing Party (1) shall immediately release and discharge, or secure the release or discharge of such Claim and (2) shall indemnify, defend and hold harmless the Released Parties from and against any and all costs, damages, expenses, court costs and attorney fees arising from such Claim or any litigation resulting from such Claim.

(the Releasing Party)

DATED: _____

By: _____

Printed Name: _____

Its: _____

[Notary Seal]

State of: _____ County of: _____

Subscribed and sworn to before me this _____ day of _____

Notary Public: _____

My Commission expires: _____

BUYERS' RETAIL SALES TAX EXEMPTION CERTIFICATE

Not to be used to make purchases for resale

<i>Vendor/Seller</i>		<i>Date</i>	
<i>Street Address</i>	<i>City</i>	<i>State</i>	<i>Zip Code</i>

I, the undersigned buyer, certify I am making an exempt purchase for the following reason: (*Enter information and/or check applicable box(es)*)

1. Nonresident:

Place of residence: _____

Type of proof of residence accepted (drivers license, fishing license, etc) _____ ,
including any identification numbers _____ , and expiration date _____ .

- a. ☐ Tangible personal property other than motor vehicles for use outside Washington by a resident of a state, possession, or province of Canada, with a sales tax rate of less than three percent.
- b. ☐ Watercraft (*Include make, model and serial number of vessel*):

☐ Registered or documented with the US Coast Guard or state of principal use and will leave Washington waters within 45 days; **or**

☐ Buyer is a resident of a foreign country. Purchase is for use outside Washington and will leave Washington waters within 45 days.

Seller's Signature: _____

2. Electric Vehicles:

- a. ☐ Batteries for electric vehicles or the purchase of labor and services rendered in respect to installing, repairing, altering, or improving electric vehicle batteries.
- b. ☐ Tangible personal property that will become a component of electric vehicle infrastructure or the purchase of or charge made for labor and services rendered in respect to installing, constructing, repairing, or improving electric vehicle infrastructure.

3. Intrastate Air Transport:

- ☐ Airplanes for use in providing intrastate air transportation by a commuter air carrier and the sale of repair and related services for these airplanes.

4. Interstate or Foreign Commerce or Commercial Deep Sea Fishing Business:

- a. ☐ Motor vehicles, trailers and component parts thereof used to transport persons or property *for hire* in interstate or foreign commerce.
- b. ☐ Airplanes, locomotives, railroad cars or watercraft and component parts thereof used in transporting persons or property *for hire*.
- c. ☐ Labor and services rendered to construct, repair, clean, alter or improve *for hire* carrier property.
- d. ☐ Items for use connected with private or common carriers engaged in air, rail or water in interstate or foreign commerce. (***Note: Items consumed in the state are subject to use tax.***)
- e. ☐ Fuel to be consumed outside of Washington by a vessel primarily engaged in foreign commerce.

Vessel Name: _____

Type of Fuel: _____ Quantity: _____

- f. ☐ Watercraft, component parts, labor and services, and/or diesel fuel used in a qualifying commercial deep sea fishing operation.

Registered Vessel Name: _____ Vessel Number: _____

5. Sales to Indians:

- ☐ Tangible personal property or services purchased by Indians or Indian tribes when the goods are delivered to or services provided within Indian country.

6. Other:

- a. ☐ Prescription items (*describe*): _____
- b. ☐ Machinery and equipment (*including labor and services to install*) used directly in generating electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources, anaerobic digestion, technology that converts otherwise lost energy from exhaust, or landfill gas.
- c. ☐ Biodiesel blend or E85 motor fuel construction and purchases of machinery and equipment for retail facilities.
- d. ☐ Biodiesel blend or E85 motor fuel delivery vehicles and service charges on such vehicles.
- e. ☐ Waste vegetable oil used to produce biodiesel fuel for personal use.
- f. ☐ Equipment rental and purchase of services for use in motion picture and video production.
- g. ☐ Objects of art or cultural value purchased by an artistic or cultural organization.
- h. ☐ Animal pharmaceuticals purchased by veterinarians (*describe*): _____
- i. ☐ Computer hardware, peripherals, software and related installation, used by the aerospace industry.
- j. ☐ Computer hardware, peripherals, software and related installation, purchased by publishers and printers.
- k. ☐ City, County, Tribal, or Inter-Tribal Housing Authorities.
- l. ☐ Tangible personal property for use in a noncontiguous state delivered to the usual receiving terminal of the shipper.

Type of Goods Purchased: _____

Point of Delivery: _____ Carrier/Agent: _____

- m. ☐ Gases and chemicals used by a manufacturer or processor for hire in the production of semiconductor materials.
- n. ☐ Hog fuel used to produce electricity, steam, heat, or biofuel.
- o. ☐ Tangible personal property under the weatherization assistance program.
- p. ☐ Trail Grooming Services.
- q. ☐ Honey bees purchased by an eligible apiarist. Apiarist ID #: _____
- r. ☐ Federal credit union purchases.

I, the undersigned buyer, understand that by completing and signing this certificate I am certifying that I qualify for the tax-exempt purchase(s) indicated above. I understand that I will be required to pay sales or use tax on purchases that do not qualify for an exemption. In addition, I understand that false or erroneous use of this certificate will result in liability for unpaid tax with interest and may result in additional penalties.

Type of entity: ☐ Individual ☐ Corporation ☐ Sole Proprietor ☐ Partnership ☐ Other (Explain)

Type of Business: _____ Tax Registration No.: _____

Name of Buyer: _____ Title: _____

Signature of Buyer: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Seller must maintain a copy. Do not send to Department of Revenue.

Each exemption on this form has specific rules (see instructions)

INSTRUCTIONS

Buyers must ensure entitlement to the exemption before using this Certificate. For information regarding exemptions, contact Washington State Department of Revenue Taxpayer Information Center at (360) 705-6705 or 1-800-647-7706 or visit the Department's web site at: dor.wa.gov.

Line 1a applies to the purchase of tangible personal property other than motor vehicles for use outside Washington by a resident of a state, possession, or province of Canada with a sales tax rate of less than three percent (e.g. Oregon, Alaska). Reference: RCW 82.08.0273, WAC 458-20-193 (6)(b) and ETA 3054.2009.

NOTE: *Sales of motor vehicles are not covered by this certificate; please refer to RCW 82.08.0264 and WAC 458-20-177 for certificate and exemption information.*

Line 1b applies to watercraft purchased by a nonresident for use outside Washington when delivery takes place in Washington. The buyer must provide proof of residency (picture ID) and check the applicable box. By checking the box, the buyer certifies that the vessel will leave Washington State waters within forty-five days. Sellers must examine and document the proof of residency provided by the buyer. **Seller must sign the form.** By signing the form, the seller certifies that the seller has examined and listed the buyer's proof of residency. See WAC 458-20-238 for acceptable proof of residency for corporations, partnerships and limited liability companies. Reference: RCW 82.08.0266, RCW 82.08.02665, and WAC 458-20-238.

Line 2a applies to the purchase of electric vehicle batteries or to labor and services rendered in respect to installing, repairing, altering, or improving electric vehicle batteries.

Line 2b applies to the purchase of tangible personal property that will become a component of an electric vehicle infrastructure or to labor and services rendered in respect to installing, constructing, repairing, or improving electric vehicle infrastructure. Reference: 2SHB 1481 (Chapter 459, 2009 Laws.)

Line 3 applies to the purchase of airplanes for use in providing intrastate air transportation by a commuter air carrier and the sale of repair and related services for these airplanes. Commuter air carriers are air carriers holding authority under Title 14, part 298 of the code of federal regulations that carries passengers on at least five round trips per week on at least one route between two or more points. Reference: RCW 82.08.0262 and 82.12.0254.

Line 4a applies to the purchase of motor vehicles, or trailers by a business operating or contracting to operate for the holder of a carrier permit issued by the Interstate Commerce Commission. The exemption also applies to component parts and repairs of such carrier property including labor and services rendered in the course of constructing, repairing, cleaning, altering or improving the same. The buyer must attach a list stating make, model, year, serial number, motor number and ICC permit number. Reference: RCW 82.08.0263 and WAC 458-20-174.

Line 4b applies to the purchase of airplanes, locomotives, railroad cars, or watercraft for use in conducting interstate or foreign commerce by transporting therein or therewith persons or property **for hire**. The exemption also applies to component parts of such carrier property. Reference: RCW 82.08.0262 and WAC 458-20-175.

Line 4c applies to charges for labor and services rendered in the course of constructing, repairing, cleaning, altering or improving carrier property when carrier property is used **for hire**. Reference: RCW 82.08.0262 and WAC 458-20-175.

Line 4d applies to the purchase of durable goods or consumables, other than those mentioned in line 3b, for use in connection with interstate or foreign commerce by such businesses. The goods must be for exclusive use while engaged in transporting persons or property in interstate or foreign commerce. The exemption **does not** apply to charges for labor or services in regard to the installing, repairing, cleaning or altering of such property. Although exempt from retail sales tax, materials are subject to use tax if consumed in Washington. Unregistered businesses must attach a list stating the description and quantity of items that will be consumed in Washington and pay use tax to the seller. Reference: RCW 82.08.0261 and WAC 458-20-175.

Line 4e applies to fuel consumed outside the territorial waters of the United States by vessels used primarily in foreign commerce. Buyers must list the vessel name, type of fuel and quantity. Reference: RCW 82.08.0261 and WAC 458-20-175.

Line 4f applies to the purchase of vessels, component parts, or repairs by persons engaged in commercial deep sea fishing operations outside the territorial waters of the state of Washington. The exemption also applies to the purchase of diesel fuel used in commercial deep or commercial passenger fishing operations when annual gross receipts from the operations are at least five thousand dollars. Reference: RCW 82.08.0262, RCW 82.08.0298, and WAC 458-20-176.

Line 5 applies to the purchase of tangible personal property or services by an Indian or Indian tribe. The goods or services must be delivered to, or performed on the reservation. The purchaser must present a tribal membership card, a treaty fishing card, a certificate of enrollment, or a letter from a tribal official. Sellers must document the buyer's name, dollar amount of purchase, tribal affiliation and reservation where delivery is made. Reference: RCW 82.08.0254 and WAC 458-20-192.

Line 6a applies to the purchase by a medical practitioner, chiropractor, nursing home, or hospital of items to be prescribed and used for the treatment of illness or ailments of human beings. To qualify, certain of these items must be prescribed. Reference: RCW 82.08.0281.

Line 6b applies to the purchase of qualifying machinery and equipment (and charges for labor and services to install) used directly in generating electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources, anaerobic digestion, technology that converts otherwise lost energy from exhaust, or landfill gas as the principal source of power at a facility capable of generating *not less than 1000 watts* of electricity. The exemption also applies to machinery and equipment used directly in a facility generating *not more than ten kilowatts* of electricity using solar energy. Effective July 1, 2009. Portion expires June 30, 2011. Reference: ESSB 6170 Part 1.

Line 6c applies to the purchase of machinery and equipment and the construction of facilities used directly for the retail sale of biodiesel blend or E85 motor fuel. Reference: RCW 82.08.955.

Line 6d applies to the purchase of fuel delivery vehicles and labor and service charges related to such vehicles, provided 75% of the fuel distributed by them is biodiesel blend and E85 motor fuel. Reference: RCW 82.08.955.

Line 6e applies to the purchase of waste vegetable oil from restaurants and food processors to produce biodiesel fuel for personal use. The exemption does not

apply to persons that are engaged in selling biodiesel fuel at wholesale or retail. Reference: RCW 82.08.0205.

Line 6f applies to the rental of production equipment and purchases of production services by motion picture and video production companies. Reference: RCW 82.08.0315 and Motion Picture-Video Production Special Notice, available from the Department.

Line 6g applies to the purchase of objects of art or cultural value and items used in the creation of such objects, or in displaying art objects or presenting artistic or cultural exhibitions or performances by artistic or cultural organizations. Reference: RCW 82.08.031 and WAC 458-20-249.

Line 6h applies to the purchase of animal pharmaceuticals by veterinarians or farmers for the purpose of administering to an animal raised for sale by a farmer. Animal pharmaceuticals must be approved by the United States Food and Drug Administration or the United States Department of Agriculture. Reference: RCW 82.08.880.

Line 6i applies to the purchase of computer hardware, peripherals, and software, and related installation, not otherwise eligible for the M&E exemption, used primarily in development, design, and engineering of aerospace products or in providing aerospace services. Reference: RCW 82.08.975.

Line 6j applies to the purchase of computer hardware, peripherals, digital cameras, software, and related installation not otherwise eligible for the M&E exemption that is used primarily in the printing or publishing of printed materials. The exemption includes repairs and replacement parts. Reference: RCW 82.08.806.

Line 6k applies to all retail purchases of goods and services by City, County, Tribal, or Inter-Tribal Housing Authorities. Reference: RCW 35.82.210.

Line 6l applies to the purchase of goods for use in a state, territory or possession of the United States which is not contiguous to any other state such as Alaska, Hawaii, Guam, and American Samoa. For the exemption to apply, the seller must deliver the goods to the usual receiving terminal of the for-hire carrier selected to transport the goods. Reference: RCW 82.08.0269 and WAC 458-20-193 (6)(c).

Line 6m applies to the purchase of gases and chemicals by a manufacturer or processor for hire in the production of semiconductor materials. Limited to gases and chemicals used to grow the product, deposit or grow permanent or sacrificial layers on the product, to etch or remove material from the product, to anneal the product, to immerse the product, to clean the product, and other uses where the gases and chemicals come into direct contact with the product during the production process, or gases and chemicals used to clean the chambers and other like equipment in which processing takes place. Reference: RCW 82.08.9651.

Line 6n applies to the purchase of hog fuel to produce electricity, steam, heat, or biofuel. Hog fuel is defined as wood waste and other wood residuals including forest derived biomass. Hog fuel does not include firewood or wood pellets. Reference: ESSB 6170 Part III.

Line 6o applies the purchase of tangible personal property used in the weatherization of residences under the weatherization assistance program. The tangible personal property must become a component part of the residence. Reference: RCW 82.08.998.

Line 6p applies to the purchase of trail grooming services by the state of Washington and nonprofit corporations organized under chapter 24.03 RCW. Trail grooming activities include snow compacting, snow redistribution, or snow removal on state or privately-owned trails. Reference: RCW 82.08.0203.

Line 6q applies to all honey bees purchased by an eligible apiarist. An eligible apiarist is a person who: owns or keeps one or more bee colonies; grows, raises, or produces honey bee products for sale at wholesale; and registers their hives/colonies with the WA State Department of Agriculture as required by RCW 15.60.021. Reference: RCW 82.08.0204.

Line 6r applies to the purchase of goods and retail services by federally chartered credit unions. Federal credit unions are exempt from state and local consumer taxes under federal law, such as sales tax, lodging taxes and rental car tax. To be exempt, the federal credit union must pay for goods and services directly, such as by a check written on the federal credit union or a credit card issued to the federal credit union. Sellers should keep a copy of the check or credit card used for payment to substantiate the exempt nature of the sale. Reference: Det. No. 92-239, 17 WTD 32 (1998).

AMENDMENTS TO WSDOT STANDARD SPECIFICATIONS

1 INTRO.AP1

2 INTRODUCTION

3 The following Amendments and Special Provisions shall be used in conjunction with the
4 2016 Standard Specifications for Road, Bridge, and Municipal Construction.

6 AMENDMENTS TO THE STANDARD SPECIFICATIONS

8 The following Amendments to the Standard Specifications are made a part of this contract
9 and supersede any conflicting provisions of the Standard Specifications. For informational
10 purposes, the date following each Amendment title indicates the implementation date of the
11 Amendment or the latest date of revision.

13 Each Amendment contains all current revisions to the applicable section of the Standard
14 Specifications and may include references which do not apply to this particular project.

16 1-01.AP1

17 Section 1-01, Definitions and Terms

18 August 1, 2016

19 1-01.3 Definitions

20 The following new term and definition is inserted after the eighth paragraph:

22 **Cold Weather Protection Period** – A period of time 7 days from the day of concrete
23 placement or the duration of the cure period, whichever is longer.

25 1-02.AP1

26 Section 1-02, Bid Procedures and Conditions

27 June 1, 2017

28 1-02.4(1) General

29 The first sentence of the last paragraph is revised to read:

31 Any prospective Bidder desiring an explanation or interpretation of the Bid Documents,
32 shall request the explanation or interpretation in writing by close of business on the
33 Thursday preceding the bid opening to allow a written reply to reach all prospective
34 Bidders before the submission of their Bids.

36 1-02.6 Preparation of Proposal

37 In this section, "Disadvantaged Business Enterprise" is revised to read "Underutilized
38 Disadvantaged Business Enterprise", and "DBE" is revised to read "UDBE".

40 1-02.9 Delivery of Proposal

41 The last sentence of the third paragraph is revised to read:

43 The Contracting Agency will not open or consider any Proposal when the Proposal or
44 Bid deposit is received after the time specified for receipt of Proposals or received in a
45 location other than that specified for receipt of Proposals unless an emergency or
46 unanticipated event interrupts normal work processes of the Contracting Agency so
47 that Proposals cannot be received.

The following new paragraph is inserted before the last paragraph:

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.12 Public Opening of Proposals

This section is supplemented with the following new paragraph:

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be opened at the time indicated in the call for Bids the time specified for opening of Proposals will be deemed to be extended to the same time of day on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.13 Irregular Proposals

In this section, "Disadvantaged Business Enterprise" is revised to read "Underutilized Disadvantaged Business Enterprise", and "DBE" is revised to read "UDBE".

1-04.AP1

Section 1-04, Scope of the Work June 1, 2017

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

The following new paragraph is inserted before the second to last paragraph:

Whenever reference is made in these Specifications or the Special Provisions to codes, rules, specifications, and standards, the reference shall be construed to mean the code, rule, specification, or standard that is in effect on the Bid advertisement date, unless otherwise stated or as required by law.

1-04.3 Reference Information

This section is supplemented with the following new sentence:

If a document that is provided as reference information contains material also included as a part of the Contract, that portion of the document shall be considered a part of the Contract and not as Reference Information.

1-04.4(2)A General

Item number 4 in the third paragraph is revised to read:

4. Provide substitution for deleted or reduced Condition of Award Work, Apprentice Utilization and Training.

1 1-06.AP1

2 **Section 1-06, Control of Material**

3 **August 7, 2017**

4 This section is supplemented with the following new section and subsections:

5
6 **1-06.6 Recycled Materials**

7 The Contractor shall make their best effort to utilize recycled materials in the
8 construction of the project; the use of recycled concrete aggregate as specified in
9 Section 1-06.6(1)A is a requirement of the Contract.

10
11 The Contractor shall submit a Recycled Material Utilization Plan as a Type 1 Working
12 Drawing within 30 calendar days after the Contract is executed. The plan shall provide
13 the Contractor's anticipated usage of recycled materials for meeting the requirements
14 of these Specifications. The quantity of recycled materials will be provided in tons and
15 as a percentage of the Plan quantity for each material listed in Section 9-03.21(1)E
16 Table on Maximum Allowable Percent (By Weight) of Recycled Material. When a
17 Contract does not include Work that requires the use of a material that is included in
18 the requirements for using materials the Contractor may state in their plan that no
19 recycled materials are proposed for use.

20
21 Prior to Physical Completion the Contractor shall report the quantity of recycled
22 materials that were utilized in the construction of the project for each of the items listed
23 in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete
24 aggregate, recycled glass, steel furnace slag and other recycled materials (e.g.
25 utilization of on-site material and aggregates from concrete returned to the supplier).
26 The Contractor's report shall be provided on DOT Form 350-075 Recycled Materials
27 Reporting.

28
29 **1-06.6(1) Recycling of Aggregate and Concrete Materials**

30 **1-06.6(1)A General**

31 The minimum quantity of recycled concrete aggregate shall be 25 percent of the
32 total quantity of aggregate that is incorporated into the Contract for those items
33 listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of
34 Recycled Material that allow the use of recycled concrete aggregate. The
35 percentage of recycled material incorporated into the project for meeting the
36 required percentage will be calculated in tons based on the quantity of recycled
37 concrete used on the entire Contract and not as individual items.

38
39 If the Contractor's total cost for Work with recycled concrete aggregate is greater
40 than without the Contractor may choose to not use recycled concrete aggregate. If
41 the Recycled Material Utilization Plan does not indicate the minimum usage of
42 recycled concrete aggregate required above, or if completed project quantities do
43 not meet the minimum usage required, the Contractor shall develop the following:

- 44
45 1. A cost estimate for each material listed in Section 9-03.21(1)E that is
46 utilized on the Contract. The cost estimate shall include the following:
47
48 a. The estimated costs for the Work for each material with 25 percent
49 recycled concrete aggregate. The cost estimate shall include for

each material a copy of the price quote from the supplier with the lowest total cost for the Work.

- b. The estimated costs for the Work for each material without recycled concrete aggregate.

The Contractor's cost estimates shall be submitted as an attachment to the Recycled Material Utilization Plan, or with the Reporting form.

1-07.AP1

Section 1-07, Legal Relations and Responsibilities to the Public August 7, 2017

1-07.1 Laws to be Observed

The second paragraph is deleted.

In the second to last sentence of the third paragraph, "WSDOT" is revised to read "Contracting Agency".

1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax

The last three sentences of the first paragraph are deleted and replaced with the following new sentence:

The Contractor (Prime or Subcontractor) shall include sales or use tax on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project, in the unit bid prices.

1-07.3(1) Forest Fire Prevention

This section is supplemented with the following new subsections:

1-07.3(1)A Fire Prevention Control and Countermeasures Plan

The Contractor shall prepare and implement a project-specific fire prevention, control, and countermeasures plan (FPCC Plan) for the duration of the project. The Contractor shall submit a Type 2 Working Drawing no later than the date of the preconstruction conference.

1-07.3(1)A1 FPCC Plan Implementation Requirements

The Contractor's FPCC Plan shall be fully implemented at all times. The Contractor shall update the FPCC Plan throughout project construction so that the plan reflects actual site conditions and practices. The Contractor shall update the FPCC Plan at least annually and maintain a copy of the updated FPCC Plan that is available for inspection on the project site. Revisions to the FPCC Plan and the Industrial Fire Precaution Level (IFPL) shall be discussed at the weekly project safety meetings.

1-07.3(1)A2 FPCC Plan Element Requirements

The FPCC Plan shall include the following:

1. The names, titles, and contact information for the personnel responsible for implementing and updating the plan.

2. The names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a fire.
3. All potential fire causing activities such as welding, cutting of metal, blasting, fueling operations, etc.
4. The location of fire extinguishers, water, shovels, and other firefighting equipment.
5. The response procedures the Contractor shall follow in the event of a fire.

Most of Washington State is covered under the IFPL system which, by law, is managed by the Department of Natural Resources (DNR). It is the Contractor's responsibility to be familiar with the DNR requirements and to verify whether or not IFPL applies to the specific project.

If the Contractor wishes to continue a work activity that is prohibited under an industrial fire precaution level, the Contractor shall obtain a waiver from the DNR and provide a copy to the Engineer prior to continuation of work on the project.

If the IFPL requirements prohibit the Contractor from performing Work the Contractor may be eligible for an unworkable day in accordance with Section 1-08.5.

The Contractor shall comply with the requirements of these provisions at no additional cost to the Contracting Agency.

1-07.8 High-Visibility Apparel

The last paragraph is revised to read:

High-visibility garments shall be labeled as, and in a condition compliant with the ANSI/ISEA 107 (2004 or later version) and shall be used in accordance with manufacturer recommendations.

1-07.8(1) Traffic Control Personnel

In this section, references to "ANSI/ISEA 107-2004" are revised to read "ANSI/ISEA 107".

1-07.8(2) Non-Traffic Control Personnel

In this section, the reference to "ANSI/ISEA 107-2004" is revised to read "ANSI/ISEA 107".

1-07.9(2) Posting Notices

Items 1 and 2 are revised to read:

1. EEOC - P/E-1 (revised 11/09, supplemented 09/15) – **Equal Employment Opportunity IS THE LAW** published by US Department of Labor. Post for projects with federal-aid funding.
2. FHWA 1022 (revised 05/15) – **NOTICE Federal-Aid Project** published by Federal Highway Administration (FHWA). Post for projects with federal-aid funding.

Items 5, 6 and 7 are revised to read:

5. WHD 1420 (revised 02/13) – **Employee Rights and Responsibilities Under The Family And Medical Leave Act** published by US Department of Labor. Post on all projects.
6. WHD 1462 (revised 01/16) – **Employee Polygraph Protection Act** published by US Department of Labor. Post on all projects.
7. F416-081-909 (revised 09/15) – **Job Safety and Health Law** published by Washington State Department of Labor and Industries. Post on all projects.

Items 9 and 10 are revised to read:

9. F700-074-909 (revised 06/13) – **Your Rights as a Worker in Washington State** by Washington State Department of Labor and Industries (L&I). Post on all projects.
10. EMS 9874 (revised 10/15) – **Unemployment Benefits** published by Washington State Employment Security Department. Post on all projects.

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

The second sentence of the first paragraph is deleted.

The first sentence of the second paragraph is revised to read:

The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and other materials defined in Chapter 447 of the WSDOT Environmental Manual M 31-11.

Item number four of the fourth paragraph (up until the colon) is revised to read:

4. **Potential Spill Sources** – Describe each of the following for all potentially hazardous materials brought or generated on-site, including but not limited to materials used for equipment operation, refueling, maintenance, or cleaning:

The first sentence of item 7e of the fourth paragraph is revised to read:

BMP methods and locations where they are used to prevent discharges to ground or water during mixing and transfer of hazardous materials and fuel.

The last paragraph is deleted.

1-08.AP1

Section 1-08, Prosecution and Progress June 1, 2017

1-08.1 Subcontracting

The eighth and ninth paragraphs are revised to read:

On all projects, the Contractor shall certify to the actual amounts paid to all firms that were used as Subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the Contract. This includes all Disadvantaged, Minority, Small, Veteran or Women's Business Enterprise firms. This Certification shall be submitted to the Engineer on a monthly basis each month between Execution of the Contract and Physical Completion of the Contract using the application available at: <https://wsdot.diversitycompliance.com>. A monthly report shall be submitted for every month between Execution of the Contract and Physical Completion regardless of whether payments were made or work occurred.

The Contractor shall comply with the requirements of RCW 39.04.250, 39.76.011, 39.76.020, and 39.76.040, in particular regarding prompt payment to Subcontractors. Whenever the Contractor withholds payment to a Subcontractor for any reason including disputed amounts, the Contractor shall provide notice within 10 calendar days to the Subcontractor with a copy to the Contracting Agency identifying the reason for the withholding and a clear description of what the Subcontractor must do to have the withholding released. Retainage withheld by the Contractor prior to completion of the Subcontractors work is exempt from reporting as a payment withheld and is not included in the withheld amount. The Contracting Agency's copy of the notice to Subcontractor for deferred payments shall be submitted to the Engineer concurrently with notification to the Subcontractor.

1-08.1(1) Prompt Payment, Subcontract Completion and Return of Retainage Withheld

In item number 5 of the first paragraph, "WSDOT" is revised to read "Contracting Agency".

The last sentence in item number 11 of the first paragraph is revised to read:

The Contractor may also require any documentation from the Subcontractor that is required by the subcontract or by the Contract between the Contractor and Contracting Agency or by law such as affidavits of wages paid, and material acceptance certifications to the extent that they relate to the Subcontractor's Work.

Item number 12 of the first paragraph is revised to read:

12. If the Contractor fails to comply with the requirements of the Specification and the Subcontractor's retainage or retainage bond is wrongfully withheld, the Contractor will be subject to the actions described in No. 7 listed above. The Subcontractor may also seek recovery against the Contractor under applicable prompt pay statutes in addition to any other remedies provided for by the subcontract or by law.

1-08.5 Time for Completion

In item 2c of the last paragraph, "Quarterly Reports" is revised to read "Monthly Reports".

1 1-09.AP1

2 **Section 1-09, Measurement and Payment**

3 **April 4, 2016**

4 **1-09.6 Force Account**

5 The second sentence of item number 4 is revised to read:

6
7 A “specialized service” is a work operation that is not typically done by worker
8 classifications as defined by the Washington State Department of Labor and Industries
9 and by the Davis Bacon Act, and therefore bills by invoice for work in road, bridge and
10 municipal construction.
11

12 1-10.AP1

13 **Section 1-10, Temporary Traffic Control**

14 **January 3, 2017**

15 **1-10.1(2) Description**

16 The first paragraph is revised to read:

17
18 The Contractor shall provide flaggers and all other personnel required for labor for
19 traffic control activities that are not otherwise specified as being furnished by the
20 Contracting Agency.
21

22 In the third paragraph, “Project Engineer” is revised to read “Engineer”.

23
24 The following new paragraph is inserted after the third paragraph:

25
26 The Contractor shall keep lanes, on-ramps, and off-ramps, open to traffic at all times
27 except when Work requires closures. Ramps shall not be closed on consecutive
28 interchanges at the same time, unless approved by the Engineer. Lanes and ramps
29 shall be closed for the minimum time required to complete the Work. When paving hot
30 mix asphalt the Contractor may apply water to the pavement to shorten the time
31 required before reopening to traffic.
32

33 **1-10.3(2)C Lane Closure Setup/Takedown**

34 The following new paragraph is inserted before the last paragraph:

35
36 Channelization devices shall not be moved by traffic control personnel across an open
37 lane of traffic. If an existing setup or staging of traffic control devices require crossing
38 an open lane of traffic, the traffic control devices shall be taken down completely and
39 then set up in the new configuration.
40

41 2-02.AP2

42 **Section 2-02, Removal of Structures and Obstructions**

43 **August 7, 2017**

44 **2-02.3(2)A Bridge Removal**

45 This section’s title is revised to read:
46

Bridge and Structure Removal

2-03.AP2

**Section 2-03, Roadway Excavation and Embankment
August 1, 2016**

2-03.3(7)C Contractor-Provided Disposal Site

The second paragraph is revised to read:

The Contractor shall acquire all permits and approvals required for the use of the disposal sites before any waste is hauled off the project. The Contractor shall submit a Type 1 Working Drawing consisting of copies of the permits and approvals for any disposal sites to be used. The cost of any such permits and approvals shall be included in the Bid prices for other Work.

The third paragraph is deleted.

2-06.AP2

**Section 2-06, Subgrade Preparation
January 3, 2017**

2-06.3(2) Subgrade for Pavement

The second sentence in the first paragraph is revised to read:

The Contractor shall compact the Subgrade to a depth of 6 inches to 95 percent of maximum density as determined by the compaction control tests for granular materials.

3-04.AP3

**Section 3-04, Acceptance of Aggregate
January 3, 2017**

3-04.5 Payment

In Table 1, the **Contingent Unit Price Per Ton** value for the item HMA Aggregate is revised to read "\$15.00".

4-04.AP4

**Section 4-04, Ballast and Crush Surfacing
January 3, 2017**

4-04.3(5) Shaping and Compaction

The first sentence is revised to read:

Immediately following spreading and final shaping, each layer of surfacing shall be compacted to at least 95 percent of maximum density determined by the requirements of Section 2-03.3(14)D before the next succeeding layer of surfacing or pavement is placed.

5-01.AP5

**Section 5-01, Cement Concrete Pavement Rehabilitation
January 3, 2017**

In this section, "portland cement" is revised to read "cement".

5-01.2 Materials

In the first paragraph, the following item is inserted after the item "Joint Sealants":

Closed Cell Foam Backer Rod 9-04.2(3)A

5-01.3(1)A Concrete Mix Designs

This section, including title, is revised to read:

5-01.3(1)A Mix Designs

The Contractor shall use either concrete patching materials or cement concrete for the rehabilitation of cement concrete pavement. Concrete patching materials shall be used for spall repair and dowel bar retrofitting and cement concrete shall be used for concrete panel replacement.

5-01.3(1)A1 Concrete Patching Materials

Item number 1 is revised to read:

1. **Materials** – The prepackaged concrete patching material and the aggregate extender shall conform to Section 9-20.

5-01.3(1)A2 Portland Cement Concrete

This section, including title, is revised to read:

5-01.3(1)A2 Cement Concrete for Panel Replacement

Cement concrete for panel replacement shall meet the requirements of Sections 5-05.3(1) and 5-05.3(2) and be air entrained with a design air content of 5.5 percent. Cement concrete for panel replacement may use rapid hardening hydraulic cement meeting the requirements of Section 9-01.2(2). Rapid hardening hydraulic cement will be considered a cementitious material for the purpose of calculating the water/cementitious materials ratio and the minimum cementitious materials requirement.

5-01.3(1)B Equipment

This section's title is revised to read:

Equipment for Panel Replacement

5-01.3(2)B Portland Cement Concrete

This section's title is revised to read:

Cement Concrete for Panel Replacement

This section is supplemented with the following new subsection:

5-01.3(2)B1 Conformance to Mix Design

Acceptance of cement concrete pavement for panel replacement shall be in accordance with Section 5-01.3(2)B. The cement, coarse, and fine aggregate weights shall be within the tolerances of the mix design in accordance with Section 5-05.3(1).

5-01.3(2)B1 Rejection of Concrete

This section is renumbered as follows:

5-01.3(2)B2 Rejection of Concrete

5-01.3(4) Replace Portland Cement Concrete Panel

This section's title is revised to read:

Replace Cement Concrete Panel

5-01.3(8) Sealing Existing Transverse and Longitudinal Joints

This section's title is revised to read:

Sealing Existing Longitudinal and Transverse Joint

The first paragraph is revised to read:

The Contractor shall clean and seal existing longitudinal and transverse joints where shown in the Plans or as marked by the Engineer.

The first sentence of the second paragraph is revised to read:

Old sealant and incompressible material shall be completely removed from the joint to the depth of the new reservoir with a diamond blade saw in accordance with the detail shown in the Standard Plans.

The fifth paragraph is revised to read:

Immediately prior to sealing, the cracks shall be blown clean with dry oil-free compressed air. If shown in the Plans, a backer rod shall be placed at the base of the sawn reservoir. The joints shall be completely dry before the sealing installation may begin. Immediately following the air blowing and backer rod placement, if required, the sealant material shall be installed in conformance to manufacturer's recommendations and in accordance with Section 5-05.3(8)B.

5-01.3(9) Portland Cement Concrete Pavement Grinding

This section's title is revised to read:

Cement Concrete Pavement Grinding

5-01.3(11) Concrete Slurry and Grinding Residue

The last sentence of the first paragraph is revised to read:

Slurry shall not be allowed to drain into an area open to traffic, off of the paved surface, into any drainage structure, water of the state, or wetlands.

The following new sentence is inserted at the end of the second paragraph:

The Contractor shall submit copies of all disposal tickets to the Engineer within 5 calendar days.

5-01.4 Measurement

The fourth paragraph is revised to read:

Sealing existing longitudinal and transverse joint will be measured by the linear foot, measured along the line of the completed joint.

5-01.5 Payment

The Bid item "Sealing Transverse and Longitudinal Joints", per linear foot and the paragraph following Bid item are revised to read:

"Sealing Existing Longitudinal and Transverse Joint", per linear foot.

The unit Contract price per linear foot for "Sealing Existing Longitudinal and Transverse Joint", shall be full payment for all costs to complete the Work as specified, including removing incompressible material, preparing and sealing existing transverse and longitudinal joints where existing transverse and longitudinal joints are cleaned and for all incidentals required to complete the Work as specified.

5-02.AP5

Section 5-02, Bituminous Surface Treatment

April 4, 2016

5-02.3(2) Preparation of Roadway Surface

This section is supplemented with the following new subsection:

5-02.3(2)E Crack Sealing

Where shown in the Plans, seal cracks and joints in the pavement in accordance with Section 5-04.3(4)A1 and the following:

1. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
2. Cracks greater than 1 inch in width – fill with sand slurry.

5-04.AP5

Section 5-04, Hot Mix Asphalt

April 3, 2017

This section (and all subsections) is revised to read:

This Section 5-04 is written in a style which, unless otherwise indicated, shall be interpreted as direction to the Contractor.

5-04.1 Description

This Work consists of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base, in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications.

HMA shall be composed of asphalt binder and mineral materials as required, and may include reclaimed asphalt pavement (RAP) or reclaimed asphalt shingles (RAS), mixed in the proportions specified to provide a homogeneous, stable, and workable mix.

5-04.2 Materials

Provide materials as specified in these sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
Warm Mix Asphalt Additive	9-02.5
Aggregates	9-03.8
Reclaimed Asphalt Pavement (RAP)	9-03.8(3)B
Reclaimed Asphalt Shingles (RAS)	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Joint Sealants	9-04.2
Closed Cell Foam Backer Rod	9-04.2(3)A

5-04.2(1) How to Get an HMA Mix Design on the QPL

Comply with each of the following:

- Develop the mix design in accordance with WSDOT SOP 732.
- Develop a mix design that complies with Sections 9-03.8(2) and 9-03.8(6).
- Develop a mix design no more than 6 months prior to submitting it for QPL evaluation.
- Submit mix designs to the WSDOT State Materials Laboratory in Tumwater, including WSDOT Form 350-042.
- Include representative samples of the materials that are to be used in the HMA production as part of the mix design submittal.
- Identify the brand, type, and percentage of anti-stripping additive in the mix design submittal.
- Include with the mix design submittal a certification from the asphalt binder supplier that the anti-stripping additive is compatible with the crude source and the formulation of asphalt binder proposed for use in the mix design.

- Do not include warm mix asphalt (WMA) additives when developing a mix design or submitting a mix design for QPL evaluation. The use of warm mix asphalt (WMA) additives is not part of the process for obtaining approval for listing a mix design on the QPL. Refer to Section 5-04.2(2)B.

The Contracting Agency's basis for approving, testing, and evaluating HMA mix designs for approval on the QPL is dependent on the contractual basis for acceptance of the HMA mixture, as shown in Table 1.

Table 1

Basis for Contracting Agency Evaluation of HMA Mix Designs for Approval on the QPL		
Contractual Basis for Acceptance of HMA Mixture (see Section 5-04.3(9))	Basis for Contracting Agency Approval of Mix Design for Placement on QPL	Contracting Agency Materials Testing for Evaluation of the Mix Design
Statistical Evaluation	WSDOT Standard Practice QC-8	The Contracting Agency will test the mix design materials for compliance with Sections 9-03.8(2) and 9-03.8(6).
Visual Evaluation	Review of Form 350-042 for compliance with Sections 9-03.8(2) and 9-03.8(6)	The Contracting Agency may elect to test the mix design materials, or evaluate in accordance with WSDOT Standard Practice QC-8, at its sole discretion.

If the Contracting Agency approves the mix design, it will be listed on the QPL for 12 consecutive months. The Contracting Agency may extend the 12 month listing provided the Contractor submits a certification letter to the Qualified Products Engineer verifying that the aggregate source and job mix formula (JMF) gradation, and asphalt binder crude source and formulation have not changed. The Contractor may submit the certification no sooner than three months prior to expiration of the initial 12 month mix design approval. Within 7 calendar days of receipt of the Contractor's certification, the Contracting Agency will update the QPL. The maximum duration for approval of a mix design and listing on the QPL will be 24 months from the date of initial approval or as approved by the Engineer.

5-04.2(1)A Mix Designs Containing RAP and/or RAS

Mix designs are classified by the RAP and/or RAS content as shown in Table 2.

Table 2

Mix Design Classification Based on RAP/RAS Content	
RAP/RAS Classification	RAP/RAS Content¹
Low RAP/No RAS	$0\% \leq \text{RAP}\% \leq 20\%$ and $\text{RAS}\% = 0\%$

High RAP/Any RAS	20% < RAP% ≤ Maximum Allowable RAP ² and/or 0% < RAS% ≤ Maximum Allowable RAS ²
------------------	---

¹Percentages in this table are by total weight of HMA

²See Table 4 to determine the limits on the maximum amount RAP and/or RAS.

5-04.2(1)A1 Low RAP/No RAS – Mix Design Submittals for Placement on QPL

For Low RAP/No RAS mix designs, comply with the following additional requirements:

1. Develop the mix design with or without the inclusion of RAP.
2. The asphalt binder grade shall be the grade indicated in the Bid item name or as otherwise required by the Contract.
3. Submit samples of RAP if used in development of the mix design.
4. Testing RAP or RAS stockpiles is not required for obtaining approval for placing these mix designs on the QPL.

5-04.2(1)A2 High RAP/Any RAS - Mix Design Submittals for Placement on QPL

For High RAP/Any RAS mix designs, comply with the following additional requirements:

1. For mix designs with any RAS, test the RAS stockpile (and RAP stockpile if any RAP is in the mix design) in accordance with Table 3.
2. For High RAP mix designs with no RAS, test the RAP stockpile in accordance with Table 3.
3. For mix designs with High RAP/Any RAS, construct a single stockpile for RAP and a single stockpile for RAS and isolate (sequester) these stockpiles from further stockpiling before beginning development of the mix design. Test the RAP and RAS during stockpile construction as required by item 1 and 2 above. Use the test data in developing the mix design, and report the test data to the Contracting Agency on WSDOT Form 350-042 as part of the mix design submittal for approval on the QPL. Account for the reduction in asphalt binder contributed from RAS in accordance with AASHTO PP 78. Do not add to these stockpiles after starting the mix design process.

Table 3

Test Frequency of RAP/RAS During RAP/RAS Stockpile Construction For Approving a High RAP/Any RAS Mix Design for Placement on the QPL		
Test Frequency ¹	Test for	Test Method
<ul style="list-style-type: none"> • 1/1000 tons of RAP (minimum of 10 per mix design) and • 1/100 tons of RAS (minimum of 10 per mix design) 	Asphalt Binder Content and Sieve Analysis of Fine and Coarse Aggregate	FOP for AASHTO T 308 and FOP for WAQTC T 27/T 11

¹“tons”, in this table, refers to tons of the reclaimed material before being incorporated into HMA.

4. Limit the amount of RAP and/or RAS used in a High RAP/Any RAS mix design by the amount of binder contributed by the RAP and/or RAS, in accordance with Table 4.

Table 4

Maximum Amount of RAP and/or RAS in HMA Mixture	
Maximum Amount of Binder Contributed from:	
RAP	RAS
40% ¹ minus contribution of binder from RAS	20% ²

¹ Calculated as the weight of asphalt binder contributed from the RAP as a percentage of the total weight of asphalt binder in the mixture.

² Calculated as the weight of asphalt binder contributed from the RAS as a percentage of the total weight of asphalt binder in the mixture.

5. Develop the mix design including RAP, RAS, recycling agent, and new binder.
6. Extract, recover, and test the asphalt residue from the RAP and RAS stockpiles to determine the percent of recycling agent and/or grade of new asphalt binder needed to meet but not exceed the performance grade (PG) of asphalt binder required by the Contract.
 - a. Perform the asphalt extraction in accordance with AASHTO T 164 or ASTM D 2172 using reagent grade solvent.
 - b. Perform the asphalt recovery in accordance with AASHTO R 59 or ASTM D 1856.
 - c. Test the recovered asphalt residue in accordance with AASHTO R 29 to determine the asphalt binder grade in accordance with Section 9-02.1(4).

- d. After determining the recovered asphalt binder grade, determine the percent of recycling agent and/or grade of new asphalt binder in accordance with ASTM D 4887.
 - e. Test the final blend of recycling agent, binder recovered from the RAP and RAS, and new asphalt binder in accordance with AASHTO R 29. The final blended binder shall meet but not exceed the performance grade of asphalt binder required by the Contract and comply with the requirements of Section 9-02.1(4).
7. Include the following test data with the mix design submittal:
 - a. All test data from RAP and RAS stockpile construction.
 - b. All data from testing the recovered and blended asphalt binder.
 8. Include representative samples of the following with the mix design submittal:
 - a. RAP and RAS.
 - b. 150 grams of recovered asphalt residue from the RAP and RAS that are to be used in the HMA production.

5-04.2(1)B Commercial HMA - Mix Design Submittal for Placement on QPL

For HMA used in the Bid item Commercial HMA, in addition to the requirements of 5-04.2(1) identify the following in the submittal:

1. Commercial HMA
2. Class of HMA
3. Performance grade of binder
4. Equivalent Single Axle Load (ESAL)

The Contracting Agency may elect to approve Commercial HMA mix designs without evaluation.

5-04.2(1)C Mix Design Resubmittal for QPL Approval

Develop a new mix design and resubmit for approval on the QPL when any of the following changes occur. When these occur, discontinue using the mix design until after it is reapproved on the QPL.

1. Change in the source of crude petroleum used in the asphalt binder.
2. Changes in the asphalt binder refining process.

3. Changes in additives or modifiers in the asphalt binder.
4. Changes in the anti-strip additive, brand, type or quantity.
5. Changes to the source of material for aggregate.
6. Changes to the job mix formula that exceed the amounts as described in item 2 of Section 9-03.8(7), unless otherwise approved by the Engineer.
7. Changes in the percentage of material from a stockpile, when such changes exceed 5% of the total aggregate weight.
 - a. For Low RAP/No RAS mix designs developed without RAP, changes to the percentage of material from a stockpile will be calculated based on the total aggregate weight not including the weight of RAP.
 - b. For Low RAP/No RAS mix designs developed with RAP, changes to the percentage of material from a stockpile will be calculated based on the total aggregate weight including the weight of RAP.
 - c. For High RAP/Any RAS mix designs, changes in the percentage of material from a stockpile will be based on total aggregate weight including the weight of RAP (and/or RAS when included in the mixture).

Prior to making any change in the amount of RAS in an approved mix design, notify the Engineer for determination of whether a new mix design is required, and obtain the Engineer's approval prior to implementing such changes.

5-04.2(2) Mix Design – Obtaining Project Approval

Use only mix designs listed on the Qualified Products List (QPL). Submit WSDOT Form 350-041 to the Engineer to request approval to use a mix design from the QPL. Changes to the job mix formula (JMF) that have been approved on other contracts may be included. The Engineer may reject a request to use a mix design if production of HMA using that mix design on any contract is not in compliance with Section 5-04.3(11)D, E, F, and G for mixture or compaction.

5-04.2(2)A Changes to the Job Mix Formula

The approved mix design obtained from the QPL will be considered the starting job mix formula (JMF) and shall be used as the initial basis for acceptance of HMA mixture, as detailed in Section 5-04.3(9).

During production the Contractor may request to adjust the JMF. Any adjustments to the JMF will require approval of the Engineer and shall be made in accordance with item 2 of Section 9-03.8(7). After approval by the Engineer, such adjusted JMF's shall constitute the basis for acceptance of the HMA mixture.

5-04.2(2)B Using Warm Mix Asphalt Processes

The Contractor may, at the Contractor's discretion, elect to use warm mix asphalt (WMA) processes for producing HMA. WMA processes include organic additives, chemical additives, and foaming. The use of WMA is subject to the following:

- Do not use WMA processes in the production of High RAP/Any RAS mixtures.
- Before using WMA processes, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed WMA process.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year, without written concurrence from the Engineer.

Do not place HMA on any wet surface, or when the average surface temperatures are less than those specified in Table 5, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Table 5

Minimum Surface Temperature for Paving		
Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55°F	45°F
0.10 to 0.20	45°F	35°F
More than 0.20	35°F	35°F

5-04.3(2) Paving Under Traffic

These requirements apply when the Roadway being paved is open to traffic.

In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

During paving operations, maintain temporary pavement markings throughout the project. Install temporary pavement markings on the Roadway prior to opening to traffic. Temporary pavement markings shall comply with Section 8-23.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Equip mixing plants as follows.

1. Use tanks for storage and preparation of asphalt binder which:

- Heat the contents by means that do not allow flame to contact the contents or the tank, such as by steam or electricity.

- Heat and hold contents at the required temperatures.
- Continuously circulate contents to provide uniform temperature and consistency during the operating period.
- Provide an asphalt binder sampling valve, in either the storage tank or the supply line to the mixer.

2. Provide thermometric equipment:

- In the asphalt binder feed line near the charging valve at the mixer unit, capable of detecting temperature ranges expected in the HMA and in a location convenient and safe for access by Inspectors.
- At the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates, and situated in full view of the plant operator.

3. When heating asphalt binder:

- Do not exceed the maximum temperature of the asphalt binder recommended by the asphalt binder supplier.
- Avoid local variations in heating.
- Provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F.

4. Provide a mechanical sampler for sampling mineral materials that:

- Meets the crushing or screening requirements of Section 1-05.6.

5. Provide HMA sampling equipment that complies with WSDOT T168.

- Use a mechanical sampling device installed between the discharge of the silo and the truck transport, approved by the Engineer, or
- Platforms or devices to enable sampling from the truck transport without entering the truck transport for sampling HMA.

6. Provide for setup and operation of the Contracting Agency's field testing:

- As required in Section 3-01.2(2).

7. Provide screens or a lump breaker:

- When using any RAP or any RAS, to eliminate oversize RAP or RAS particles from entering the pug mill or drum mixer.

5-04.3(3)B Hauling Equipment

Provide HMA hauling equipment with tight, clean, smooth metal beds and a cover of canvas or other suitable material of sufficient size to protect the HMA from adverse weather. Securely attach the cover to protect the HMA whenever the weather conditions during the work shift include, or are forecast to include, precipitation or an air temperature less than 45°F.

Prevent HMA from adhering to the hauling equipment. Spray metal beds with an environmentally benign release agent. Drain excess release agent prior to filling hauling equipment with HMA. Do not use petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA. For hopper trucks, operate the conveyer during the process of applying the release agent.

5-04.3(3)C Pavers

Use self-contained, power-propelled pavers provided with an internally heated vibratory screed that is capable of spreading and finishing courses of HMA in lane widths required by the paving section shown in the Plans.

When requested by the Engineer, provide written certification that the paver is equipped with the most current equipment available from the manufacturer for the prevention of segregation of the coarse aggregate particles. The certification shall list the make, model, and year of the paver and any equipment that has been retrofitted to the paver.

Operate the screed in accordance with the manufacturer's recommendations and in a manner to produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. Provide a copy of the manufacturer's recommendations upon request by the Contracting Agency. Extensions to the screed will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. In the Travelled Way do not use extensions without both augers and an internally heated vibratory screed.

Equip the paver with automatic screed controls and sensors for either or both sides of the paver. The controls shall be capable of sensing grade from an outside reference line, sensing the transverse slope of the screed, and providing automatic signals that operate the screed to maintain the desired grade and transverse slope. Construct the sensor so it will operate from a reference line or a mat referencing device. The transverse slope controller shall be capable of maintaining the screed at the desired slope within plus or minus 0.1 percent.

Equip the paver with automatic feeder controls, properly adjusted to maintain a uniform depth of material ahead of the screed.

Manual operation of the screed is permitted in the construction of irregularly shaped and minor areas. These areas include, but are not limited to, gore areas, road approaches, tapers and left-turn channelizations.

When specified in the Contract, provide reference lines for vertical control. Place reference lines on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line is permitted. Automatically control the grade and slope of intermediate lanes by means of reference lines or a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

Furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6.

5-04.3(3)D Material Transfer Device or Material Transfer Vehicle

Use a material transfer device (MTD) or material transfer vehicle (MTV) to deliver the HMA from the hauling equipment to the paving machine for any lift in (or partially in) the top 0.30 feet of the pavement section used in traffic lanes. However, an MTD/V is not required for HMA placed in irregularly shaped and minor areas such as tapers and turn lanes, or for HMA mixture that is accepted by Visual Evaluation. At the Contractor's request the Engineer may approve paving without an MTD/V; the Engineer will determine if an equitable adjustment in cost or time is due. If a windrow elevator is used, the Engineer may limit the length of the windrow in urban areas or through intersections.

To be approved for use, an MTV:

1. Shall be a self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not connected to the hauling vehicle or paver.
3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.

- 1
2 5. Shall mix the HMA sufficiently to obtain a uniform temperature
3 throughout the mixture.
4

5 To be approved for use, an MTD:
6

- 7 1. Shall be positively connected to the paver.
8
9 2. May accept HMA directly from the haul vehicle or pick up HMA from
10 a windrow.
11
12 3. Shall mix the HMA after delivery by the hauling equipment and prior
13 to placement into the paving machine.
14
15 4. Shall mix the HMA sufficiently to obtain a uniform temperature
16 throughout the mixture.
17

18 **5-04.3(3)E Rollers**

19 Operate rollers in accordance with the manufacturer's recommendations.
20 When requested by the Engineer, provide a Type 1 Working Drawing of the
21 manufacturer's recommendation for the use of any roller planned for use on
22 the project. Do not use rollers that crush aggregate, produce pickup or
23 washboard, unevenly compact the surface, displace the mix, or produce other
24 undesirable results.
25

26 **5-04.3(4) Preparation of Existing Paved Surfaces**

27 Before constructing HMA on an existing paved surface, the entire surface of the
28 pavement shall be clean. Entirely remove all fatty asphalt patches, grease
29 drippings, and other deleterious substances from the existing pavement to the
30 satisfaction of the Engineer. Thoroughly clean all pavements or bituminous
31 surfaces of dust, soil, pavement grindings, and other foreign matter. Thoroughly
32 remove any cleaning or solvent type liquids used to clean equipment spilled on the
33 pavement before paving proceeds. Fill all holes and small depressions with an
34 appropriate class of HMA. Level and thoroughly compact the surface of the
35 patched area.
36

37 Apply a uniform coat of asphalt (tack coat) to all paved surfaces on which any
38 course of HMA is to be placed or abutted. Apply tack coat to cover the cleaned
39 existing pavement with a thin film of residual asphalt free of streaks and bare
40 spots. Apply a heavy application of tack coat to all joints. For Roadways open to
41 traffic, limit the application of tack coat to surfaces that will be paved during the
42 same working shift. Equip the spreading equipment with a thermometer to indicate
43 the temperature of the tack coat material.
44

45 Do not operate equipment on tacked surfaces until the tack has broken and cured.
46 Repair tack coat damaged by the Contractor's operation, prior to placement of the
47 HMA.
48

49 Unless otherwise approved by the Engineer, use cationic emulsified asphalt CSS-
50 1, CSS-1h, STE-1, or Performance Graded (PG) asphalt for tack coat. The CSS-1
51 and CSS-1h may be diluted with water at a rate not to exceed one part water to

one part emulsified asphalt. Do not allow the tack coat material to exceed the maximum temperature recommended by the asphalt supplier.

When shown in the Plans, prelevel uneven or broken surfaces over which HMA is to be placed by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

5-04.3(4)A Crack Sealing

5-04.3(4)A1 General

When the Proposal includes a pay item for crack sealing, seal all cracks ¼ inch in width and greater.

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

Sand Slurry: For cracks that are to be filled with sand slurry, thoroughly mix the components and pour the mixture into the cracks until full. Add additional CSS-1 cationic emulsified asphalt to the sand slurry as needed for workability to ensure the mixture will completely fill the crack. Strike off the sand slurry flush with the existing pavement surface and allow the mixture to cure. Top off cracks that were not completely filled with additional sand slurry. Do not place the HMA overlay until the slurry has fully cured.

Hot Poured Sealant: For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's recommendations. Furnish a Type 1 Working Drawing of the manufacturer's product information and recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures, allowable storage time and temperatures after initial heating, allowable reheating criteria, and application temperature range. Confine hot poured sealant material within the crack. Clean any overflow of sealant from the pavement surface. If, in the opinion of the Engineer, the Contractor's method of sealing the cracks with hot poured sealant results in an excessive amount of material on the pavement surface, stop and correct the operation to eliminate the excess material.

5-04.3(4)A2 Crack Sealing Areas Prior to Paving

In areas where HMA will be placed, use sand slurry to fill the cracks.

5-04.3(4)A3 Crack Sealing Areas Not to be Paved

In areas where HMA will not be placed, fill the cracks as follows:

1. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
2. Cracks greater than 1 inch in width – fill with sand slurry.

1
2 **5-04.3(4)B Soil Residual Herbicide**

3 Where shown in the Plans, apply one application of an approved soil residual
4 herbicide. Comply with Section 8-02.3(3)B. Complete paving within 48 hours
5 of applying the herbicide.
6

7 Use herbicide registered with the Washington State Department of Agriculture
8 for use under pavement. Before use, obtain the Engineer's approval of the
9 herbicide and the proposed rate of application. Include the following
10 information in the request for approval of the material:
11

- 12 1. Brand Name of the Material,
- 13
- 14 2. Manufacturer,
- 15
- 16 3. Environmental Protection Agency (EPA) Registration Number,
- 17
- 18 4. Material Safety Data Sheet, and
- 19
- 20 5. Proposed Rate of Application.
21

22 **5-04.3(4)C Pavement Repair**

23 Excavate pavement repair areas and backfill these with HMA in accordance
24 with the details shown in the Plans and as staked. Conduct the excavation
25 operations in a manner that will protect the pavement that is to remain. Repair
26 pavement not designated to be removed that is damaged as a result of the
27 Contractor's operations to the satisfaction of the Engineer at no cost to the
28 Contracting Agency. Excavate only within one lane at a time unless approved
29 otherwise by the Engineer. Do not excavate more area than can be
30 completely backfilled and compacted during the same shift.
31

32 Unless otherwise shown in the Plans or determined by the Engineer, excavate
33 to a depth of 1.0 feet. The Engineer will make the final determination of the
34 excavation depth required.
35

36 The minimum width of any pavement repair area shall be 40 inches unless
37 shown otherwise in the Plans. Before any excavation, sawcut the perimeter of
38 the pavement area to be removed unless the pavement in the pavement
39 repair area is to be removed by a pavement grinder.
40

41 Excavated materials shall be the property of the Contractor and shall be
42 disposed of in a Contractor-provided site off the Right of Way or used in
43 accordance with Sections 2-02.3(3) or 9-03.21.
44

45 Apply a heavy application of tack coat to all surfaces of existing pavement in
46 the pavement repair area, in accordance with Section 5-04.3(4).
47

48 Place the HMA backfill in lifts not to exceed 0.35-foot compacted depth.
49 Thoroughly compact each lift by a mechanical tamper or a roller.
50

5-04.3(5) Producing/Stockpiling Aggregates, RAP, & RAS

Produce aggregate in compliance with Section 3-01. Comply with Section 3-02 for preparing stockpile sites, stockpiling, and removing from stockpile each of the following: aggregates, RAP, and RAS. Provide sufficient storage space for each size of aggregate, RAP and RAS. Fine aggregate or RAP may be uniformly blended with the RAS as a method of preventing the agglomeration of RAS particles. Remove the aggregates, RAP and RAS from stockpile(s) in a manner that ensures minimal segregation when being moved to the HMA plant for processing into the final mixture. Keep different aggregate sizes separated until they have been delivered to the HMA plant.

5-04.3(5)A Stockpiling RAP or RAS for High RAP/Any RAS Mixes

Do not place any RAP or RAS into a stockpile which has been sequestered for a High RAP/Any RAS mix design. Do not incorporate any RAP or RAS into a High RAP/Any RAS mixture from any source other than the stockpile which was sequestered for approval of that particular High RAP/Any RAS mix design.

RAP that is used in a Low RAP/No RAS mix is not required to come from a sequestered stockpile.

5-04.3(6) Mixing

The asphalt supplier shall introduce anti-stripping additive, in the amount designated on the QPL for the mix design, into the asphalt binder prior to shipment to the asphalt mixing plant.

Anti-strip is not required for temporary work that will be removed prior to Physical Completion.

Use asphalt binder of the grade, and from the supplier, in the approved mix design.

Prior to introducing reclaimed materials into the asphalt plant, remove wire, nails, and other foreign material. Discontinue use of the reclaimed material if the Engineer, in their sole discretion, determines the wire, nails, or other foreign material to be excessive.

Size RAP and RAS prior to entering the mixer to provide uniform and thoroughly mixed HMA. If there is evidence of the RAP or RAS not breaking down during the heating and mixing of the HMA, immediately suspend the use of the RAP or RAS until changes have been approved by the Engineer.

After the required amount of mineral materials, RAP, RAS, new asphalt binder and recycling agent have been introduced into the mixer, mix the HMA until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, RAP and RAS is ensured.

Upon discharge from the mixer, ensure that the temperature of the HMA does not exceed the optimum mixing temperature shown on the approved Mix Design Report by more than 25°F, or as approved by the Engineer. When a WMA additive is included in the manufacture of HMA, do not heat the WMA

additive (at any stage of production including in binder storage tanks) to a temperature higher than the maximum recommended by the manufacturer of the WMA additive.

A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, reduce the moisture content.

During the daily operation, HMA may be temporarily held in approved storage facilities. Do not incorporate HMA into the Work that has been held for more than 24 hours after mixing. Provide an easily readable, low bin-level indicator on the storage facility that indicates the amount of material in storage. Waste the HMA in storage when the top level of HMA drops below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift. Dispose of rejected or waste HMA at no expense to the Contracting Agency.

5-04.3(7) Spreading and Finishing

Do not exceed the maximum nominal compacted depth of any layer in any course, as shown in Table 6, unless approved by the Engineer:

Table 6

Maximum Nominal Compacted Depth of Any Layer		
HMA Class	Wearing Course	Other than Wearing Course
1 inch	0.35 feet	0.35 feet
$\frac{3}{4}$ and $\frac{1}{2}$ inch	0.30 feet	0.35 feet
$\frac{3}{8}$ inch	0.15 feet	0.15 feet

Use HMA pavers complying with Section 5-04.3(3) to distribute the mix. On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, place the material produced for each JMF with separate spreading and compacting equipment. Do not intermingle HMA produced from more than one JMF. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

Sample aggregate for meeting the requirements of Section 3-04 prior to being incorporated into HMA. (The acceptance data generated for the Section 3-04 acceptance analysis will not be commingled with the acceptance data generated for the Section 5-04.3(9) acceptance analysis.) Aggregate acceptance samples shall be taken as described in Section 3-04. Aggregate acceptance testing will be performed by the Contracting Agency. Aggregate contributed from RAP and/or RAS will not be evaluated under Section 3-04.

For aggregate that will be used in HMA mixture which will be accepted by Statistical Evaluation, the Contracting Agency's acceptance of the aggregate will be based on:

1. Samples taken prior to mixing with asphalt binder, RAP, or RAS;
2. Testing for the materials properties of fracture, uncompacted void content, and sand equivalent;
3. Evaluation by the Contracting Agency in accordance with Section 3-04, including price adjustments as described therein.

For aggregate that will be used in HMA which will be accepted by Visual Evaluation, evaluation in accordance with items 1, 2, and 3 above is at the discretion of the Engineer.

5-04.3(9) HMA Mixture Acceptance

The Contracting Agency will evaluate HMA mixture for acceptance by one of two methods as determined from the criteria in Table 7.

Table 7

Basis of Acceptance for HMA Mixture		
	Visual Evaluation	Statistical Evaluation
Criteria for Selecting the Evaluation Method	<ul style="list-style-type: none"> • Commercial HMA placed at any location • Any HMA placed in: <ul style="list-style-type: none"> ○ sidewalks ○ road approaches ○ ditches ○ slopes ○ paths ○ trails ○ gores ○ prelevel ○ temporary pavement¹ ○ pavement repair • Other nonstructural applications of HMA as approved by the Engineer 	<ul style="list-style-type: none"> • All HMA mixture other than that accepted by Visual Evaluation

¹ Temporary pavement is HMA that will be removed before Physical Completion of the Contract.

5-04.3(9)A Test Sections

This Section applies to HMA mixture accepted by Statistical Evaluation. A test section is not allowed for HMA accepted by Visual Evaluation.

The purpose of a test section is to determine whether or not the Contractor's mix design and production processes will produce HMA meeting the Contract requirements related to mixture. Construct HMA mixture test sections at the beginning of paving, using at least 600 tons and a maximum of 1,000 tons or as specified by the Engineer. Each test section shall be constructed in one continuous operation.

5-04.3(9)A1 Test Section – When Required, When to Stop

Use Tables 8 and 9 to determine when a test section is required, optional, or not allowed, and to determine when performing test sections may end. Each mix design will be evaluated independently for the test section requirements. If more than one test section is required, each test section shall be evaluated separately by the criteria in table 8 and 9.

Table 8

Criteria for Conducting and Evaluating HMA Mixture Test Sections (For HMA Mixture Accepted by Statistical Evaluation)		
	High RAP/Any RAS	Low RAP/No RAS
Is Mixture Test Section Optional or Mandatory?	Mandatory ¹	At Contractor's Option
Waiting period after paving the test section.	4 calendar days ²	4 calendar days ²
What Must Happen to Stop Performing Test Sections?	Meet "Results Required to Stop Performing Test Sections" in Table 9 for High RAP/Any RAS.	Provide samples and respond to WSDOT test results required by Table 9 for Low RAP/No RAS.

¹If a mix design has produced an acceptable test section on a previous contract (paved in the same calendar year, from the same plant, using the same JMF) the test section may be waived if approved by the Engineer.

²This is to provide time needed by the Contracting Agency to complete testing and the Contractor to adjust the mixture in response to those test results. Paving may resume when this is done.

Table 9

Results Required to Stop Performing HMA Mixture Test Sections¹ (For HMA Mixture Accepted by Statistical Evaluation)		
Test Property	Type of HMA	
	High RAP/Any RAS	Low RAP/No RAS

Gradation	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4 ²	None ⁴
Asphalt Binder	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4 ²	None ⁴
V_a	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4 ²	None ⁴
Hamburg Wheel Track Indirect Tensile Strength	Meet requirements of Section 9-03.8(2). ³	These tests will not be done as part of Test Section.
Aggregates Sand Equivalent Uncompacted Void Content Fracture	Nonstatistical Evaluation in accordance with the requirements of Section 3-04 ³	None ³

¹In addition to the requirements of this table, acceptance of the HMA mixture used in each test section is subject to the acceptance criteria and price adjustments for Statistical Evaluation (see Table 9a).

²Divide the test section lot into three sublots, approximately equal in size. Take one sample from each subplot, and test each sample for the property in the first column.

³Take one sample for each test section lot. Test the sample for the properties in the first column.

⁴Divide the test section lot into three sublots, approximately equal in size. Take one sample from each subplot, and test each sample for the property in the first column. There are no criteria for discontinuing test sections for these mixes; however, the contractor must comply with Section 5-04.3(11)F before resuming paving.

5-04.3(9)A2 Test Section – Evaluating the HMA Mixture in a Test Section

The Engineer will evaluate the HMA mixture in each test section for rejection, acceptance, and price adjustments based on the criteria in Table 9a using the data generated from the testing required by Table 9. Each test section shall be considered a separate lot.

Table 9a

Acceptance Criteria for HMA Mixture Placed in a Test Section (For HMA Mixture Accepted by Statistical Evaluation)	
Test Property	Type of HMA

	High RAP/Any RAS	Low RAP/No RAS
Gradation Asphalt Binder V_a	Statistical Evaluation	Statistical Evaluation
Hamburg Wheel Track Indirect Tensile Strength	Pass/Fail for the requirements of Section 9-03.8(2) ¹	N/A
HMA Aggregate Sand Equivalent Uncompacted Void Content	Nonstatistical Evaluation in accordance with the requirements of Section 3-04	Nonstatistical Evaluation in accordance with the requirements of Section 3-04

¹Failure to meet the specifications for Hamburg and/or IDT will cause the mixture in the test section to be rejected. Refer to Section 5-04.3(11).

5-04.3(9)B Mixture Acceptance – Statistical Evaluation

5-04.3(9)B1 Mixture Statistical Evaluation – Lots and Sublots

HMA mixture which is accepted by Statistical Evaluation will be evaluated by the Contracting Agency dividing that HMA tonnage into mixture lots, and each mixture lot will be evaluated using stratified random sampling by the Contracting Agency sub-dividing each mixture lot into mixture sublots. All mixture in a mixture lot shall be of the same mix design. The mixture sublots will be numbered in the order in which the mixture (of a particular mix design) is paved.

Each mixture lot comprises a maximum of 15 mixture sublots, except:

- The final mixture lot of each mix design on the Contract will comprise a maximum of 25 sublots.
- A mixture lot for a test section will consist of three sublots.

Each mixture subplot shall be approximately uniform in size with the maximum mixture subplot size as specified in Table 10. The quantity of material represented by the final mixture subplot of the project, for each mix design on the project, may be increased to a maximum of two times the mixture subplot quantity calculated.

Table 10

Maximum HMA Mixture Sublot Size For HMA Accepted by Statistical Evaluation	
HMA Original Plan Quantity (tons) ¹	Maximum Sublot Size (tons) ²
< 20,000	1,000
20,000 to 30,000	1,500
>30,000	2,000

¹ "Plan quantity" means the plan quantity of all HMA of the same class and binder grade which is accepted by Statistical Evaluation.

² The maximum subplot size for each combination of HMA class and binder grade shall be calculated separately.

- For a mixture lot in progress with a mixture CPF less than 0.75, a new mixture lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.
- If, before completing a mixture lot, the Contractor requests a change to the JMF which is approved by the Engineer, the mixture produced in that lot after the approved change will be evaluated on the basis of the changed JMF, and the mixture produced in that lot before the approved change will be evaluated on the basis of the unchanged JMF; however, the mixture before and after the change will be evaluated in the same lot. Acceptance of subsequent mixture lots will be evaluated on the basis of the changed JMF.

5-04.3(9)B2 Mixture Statistical Evaluation – Sampling

Comply with Section 1-06.2(1).

Samples of HMA mixture which is accepted by Statistical Evaluation will be randomly selected from within each subplot, with one sample per subplot. The Engineer will determine the random sample location using WSDOT Test Method T 716. The Contractor shall obtain the sample when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with FOP for WAQTC T 168.

5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing

Comply with Section 1-06.2(1).

The Contracting Agency will test the mixture sample from each subplot (including sublots in a test section) for the properties shown in Table 11.

Table 11

Testing Required for each HMA Mixture Sublot		
Test	Procedure	Performed by
V _a	WSDOT SOP 731	Engineer
Asphalt Binder Content	FOP for AASHTO T 308	Engineer

Gradation: Percent Passing 1½", 1", ¾", ½", ⅜", No. 4, No. 8, No. 200	FOP for WAQTC T 27/T 11	Engineer
--	-------------------------------	----------

The mixture samples and tests taken for the purpose of determining acceptance of the test section (as described in Section 5-04.3(9)A) shall also be used as the test results for acceptance of the mixture described in 5-04.3(9)B3, 5-04.3(9)B4, 5-04.3(9)B5, and 5-04.3(9)B6.

5-04.3(9)B4 Mixture Statistical Evaluation – Pay Factors

Comply with Section 1-06.2(2).

The Contracting Agency will determine a pay factor (PF_i) for each of the properties in Table 11, for each mixture lot, using the quality level analysis in Section 1-06.2(2)D. For Gradation, a pay factor will be calculated for each of the sieve sizes listed in Table 11 which is equal to or smaller than the maximum allowable aggregate size (100 percent passing sieve) of the HMA mixture. The USL and LSL shall be calculated using the Job Mix Formula Tolerances (for Statistical Evaluation) in Section 9-03.8(7).

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(9)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)

Comply with Section 1-06.2(2).

In accordance with Section 1-06.2(2)D4, the Contracting Agency will determine a Composite Pay Factor (CPF) for each mixture lot from the pay factors calculated in Section 5-04.3(9)B4, using the price adjustment factors in Table 12. Unless otherwise specified, the maximum CPF for HMA mixture shall be 1.05.

Table 12

HMA Mixture Price Adjustment Factors	
Constituent	Factor "f"
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (V _a)	20

5-04.3(9)B6 Mixture Statistical Evaluation – Price Adjustments

For each HMA mixture lot, a Job Mix Compliance Price Adjustment will be determined and applied, as follows:

$$\text{JMCPA} = [0.60 \times (\text{CPF} - 1.00)] \times Q \times \text{UP}$$

Where

JMCPA = Job Mix Compliance Price Adjustment for a given lot of mixture (\$)

CPF = Composite Pay factor for a given lot of mixture (maximum is 1.05)

Q = Quantity in a given lot of mixture (tons)

UP = Unit price of the HMA in a given lot of mixture (\$/ton)

5-04.3(9)B7 Mixture Statistical Evaluation – Retests

The Contractor may request that a mixture subplot be retested. To request a retest, submit a written request to the Contracting Agency within 7 calendar days after the specific test results have been posted to the website or emailed to the Contractor, whichever occurs first. The Contracting Agency will send a split of the original acceptance sample for testing by the Contracting Agency to either the Region Materials Laboratory or the State Materials Laboratory as determined by the Engineer. The Contracting Agency will not test the split of the sample with the same equipment or by the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and V_a , and the results of the retest will be used for the acceptance of the HMA mixture in place of the original mixture subplot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$250 per sample.

5-04.3(9)C Vacant

5-04.3(9)D Mixture Acceptance – Visual Evaluation

Visual Evaluation of HMA mixture will be by visual inspection by the Engineer or, in the sole discretion of the Engineer, the Engineer may sample and test the mixture.

5-04.3(9)D1 Mixture Visual Evaluation – Lots, Sampling, Testing, Price Adjustments

HMA mixture accepted by Visual Evaluation will not be broken into lots unless the Engineer determines that testing is required. When that occurs, the Engineer will identify the limits of the questionable HMA mixture, and that questionable HMA mixture shall constitute a lot. Then, the Contractor will take samples from the truck, or the Engineer will take core samples from the roadway at a minimum of three random locations from within the lot, selected in accordance with WSDOT Test Method T 716, taken from the roadway in accordance with WSDOT SOP 734, and tested in accordance with WSDOT SOP 737. The Engineer will test one of the samples for all constituents in Section 5-04.3(9)B3. If all constituents from that test fall within the Job Mix Formula Tolerances (for Visual Evaluation) in

Section 9-03.8(7), the lot will be accepted at the unit Contract price with no further evaluation.

When one or more constituents fall outside those tolerance limits, the other samples will be tested for all constituents in Section 5-04.3(9)B3, and a Job Mix Compliance Price Adjustment will be calculated in accordance with Table 13.

Table 13

Visual Evaluation – Out of Tolerance Procedures	
Comply with the Following	
Pay Factors ¹	Section 5-04.3(9)B4
Composite Pay Factors ²	Section 5-04.3(9)B5
Price Adjustments	Section 5-04.3(9)B6

¹The Visual Evaluation tolerance limits in Section 9-03.8(7) will be used in the calculation of the PF_i.

²The maximum CPF shall be 1.00.

5-04.3(9)E Mixture Acceptance – Notification of Acceptance Test Results

The results of all mixture acceptance testing and the Composite Pay Factor (CPF) of the lot after three sublots have been tested will be available to the Contractor through The Contracting Agency's website.

The Contracting Agency will endeavor to provide written notification (via email to the Contractor's designee) of acceptance test results through its web-based materials testing system Statistical Analysis of Materials (SAM) within 24 hours of the sample being made available to the Contracting Agency. However, the Contractor agrees:

1. Quality control, defined as the system used by the Contractor to monitor, assess, and adjust its production processes to ensure that the final HMA mixture will meet the specified level of quality, is the sole responsibility of the Contractor.
2. The Contractor has no right to rely on any testing performed by the Contracting Agency, nor does the Contractor have any right to rely on timely notification by the Contracting Agency of the Contracting Agency's test results (or statistical analysis thereof), for any part of quality control and/or for making changes or correction to any aspect of the HMA mixture.
3. The Contractor shall make no claim for untimely notification by the Contracting Agency of the Contracting Agency's test results or statistical analysis.

5-04.3(10) HMA Compaction Acceptance

For all HMA, the Contractor shall comply with the General Compaction Requirements in Section 5-04.3(10)A. The Contracting Agency will evaluate all HMA for compaction compliance with one of the following - Statistical

Evaluation, Visual Evaluation, or Test Point Evaluation - determined by the criteria in Table 14:

Table 14

Criteria for Determining Method of Evaluation for HMA Compaction ¹		
Statistical Evaluation of HMA Compaction is Required For:	Visual Evaluation of HMA Compaction is Required For:	Test Point Evaluation of HMA Compaction is Required For:
<ul style="list-style-type: none"> Any HMA for which the specified course thickness is greater than 0.10 feet, and the HMA is in: <ul style="list-style-type: none"> traffic lanes, including but not limited to: <ul style="list-style-type: none"> ramp lanes truck climbing lanes weaving lanes speed change lanes 	<ul style="list-style-type: none"> "HMA for Preleveling..." "HMA for Pavement Repair..." 	<ul style="list-style-type: none"> Any HMA not meeting the criteria for Statistical Evaluation or Visual Evaluation

¹This table applies to all HMA, and shall be the sole basis for determining the acceptance method for compaction.

The Contracting Agency may, at its sole discretion, evaluate any HMA for compliance with the Cyclic Density requirements of Section 5-04.3(10)B.

5-04.3(10)A HMA Compaction – General Compaction Requirements

Immediately after the HMA has been spread and struck off, and after surface irregularities have been adjusted, thoroughly and uniformly compact the mix. The completed course shall be free from ridges, ruts, humps, depressions, objectionable marks, and irregularities and shall conform to the line, grade, and cross-section shown in the Plans. If necessary, alter the JMF in accordance with Section 9-03.8(7) to achieve desired results.

Compact the mix when it is in the proper condition so that no undue displacement, cracking, or shoving occurs. Compact areas inaccessible to large compaction equipment by mechanical or hand tampers. Remove HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective. Replace the removed material with new HMA, and compact it immediately to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. An exception shall be that pneumatic

tired rollers shall be used for compaction of the wearing course beginning October 1st of any year through March 31st of the following year. Coverage with a steel wheel roller may precede pneumatic tired rolling. Unless otherwise approved by the Engineer, operate rollers in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, do not operate a roller in a mode that results in checking or cracking of the mat.

On bridge decks and on the five feet of roadway approach immediately adjacent to the end of bridge/back of pavement seat, operate rollers in static mode only.

5-04.3(10)B HMA Compaction – Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A \$500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

5-04.3(10)C HMA Compaction Acceptance – Statistical Evaluation

HMA compaction which is accepted by Statistical Evaluation will be based on acceptance testing performed by the Contracting Agency, and statistical analysis of those acceptance tests results. This will result in a Compaction Price Adjustment.

5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots

HMA compaction which is accepted by Statistical Evaluation will be evaluated by the Contracting Agency dividing the project into compaction lots, and each compaction lot will be evaluated using stratified random sampling by the Contracting Agency sub-dividing each compaction lot into compaction sublots. All mixture in any individual compaction lot shall be of the same mix design. The compaction sublots will be numbered in the order in which the mixture (of a particular mix design) is paved.

Each compaction lot comprises a maximum of 15 compaction sublots, except for the final compaction lot of each mix design on the Contract, which comprises a maximum of 25 sublots.

Each compaction subplot shall be uniform in size as shown in Table 15, except that the last compaction subplot of each day may be increased to a maximum of two times the compaction subplot quantity calculated. Minor variations in the size of any subplot shall not be cause to invalidate the associated test result.

Table 15

HMA Compaction Sublot Size

HMA Original Plan Quantity (tons) ¹	Compaction Sublot Size (tons)
<20,000	100
20,000 to 30,000	150
>30,000	200

¹ In determining the plan quantity tonnage, do not include any tons accepted by test point evaluation.

The following will cause one compaction lot to end prematurely and a new compaction lot to begin:

- For a compaction lot in progress with a compaction CPF less than 0.75, a new compaction lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

All HMA which is paved on a bridge and accepted for compaction by Statistical Evaluation will compose a bridge compaction lot. If the contract includes such HMA on more than one bridge, compaction will be evaluated on each bridge individually, as separate bridge compaction lots.

Bridge compaction sublots will be determined by the Engineer subject to the following:

- All sublots on a given bridge will be approximately the same size.
- Sublots will be stratified from the lot.
- In no case will there be less than 3 sublots in each bridge compaction lot.
- No sublot will exceed 50 tons.
- Compaction test locations will be determined by the Engineer in accordance with WSDOT FOP for AASHTO T716.

5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing

Comply with Section 1-06.2(1).

The location of HMA compaction acceptance tests will be randomly selected by the Contracting Agency from within each sublot, with one test per sublot. The Contracting Agency will determine the random sample location using WSDOT Test Method T 716.

Use Table 16 to determine compaction acceptance test procedures and to allocate compaction acceptance sampling and testing

responsibilities between the Contractor and the Contracting Agency. HMA cores shall be taken or nuclear density testing shall occur after completion of the finish rolling, prior to opening to traffic, and on the same day that the mix is placed.

Table 16

HMA Compaction Acceptance Testing Procedures and Responsibilities			
	When Contract Includes Bid Item "HMA Core – Roadway" or "HMA Core – Bridge" ⁴	When Contract Does Not Include Bid Item "HMA Core – Roadway" or "HMA Core – Bridge" ⁴	
Basis for Test:	Cores	Cores ³	Nuclear Density Gauge ³
In-Place Density Determined by:	Contractor shall take cores ¹ using WSDOT SOP 734 ² Contracting Agency will determine core density using FOP for AASHTO T 166	Contracting Agency will take cores ¹ using WSDOT SOP 734 Contracting Agency will determine core density using FOP for AASHTO T 166	Contracting Agency, using WSDOT FOP for AASHTO T 355
Theoretical Maximum Density Determined by:	Contracting Agency, using FOP for AASHTO T 209		
Rolling Average of Theoretical Maximum Densities Determined by:	Contracting Agency, using WSDOT SOP 729		
Percent Compaction in Each Sublot Determined by:	Contracting Agency, using WSDOT SOP 736	Contracting Agency, using WSDOT SOP 736	Contracting Agency, using WSDOT FOP for AASHTO T 355

¹The core diameter shall be 4-inches unless otherwise approved by the Engineer.

²The Contractor shall take the core samples in the presence of the Engineer, at locations designated by the Engineer, and deliver the core samples to the Contracting Agency.

³The Contracting Agency will determine, in its sole discretion, whether it will take cores or use the nuclear density gauge to determine in-

place density. Exclusive reliance on cores for density acceptance is generally intended for small paving projects and is not intended as a replacement for nuclear gauge density testing on typical projects.

⁴The basis for test of all compaction sublots in a bridge compaction lot shall be cores. These cores shall be taken by the Contractor when the Proposal includes the bid item "HMA Cores – Bridge". When there is no bid item for "HMA Cores – Bridge", the Engineer will be responsible for taking HMA cores for all compaction sublots in a bridge compaction lot. In either case, the Engineer will determine core location, in-place density of the core, theoretical maximum density, rolling average of theoretical maximum density, and percent compaction using the procedure called for in this Section.

When using the nuclear density gauge for acceptance testing of pavement density, the Engineer will follow WSDOT SOP 730 for correlating the nuclear gauge with HMA cores. When cores are required for the correlation, coring and testing will be by the Contracting Agency. When a core is taken for gauge correlation at the location of a subplot, the relative density of the core will be used for the subplot test result and is exempt from retesting.

5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments

For each HMA compaction lot (that is accepted by Statistical Evaluation) which has less than three compaction sublots, for which all compaction sublots attain a minimum of 91 percent compaction determined in accordance with WSDOT FOP for AASHTO T 355 (or WSDOT SOP 736 when provided by the Contract), the HMA will be accepted at the unit Contract price with no further evaluation.

For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in accordance with Section 1-06.2(2) to determine the appropriate Compaction Price Adjustment (CPA). All of the test results obtained from the acceptance samples from a given compaction lot shall be evaluated collectively. Additional testing by either a nuclear density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For the statistical analysis in Section 1-06.2, use the following values:

x =	Percent compaction of each subplot
USL =	100
LSL =	91

Each CPA will be determined as follows:

$$CPA = [0.40 \times (CPF - 1.00)] \times Q \times UP$$

Where

CPA = Compaction Price Adjustment for the compaction lot (\$)
CPF = Composite Pay Factor for the compaction lot (maximum is 1.05)
Q = Quantity in the compaction lot (tons)
UP = Unit price of the HMA in the compaction lot (\$/ton)

5-04.3(10)C4 HMA Statistical Compaction – Requests for Retesting

For a compaction subplot that has been tested with a nuclear density gauge that did not meet the minimum of 91 percent of the theoretical maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core, taken at the same location as the nuclear density test, be used for determination of the relative density of the compaction subplot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the compaction subplot and will be used for calculation of the CPF and acceptance of HMA compaction lot. When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the compaction subplot have been provided or made available to the Contractor. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for retesting. When the CPF for the compaction lot based on the results of the cores is less than 1.00, the Contracting Agency will deduct the cost for the coring from any monies due or that may become due the Contractor under the Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)D HMA Compaction – Visual Evaluation

Visual Evaluation will be the basis of acceptance for compaction of the Bid items “HMA for Pavement Repair Cl. ____ PG ____” and “HMA for Prelevelling Class ____ PG ____”. This HMA shall be thoroughly compacted to the satisfaction of the Engineer. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller.

5-04.3(10)E HMA Compaction – Test Point Evaluation

When compaction acceptance is by Test Point Evaluation, compact HMA based on a test point evaluation of the compaction train. Perform the test point evaluation in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

5-04.3(10)F HMA Compaction Acceptance – Notification of Acceptance Test Results

The obligations and responsibilities for notifying the Contractor of compaction acceptance test results are the same as for mixture acceptance test results. See Section 5-04.3(9)E.

1
2 **5-04.3(11) Reject Work**

3 This Section applies to HMA and all requirements related to HMA (except
4 aggregates prior to being incorporated into HMA). For rejection of aggregate
5 prior to its incorporation into HMA refer to Section 3-04.
6

7 **5-04.3(11)A Reject Work – General**

8 Work that is defective or does not conform to Contract requirements shall
9 be rejected. The Contractor may propose, in writing, alternatives to
10 removal and replacement of rejected material. Acceptability of such
11 alternative proposals will be determined at the sole discretion of the
12 Engineer.
13

14 **5-04.3(11)B Rejection by Contractor**

15 The Contractor may, prior to acceptance sampling and testing, elect to
16 remove any defective material and replace it with new material. Any such
17 new material will be sampled, tested, and evaluated for acceptance.
18

19 **5-04.3(11)C Rejection Without Testing (Mixture or Compaction)**

20 The Engineer may, without sampling, reject any batch, load, or section of
21 Roadway that appears defective. Material rejected before placement shall
22 not be incorporated into the pavement.
23

24 No payment will be made for the rejected materials or the removal of the
25 materials unless the Contractor requests the rejected material to be
26 tested. If the Contractor requests testing, acceptance will be by Statistical
27 Evaluation, and a minimum of three samples will be obtained and tested.
28 When uncompacted material is required for testing but not available, the
29 Engineer will determine random sample locations on the roadway in
30 accordance with WSDOT Test Method T 716, take cores in accordance
31 with WSDOT SOP 734, and test the cores in accordance with WSDOT
32 SOP 737.
33

34 If the CPF for the rejected material is less than 0.75, no payment will be
35 made for the rejected material; in addition, the cost of sampling and
36 testing shall be borne by the Contractor. If the CPF is greater than or
37 equal to 0.75, the cost of sampling and testing will be borne by the
38 Contracting Agency. If the material is rejected before placement and the
39 CPF is greater than or equal to 0.75, compensation for the rejected
40 material will be at a CPF of 0.75. If rejection occurs after placement and
41 the CPF is greater than or equal to 0.75, compensation for the rejected
42 material will be at the calculated CPF with an addition of 25 percent of the
43 unit Contract price added for the cost of removal and disposal.
44

45 **5-04.3(11)D Rejection – A Partial Sublot (Mixture or Compaction)**

46 In addition to the random acceptance sampling and testing, the Engineer
47 may also isolate from a mixture or compaction sublot any material that is
48 suspected of being defective in relative density, gradation or asphalt
49 binder content. Such isolated material will not include an original sample
50 location. The Contracting Agency will obtain a minimum of three random
51 samples of the suspect material and perform the testing. When

uncompacted material is required for testing but is not available, the Engineer will select random sample locations on the roadway in accordance with WSDOT Test Method T 716, take cores samples in accordance with WSDOT SOP 734, and test the material in accordance with WSDOT SOP 737. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection – An Entire Sublot (Mixture or Compaction)

An entire mixture or compaction sublot that is suspected of being defective may be rejected. When this occurs, a minimum of two additional random samples from this sublot will be obtained. When uncompacted material is required for the additional samples but the material has been compacted, the Contracting Agency will take and test cores from the roadway as described in Section 5-04.3(11)D. The additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress (Mixture or Compaction)

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced when:

1. the Composite Pay Factor (CPF) of a mixture or compaction lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. the Pay Factor (PF_i) for any constituent of a mixture or compaction lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. either the PF_i for any constituent (or the CPF) of a mixture or compaction lot in progress is less than 0.75.

5-04.3(11)G Rejection – An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

Conduct operations such that placement of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed, but the roller may pass over the unprotected end of the freshly laid HMA only when the placement of the course is discontinued for such a length of time that the HMA will cool below compaction temperature. When the Work is resumed, cut back the previously compacted HMA to produce a slightly beveled edge for the full thickness of the course.

Construct a temporary wedge of HMA on a 50H:1V where a transverse joint as a result of paving or planing is open to traffic. Separate the HMA in the temporary wedge from the permanent HMA

upon which it is placed by strips of heavy wrapping paper or other methods approved by the Engineer. Remove the wrapping paper and trim the joint to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

Waste the material that is cut away and place new HMA against the cut. Use rollers or tamping irons to seal the joint.

5-04.3(12)A2 Longitudinal Joints

Offset the longitudinal joint in any one course from the course immediately below by not more than 6 inches nor less than 2 inches. Locate all longitudinal joints constructed in the wearing course at a lane line or an edge line of the Traveled Way. Construct a notched wedge joint along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size nor more than $\frac{1}{2}$ of the compacted lift thickness, and then taper down on a slope not steeper than 4H:1V. Uniformly compact the sloped portion of the HMA notched wedge joint.

On one-lane ramps a longitudinal joint may be constructed at the center of the traffic lane, subject to approval by the Engineer, if:

1. The ramp must remain open to traffic, or
2. The ramp is closed to traffic and a hot-lap joint is constructed.
 - a. Two paving machines shall be used to construct the hot-lap joint.
 - b. The pavement within 6 inches of the hot-lap joint will not be excluded from random location selection for compaction testing.
 - c. Construction equipment other than rollers shall not operate on any uncompacted HMA.

When HMA is placed adjacent to cement concrete pavement, construct longitudinal joints between the HMA and the cement concrete pavement. Saw the joint to the dimensions shown on Standard Plan A-40.10 and fill with joint sealant meeting the requirements of Section 9-04.2.

5-04.3(12)B Bridge Paving Joint Seals

5-04.3(12)B1 HMA Sawcut and Seal

Prior to placing HMA on the bridge deck, establish sawcut alignment points at both ends of the bridge paving joint sealsto be placed at the bridge ends, and at interior joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in

a manner that they remain functional for use in aligning the sawcut after placing the HMA overlay.

Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application procedure.

Construct the bridge paving joint seal as specified in the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with Section 5-05.3(8). Apply the sealant in accordance with Section 5-05.3(8)B and the manufacturer's application procedure.

5-04.3(12)B2 Paved Panel Joint Seal

Construct the paved panel joint seal in accordance with the requirements specified in Section 5-04.3(12)B1 and the following requirement:

1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than $\frac{1}{8}$ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than $\frac{1}{4}$ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, correct the pavement surface by one of the following methods:

1. Remove material from high places by grinding with an approved grinding machine, or
2. Remove and replace the wearing course of HMA, or
3. By other method approved by the Engineer.

Correct defects until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of \$500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When portland cement concrete pavement is to be placed on HMA, the surface tolerance of the HMA shall be such that no surface elevation lies above the Plan grade minus the specified Plan depth of portland cement concrete pavement. Prior to placing the portland cement concrete pavement, bring any such irregularities to the required tolerance by grinding or other means approved by the Engineer.

When utility appurtenances such as manhole covers and valve boxes are located in the Traveled Way, pave the Roadway before the utility appurtenances are adjusted to the finished grade.

5-04.3(14) Planing Bituminous Pavement

Plane in such a manner that the underlying pavement is not torn, broken, or otherwise damaged by the planing operation. Delamination or raveling of the underlying pavement will not be construed as damage due to the Contractor's operations. Pavement outside the limits shown in the Plans or designated by the Engineer that is damaged by the Contractor's operations shall be repaired to the satisfaction of the Engineer at no additional cost to the Contracting Agency.

For mainline planing operations, use equipment with automatic controls and with sensors for either or both sides of the equipment. The controls shall be capable of sensing the grade from an outside reference line, or a mat-referencing device. The automatic controls shall have a transverse slope controller capable of maintaining the mandrel at the desired transverse slope (expressed as a percentage) within plus or minus 0.1 percent.

Remove all loose debris from the planed surface before opening the planed surface to traffic. The planings and other debris resulting from the planing operation shall become the property of the Contractor and be disposed of in accordance with Section 2-03.3(7)C, or as otherwise allowed by the Contract.

5-04.3(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the Plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

Construct HMA approaches at the locations shown in the Plans or where staked by the Engineer, in accordance with Section 5-04.

5-04.4 Measurement

HMA CI. ____ PG ____, HMA for ____ CI. ____ PG ____, and Commercial HMA will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the HMA. If the Contractor elects to remove and replace HMA as allowed by Section 5-04.3(11), the material removed will not be measured.

Roadway cores will be measured per each for the number of cores taken.

Crack Sealing-LF will be measured by the linear foot along the line of the crack.

Soil residual herbicide will be measured by the mile for the stated width to the nearest 0.01 mile or by the square yard, whichever is designated in the Proposal.

Pavement repair excavation will be measured by the square yard of surface marked prior to excavation.

Asphalt for fog seal will be measured by the ton, as provided in Section 5-02.4.

Longitudinal joint seals between the HMA and cement concrete pavement will be measured by the linear foot along the line and slope of the completed joint seal.

HMA sawcut and seal, and paved panel joint seal, will be measured by the linear foot along the line and slope of the completed joint seal.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will be measured by the linear foot as provided in Section 8-23.4.

Water will be measured by the M gallon as provided in Section 2-07.4.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

“HMA Cl. ____ PG ____”, per ton.

“HMA for Approach Cl. ____ PG ____”, per ton.

“HMA for Preleveling Cl. ____ PG ____”, per ton.

“HMA for Pavement Repair Cl. ____ PG ____”, per ton.

“Commercial HMA”, per ton.

The unit Contract price per ton for “HMA Cl. ____ PG ____”, “HMA for Approach Cl. ____ PG ____”, “HMA for Preleveling Cl. ____ PG ____”, “HMA for Pavement Repair Cl. ____ PG ____”, and “Commercial HMA” shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

“Crack Sealing-FA”, by force account.

“Crack Sealing-FA” will be paid for by force account as specified in Section 1-09.6.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total Bid by the Contractor.

“Crack Sealing-LF”, per linear foot.

The unit Contract price per linear foot for “Crack Sealing-LF” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)A.

“Soil Residual Herbicide ____ ft. Wide”, per mile, or

“Soil Residual Herbicide”, per square yard.

1 The unit Contract price per mile or per square yard for "Soil Residual Herbicide"
2 shall be full payment for all costs incurred to obtain, provide and install herbicide in
3 accordance with Section 5-04.3(4)B.

4
5 "Pavement Repair Excavation Incl. Haul", per square yard.

6 The unit Contract price per square yard for "Pavement Repair Excavation Incl.
7 Haul" shall be full payment for all costs incurred to perform the Work described in
8 Section 5-04.3(4)C with the exception, however, that all costs involved in the
9 placement of HMA shall be included in the unit Contract price per ton for "HMA for
10 Pavement Repair Cl. ____ PG ____", per ton.

11
12 "Asphalt for Fog Seal", per ton.

13 Payment for "Asphalt for Fog Seal" is described in Section 5-02.5.

14
15 "Longitudinal Joint Seal", per linear foot.

16 The unit Contract price per linear foot for "Longitudinal Joint Seal" shall be full
17 payment for all costs incurred to construct the longitudinal joint between HMA and
18 cement concrete pavement, as described in Section 5-04.3(12)B.

19
20 "HMA Sawcut And Seal", per linear foot.

21 The unit Contract price per linear foot for "HMA Sawcut And Seal" shall be full
22 payment for all costs incurred to perform the Work described in Section 5-
23 04.3(12)B1.

24
25 "Paved Panel Joint Seal", per linear foot.

26 The unit Contract price per linear foot for "Paved Panel Joint Seal" shall be full
27 payment for all costs incurred to perform the Work described in Section 5-
28 04.3(12)B2.

29
30 "Planing Bituminous Pavement", per square yard.

31 The unit Contract price per square yard for "Planing Bituminous Pavement" shall
32 be full payment for all costs incurred to perform the Work described in Section 5-
33 04.3(14).

34
35 "Temporary Pavement Marking", per linear foot.

36 Payment for "Temporary Pavement Marking" is described in Section 8-23.5.

37
38 "Water", per M gallon.

39 Payment for "Water" is described in Section 2-07.5.

40
41 "Job Mix Compliance Price Adjustment", by calculation.

42 "Job Mix Compliance Price Adjustment" will be calculated and paid for as
43 described in Section 5-04.3(9)B6 and 5-04.3(9)D1.

44
45 "Compaction Price Adjustment", by calculation.

46 "Compaction Price Adjustment" will be calculated and paid for as described in
47 Section 5-04.3(10)C3.

48
49 "HMA Core – Bridge", per each.

The unit Contract price per each for “HMA Core – Bridge” shall be full payment for all costs, including traffic control, associated with taking HMA density cores in pavement that is on a bridge deck.

“HMA Core – Roadway”, per each.

The unit Contract price per each for “HMA Core – Roadway” shall be full payment for all costs, including traffic control, associated with taking HMA density cores in pavement that is not on a bridge deck.

“Cyclic Density Price Adjustment”, by calculation.

“Cyclic Density Price Adjustment” will be calculated and paid for as described in Section 5-04.3(10)B.

5-05.AP5

Section 5-05, Cement Concrete Pavement January 3, 2017

5-05.3(1) Concrete Mix Design for Paving

In last sentence of the second paragraph of item number 1, the reference to “Section 9-01.2(4)” is revised to read “Section 9-01.2(1)B”.

The following is inserted after item number 2:

3. **Mix Design Modifications** - The Contractor may initiate adjustments to the aggregate proportions of the approved mix design. An adjustment in both the fine and coarse aggregate batch target weights of plus or minus 200 pounds per cubic yard will be allowed without resubmittal of the mix design. The adjusted aggregate weights shall become the new batch target weights for the mix design.

Item number 3 is renumbered to 4 and revised (up until the table) to read:

4. **Conformance to Mix Design** - Cement and coarse and fine aggregate weights shall be within the following tolerances of the batch target weights of the mix design:

Portland Cement Concrete Batch Weights		
Cement	+5%	-1%
Coarse Aggregate	+2%	-2%
Fine Aggregate	+2%	-2%

5-05.3(3)B Mixing Equipment

The last sentence of item number 4 is revised to read:

Plant-mixed concrete may be transported in nonagitated vehicles provided that the concrete is in a workable condition when placed and:

- a. discharge is completed within 45 minutes after the introduction of mixing water to the cement and aggregates, or

- 1 b. discharge is completed within 60 minutes after the introduction of mixing
2 water to the cement and aggregates, provided the concrete mix temperature
3 is 70°F or below during placement, or
4
5 c. discharge is completed within 60 minutes after the introduction of mixing
6 water to the cement and aggregates, provided the mix contains an approved
7 set retarder at the manufacturer's minimum dosage rate.
8

9 **5-05.3(6) Subgrade**

10 This section, including title, is revised to read:

11 **5-05.3(6) Surface Preparation**

12 The Subgrade surface shall be prepared and compacted a minimum of 3 feet beyond
13 each edge of the area which is to receive concrete pavement in order to accommodate
14 the slip-form equipment.
15

16 Concrete shall not be placed during a heavy rainfall. Prior to placing concrete:

- 17
18 1. The surface shall be moist;
19
20 2. Excess water (e.g., standing, pooling or flowing) shall be removed from the
21 surface.
22
23 3. The surface shall be clean and free of any deleterious materials.
24
25 4. The surface temperature shall not exceed 120°F or be frozen.
26
27

28 **5-05.3(7)A Slip-Form Construction**

29 The second sentence of the first paragraph is revised to read:

30
31 The alignment and elevation of the paver shall be regulated from outside reference
32 lines established for this purpose, or by an electronic control system capable of
33 controlling the line and grade within required tolerances.
34

35 6-02.AP6

36 **Section 6-02, Concrete Structures**

37 **August 7, 2017**

38 **6-02.2 Materials**

39 The item "Elastomeric Bearing Pads" is revised to read "Fabricated Bridge Bearing
40 Assemblies".
41

42 **6-02.3(2) Proportioning Materials**

43 In the sixth paragraph, the reference to "Section 9-01.2(4)" is revised to read "9-01.2(1)B".
44

45 **6-02.3(2)A Contractor Mix Design**

46 The following new sentence is inserted after the first sentence of the third paragraph:
47

The mix design submittal shall also include test results no older than one year showing that the Aggregates do not contain Deleterious Substances in accordance with Section 9-03.

6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D

Item number 4 of the first paragraph is deleted.

Items number 5, 6, and 7 of the first paragraph are renumbered to 4, 5, and 6, respectively.

The following new sentence is inserted after the second sentence of the last paragraph:

Mix designs using shrinkage reducing admixture shall state the specific quantity required.

The following new sentence is inserted before the last sentence of the last paragraph:

Testing samples of mixes using shrinkage reducing admixture shall use the admixture amount specified in the mix design submittal.

6-02.3(2)B Commercial Concrete

The last sentence of the first paragraph is revised to read:

Commercial concrete does not require mix design or source approvals for cement, aggregate, and other admixtures.

6-02.3(5)G Sampling and Testing for Temperature, Consistency and Air Content

The last three paragraphs are revised to read:

Sampling and testing will be performed before concrete placement from the first load. Concrete shall not be placed until all tests have been completed by the Engineer, and the results indicate that the concrete is within acceptable limits. If the concrete is not within acceptable limits, sampling and testing will continue before concrete placement for each load until one load meets all of the applicable acceptance requirements. After one test indicates that the concrete is within specified limits, the concrete may be placed and the sampling and testing frequency may decrease to one for every 100 cubic yards. Sampling shall be performed in accordance with FOP for WAQTC TM 2 and random samples shall be selected in accordance with WSDOT T 716. After the first acceptable load of concrete, up to ½ cubic yard may be placed from subsequent loads to be tested prior to testing for acceptance.

When the results for any subsequent acceptance test indicates that the concrete as delivered and approved by the Contractor for placement does not conform to the specified limits, the sampling and testing frequency will be resumed for each load. Whenever one subsequent test indicates that the concrete is within the specified limits, the random sampling and testing frequency of one for every 100 cubic yards may resume.

Sampling and testing for a placement of one class of concrete consisting of 50 cubic yards or less will be as listed above, except that after one set of tests indicate that the

concrete is within specified limits, the remaining concrete to be placed may be accepted by visual inspection.

6-02.3(6)A1 Hot Weather Protection

This section is revised to read:

The Contractor shall provide concrete within the specified temperature limits. Cooling of the coarse aggregate piles by sprinkling with water is permitted provided the moisture content is monitored and the mixing water is adjusted for the free water in the aggregate. Shading or cooling aggregate piles (sprinkling of fine aggregate piles with water is not allowed). If sprinkling of the coarse aggregates is to be used, the piles moisture content shall be monitored and the mixing water adjusted for the free water in the aggregate. In addition, when removing the coarse aggregate, it shall be removed from at least 1 foot above the bottom of the pile. Refrigerating mixing water; or replacing all or part of the mixing water with crushed ice, provided the ice is completely melted by placing time.

If air temperature exceeds 90°F, the Contractor shall use water spray or other accepted methods to cool all concrete-contact surfaces to less than 90°F. These surfaces include forms, reinforcing steel, steel beam flanges, and any others that touch the mix.

6-02.3(6)A2 Cold Weather Protection

This section is revised to read:

Concrete shall be maintained at or above a temperature of 40°F during the first seven days of the Cold Weather Protection Period and at or above a temperature of 35°F during the remainder of the Cold Weather Protection Period. Cold weather protection requirements do not apply to concrete in shafts and piles placed below the ground line.

Prior to placing concrete in cold weather, the Contractor shall submit a Type 2 Working Drawing with a written procedure for cold weather concreting. The procedure shall detail how the Contractor will adequately cure the concrete and prevent the concrete temperature from falling below the minimum temperature. Extra protection shall be provided for areas especially vulnerable to freezing (such as exposed top surfaces, corners and edges, thin sections, and concrete placed into steel forms). Concrete placement will only be allowed if the Contractor's cold weather protection plan has been accepted by the Engineer.

Prior to concrete placement, the Contractor shall review the 7-day temperature predictions for the job site from the Western Region Headquarters of the National Weather Service (www.wrh.noaa.gov). When temperatures below 35°F are predicted, the Contractor shall:

1. Install temperature sensors in each concrete placement. One sensor shall be installed for every 100 cubic yards of concrete placed. Sensors shall be installed at locations directed by the Engineer, and shall be placed 1.5 inches from the face of concrete.
2. Immediately after concrete placement, temperature sensors shall be installed on the concrete surface at locations directed by the Engineer. One sensor shall be installed for every 100 cubic yards of concrete placed.

Temperatures shall be measured and recorded a minimum of every hour for the duration of the Cold Weather Protection Period. Temperature data shall be submitted to the Engineer as a Type 1 Working Drawing within three days following the end of the Cold Weather Protection Period.

For each day that the concrete temperature falls below 40°F during the first seven days of the Cold Weather Protection Period, no curing time is awarded for that day and the Cold Weather Protection Period is extended for one additional day. If the concrete temperature falls below 35°F during the Cold Weather Protection Period, the concrete may be rejected by the Engineer.

6-02.3(7) Concrete Exposed to Sea Water

This section including title is revised to read:

6-02.3(7) Vacant

6-02.3(8) Concrete Exposed to Alkaline Soils or Water

This section including title is revised to read:

6-02.3(8) Vacant

6-02.3(10)D4 Monitoring Bridge Deck Concrete Temperature After Placement

This section is revised to read:

The Contractor shall measure and record the concrete temperature and ambient temperature a minimum of every hour for seven calendar days after concrete placement. The Contractor shall place two temperature sensors in the bridge deck at locations specified by the Engineer. The Contractor shall measure ambient temperature near the locations where concrete temperature is being measured. When the bridge deck is being enclosed and heated to meet cold weather requirements, ambient temperature readings shall be taken within the enclosure. The Contractor shall submit the concrete temperature and ambient temperature data as a Type 1 Working Drawing in spreadsheet format within 14 calendar days from placing the bridge deck concrete.

The Contractor shall submit a Type 1 Working Drawing consisting of the type and model of each device and the method used to measure and record the temperatures.

6-02.3(13)A Strip Seal Expansion Joint System

The first paragraph is revised to read:

The Contractor shall submit Type 2 Working Drawings consisting of the strip seal expansion joint shop drawings. These plans shall include, at a minimum, the following:

1. Plan, elevation, and sections of the joint system and all components, with dimensions and tolerances.
2. All material designations.

3. Manufacturer's written installation procedure. The installation procedure shall indicate how the extrusions set into the two sides of the joint will be allowed to move independently of one another.
4. Corrosion protection system used on the metal components.
5. Locations of welded shear studs, lifting mechanisms, temperature setting devices, and construction adjustment devices.
6. Method of sealing the system to prevent leakage of water through the joint.
7. Details of the temporary supports for the steel extrusions while the encapsulating concrete of the headers is placed and cured.
8. The gland installation procedure, including the means and methods used to install the gland and assure correct seating of the gland within the steel extrusions.

The following new paragraph is inserted after the third paragraph:

If the gland is installed in the field, the Contractor shall have the services of a strip seal expansion joint system manufacturer's technical representative physically present at the job site. The manufacturer's technical representative shall train the Contractor's personnel performing the field installation of the gland, provide technical assistance for installing the gland, and observe and inspect the installation of at least the first complete joint.

The second to last paragraph is deleted.

6-02.3(14)D General Requirements for Concrete Surface Finishes Produced by Form Liners

The first two sentences of the third paragraph are deleted.

6-02.3(16) Plans for Falsework and Formwork

The last sentence of the first paragraph is revised to read:

A submittal is not required for footing or retaining wall formwork if the concrete placement is 4 feet or less in height.

The second to last paragraph is revised to read:

The Contractor shall furnish associated design calculations to the Engineer as part of the submittal. The design calculations shall include the structural and geotechnical design of the foundation and shall show the stresses and deflections in all load-carrying members that are part of the falsework system. Construction details which may be shown in the form of sketches on the calculation sheets shall be shown in the falsework or formwork drawings as well. Falsework or formwork plans will not be accepted in cases where it is necessary to refer to the calculation sheets for information needed for complete understanding of the falsework and formwork plans or how to construct the falsework and formwork.

The last paragraph is deleted.

6-02.3(17)D Falsework Support Systems: Piling, Temporary Concrete Footings, Timber Mudsills, Manufactured Shoring Towers, Caps, and Posts

This section, including title, is revised to read:

6-02.3(17)D Falsework Support Systems: Foundations, Manufactured Shoring Towers, Caps, and Posts

Foundations for falsework shall be designed for conditions stated in this Section using methods shown in the AASHTO Standard Specifications for Highway Bridges Seventeenth Edition – 2002 for allowable stress design, the AASHTO LRFD Bridge Design Specifications for load and resistance factor design or the AASHTO Guide Design Specifications for Bridge Temporary Works. Allowable stresses for materials shall not exceed stresses and conditions allowed by Section 6-02.3(17)B.

6-02.3(17)D1 Piling

This section including title is revised to read:

6-02.3(17)D1 Vacant

6-02.3(17)D2 Temporary Concrete Footings and Timber Mudsills

This section including title is revised to read:

6-02.3(17)D2 Vacant

6-02.3(17)D4 Manufactured Shoring Tower Systems and Devices

The fifth paragraph is deleted.

6-02.3(17)D5 Cross-Braced Type Base Frames

This section is deleted in its entirety.

6-02.3(17)D6 Ladder Type Base Frames

This section is deleted in its entirety.

6-02.3(17)D7 Intermediate Strength Shoring

This section is deleted in its entirety.

6-02.3(17)D8 Heavy-Duty Shoring Systems

This section is deleted in its entirety.

6-02.3(17)K Concrete Forms on Steel Spans

In the last paragraph, “ASTM A325” is revised to read “ASTM F3125 Grade A325”.

6-02.3(17)N Removal of Falsework and Forms

The fifth paragraph is deleted.

6-02.3(19)A Vacant

This section, including title, is revised to read:

1 **6-02.3(19)A Submittals of Acceptance Test Reports and Certificates**

2 The Contractor shall submit the following production samples and test reports and
3 certificates for fabricated bridge bearing assemblies as applicable:
4

- 5 1. A Type 2 Working Drawing consisting of a six-inch square by 1/8-inch thick
6 sample of PTFE taken from the lot of production material.
7
- 8 2. A Type 2 Working Drawing consisting of a six-inch square by 1-inch thick
9 sample of pre-formed fabric pad taken from the lot of production material.
10
- 11 3. Type 1 Working Drawings consisting of Manufacturers' Certificates of
12 Compliance for the PTFE, polyether urethane, pre-formed fabric pad duck,
13 silicone grease, epoxy gel, and resin filler.
14
- 15 4. Type 1 Working Drawings consisting of certified mill test reports for all steel
16 and stainless steel in the bearing assemblies.
17
- 18 5. Type 1 Working Drawings consisting of certified test reports confirming that
19 the pre-formed fabric pads meet the specific requirements of proof load.
20

21 **6-02.3(24)A Field Bending**

22 This section (excluding the tables) is revised to read:
23

24 Field bending of AASHTO M31 Grade 60 and ASTM A706 Grade 60 reinforcement
25 shall be done in accordance with the requirements of this section. Field bending of all
26 other reinforcement shall require a Type 2 Working Drawing showing the bend radii,
27 bending and heating procedures, and any inspection or testing requirements.
28

29 Field bending shall not be done on reinforcement within the top or bottom third of
30 column lengths or within plastic hinge regions identified in the Plans. Field bending
31 shall not be done on bar sizes No. 14 or No. 18.
32

33 In field-bending steel reinforcing bars, the Contractor shall:
34

- 35 1. Make the bend gradually using a bending tool equipped with a bending
36 diameter as listed in Table 1. Bending shall not be done by means of hammer
37 blows and pipe sleeves. When bending to straighten a previously bent bar,
38 move a hickey bar progressively around the bend.
39
- 40 2. Apply heat as described below for bending bar sizes No. 6 through No. 11
41 and for bending bar sizes No. 5 and smaller when the bars have been
42 previously bent. Previously unbent bars of sizes No. 5 and smaller may be
43 bent without heating when the bar temperature is 40°F or higher. When
44 previously unbent bars of sizes No. 5 and smaller have a bar temperature
45 lower than 40°F, they shall be heated to within the range of 100°F to 150°F
46 prior to bending. In applying heat for field-bending steel reinforcing bars, the
47 Contractor shall:
48
- 49 a. Avoid damage to the concrete by insulating any concrete within 6 inches
50 of the heated bar area;
51

- b. Apply two heat tips simultaneously at opposite sides of bar sizes No. 7 or larger;
 - c. Heat the bar to within the required temperature range shown in Table 2 as verified by using temperature-indicating crayons or other suitable means;
 - d. Heat a minimum bar length as shown in Table 3. Locate the heated section of the bar to include the entire bending length;
 - e. Bend immediately after the required temperature range has been achieved. Maintain the bar within the required temperature range during the entire bending process;
 - f. Do not cool bars artificially with water, forced air, or other means.
3. Limit any bend or straightening to these maximum angles: 135 degrees for bar sizes No. 8 or smaller, and 90 degrees for bar sizes No. 9 through No. 11.
 4. Repair epoxy coating on epoxy coated bars in accordance with Section 6-02.3(24)H.

6-02.3(25) Prestressed Concrete Girders

Under the heading “**Prestressed Concrete Slab Girder**”, the second sentence is deleted.

6-02.3(25)A Shop Drawings

The sixth paragraph is deleted.

6-02.3(25)F Prestress Release

The last two sentences of the last paragraph are deleted and replaced with the following single sentence:

This request shall be submitted as a Type 2E Working Drawing analyzing changes in vertical deflection, girder lateral stability and concrete stresses in accordance with Section 6-02.3(25)L2.

6-02.3(25)H Finishing

Item number 2 in the first paragraph is revised to read:

2. The bottoms, sides, and tops of the lower flanges on all girders, including the top of the bottom slab between the tub girder webs.

6-02.3(25)I Fabrication Tolerances

Items 4 and 5 in the first paragraph are revised to read:

4. Flange Depth: $\pm \frac{1}{4}$ inch
5. Strand Position:
Individual strands: $\pm \frac{1}{4}$ inch

Bundled strands: $\pm \frac{1}{2}$ inch

Harped strand group center of gravity at the girder ends: ± 1 inch

Items 7, 8, 9 and 10 in the first paragraph are revised to read:

7. Position of an Interior Void, vertically and horizontally: $\pm \frac{1}{2}$ inch.

8. Bearing Recess (center of recess to girder end): $\pm \frac{5}{8}$ inch.

9. Girder Ends (deviation from square or designated skew):

Horizontal: $\pm \frac{1}{8}$ inch per foot of girder width, up to a maximum of $\pm \frac{1}{2}$ inch

Vertical: $\pm \frac{3}{16}$ inch per foot of girder depth, up to a maximum of ± 1 inch

10. Bearing Area Deviation from Plane (in length or width of bearing): $\pm \frac{1}{8}$ inch

Items 14 and 15 in the first paragraph are revised to read:

14. Local smoothness of any surface: $\pm \frac{1}{4}$ inch in 10 feet.

15. Differential Camber between Girders in a Span (measured in place at the job site):

For wide flange deck and deck bulb tee girders with a cast-in-place reinforced concrete deck:	Cambers shall be equalized when the differences in cambers between adjacent girders exceeds $\pm \frac{3}{4}$ inch
For wide flange deck, deck bulb tee and slab girders without a cast-in-place reinforced concrete deck:	Cambers shall be equalized when the differences in cambers between adjacent girders exceeds $\pm \frac{1}{4}$ inch

Item 17 in the first paragraph is revised to read:

17. Position of Lifting Embedments: ± 3 inches longitudinal, $\pm \frac{1}{4}$ inch transverse.

6-02.3(25)J Horizontal Alignment

This section is revised to read:

The Contractor shall check and record the horizontal alignment (sweep) of each girder at the following times:

1. Initial – Upon removal of the girder from the casting bed
2. Shipment – Within 14 days prior to shipment; and
3. Erection – After girder erection and cutting temporary top strands but prior to any equalization, welding ties or placement of diaphragms.

Horizontal alignment of the top and bottom flanges shall be checked and recorded. Alternatively, the Contractor may check and record the horizontal alignment of the web

near mid-height of the girder. Each check shall be made by measuring the maximum offset at mid-span relative to a chord that starts and stops at the girder ends. The Contractor shall check and record the alignment at a time when the girder is not influenced by temporary differences in surface temperature. Records for the initial check (item 1 above) shall be included in the Contractor's prestressed concrete certificate of compliance. Records for all other checks shall be submitted as a Type 1 Working Drawing.

For each check (Items 1 to 3 above), the alignment shall not be offset more than $\frac{1}{8}$ inch for each 10 feet of girder length. Girders not meeting this tolerance for the shipment check (Item 2 above) shall require an analysis of girder lateral stability and stresses in accordance with Section 6-02.3(25)L1. The Contractor shall perform this analysis and submit it as a Type 2E Working Drawing prior to shipment of the girder. Any girder that exceeds an offset of $\frac{1}{8}$ inch for each 10 feet of girder length for the erection check (Item 3 above) shall be corrected at the job site to the $\frac{1}{8}$ inch maximum offset per 10 feet of girder length before concrete is placed into the diaphragms. The Contractor shall submit a Type 2 Working Drawing for any required corrective action.

The maximum distance between the side of a prestressed concrete slab girder, or the edge of the top flange of a wide flange deck, wide flange thin deck or deck bulb tee girder, and a chord that extends the full length of the girder shall be $\pm\frac{1}{2}$ inch after erection (Item 3 above).

6-02.3(25)K Vertical Deflection

Items 2 and 3 in the first paragraph are revised to read:

2. Shipment – Within 14 days prior to shipment;
3. Erection – After girder erection and cutting temporary top strands but prior to any equalization, welding ties or placement of diaphragms.

The following new paragraph is inserted after the second paragraph:

Girders with vertical deflections not meeting the limit shown in the Plans for the shipment check (Item 2 above) shall require an analysis of girder lateral stability and stresses in accordance with Section 6-02.3(25)L1. The Contractor shall perform this analysis and submit it as a Type 2E Working Drawing prior to shipment.

The following new sentence is inserted after the second sentence of the fourth to last paragraph:

Any diaphragms are assumed to be placed.

The last three paragraphs are deleted and replaced with the following:

If the girder vertical deflection measured for the erection check (Item 3 above) is not between the lower "D" dimension bound shown in the Plans and the upper "D" dimension bound shown in the Plans plus $\frac{3}{4}$ inches, the Engineer may require corrective action. The Contractor shall submit a Type 2 Working Drawing for any required corrective action.

6-02.3(25)L Handling and Storage

The second paragraph is revised to read:

For strand lift loops, only ½-inch diameter or 0.6-inch diameter strand conforming to Section 9-07.10 shall be used, and a minimum 2-inch diameter straight pin of a shackle shall be used through the loops. Multiple loops shall be held level in the girder during casting in a manner that allows each loop to carry its share of the load during lifting. The minimum distance from the end of the girder to the centroid of the strand lift loops shall be 3 feet. The loops for all prestressed concrete girders, with the exception of prestressed concrete slab girders, shall project a minimum of 1'-6" from the top of the girder. The loops for prestressed concrete slab girders shall project a minimum of 4 inches. Loops shall extend to within 3 inches clear of the bottom of the girder, terminating with a 9-inch long 90-degree hook. Loads on individual loops shall be limited to 12 kips, and all girders shall be picked up at a minimum angle of 60 degrees from the top of the girder.

The third sentence of the fourth paragraph is revised to read:

Alternatively, these temporary strands may be post-tensioned provided the strands are stressed on the same day that the permanent prestress is released into the girder and the strands are tensioned prior to lifting the girder.

The second to last sentence of the fourth paragraph is revised to read:

When the post-tensioned alternative is used, the Contractor shall be responsible for properly sizing the anchorage plates, and configuring the reinforcement adjacent to the anchorage plates, to prevent bursting or splitting of the concrete in the top flange.

The second to last paragraph is deleted.

This section is supplemented with the following new subsections:

6-02.3(25)L1 Girder Lateral Stability and Stresses

The Contractor shall be responsible for safely lifting, storing, shipping and erecting prestressed concrete girders.

The Contract documents may provide shipping and handling details for girders including lifting embedment locations (L), shipping support locations (L₁ and L₂), minimum shipping support rotational spring constants (K_θ), minimum shipping support center-to-center wheel spacings (W_{cc}), vertical deflections and number of temporary top strands. These shipping and handling details have been determined in accordance with Section 6-02.3(25)L2.

The Contractor shall submit a Type 2E Working Drawing analyzing girder lateral stability and concrete stresses during lifting, storage, shipping and erection in accordance with Section 6-02.3(25)L2 in the following cases:

1. Any of the analysis assumptions listed in Section 6-02.3(25)L2 are invalid. Determination of validity shall be made by the Contractor, except that analysis assumptions shall be considered invalid if the actual values are outside of the provided tolerances.

2. The Contractor intends to alter the shipping and handling details provided in the Contract documents.
3. The Contract documents do not provide shipping and handling details.

6-02.3(25)L2 Lateral Stability and Stress Analysis

Analysis for girder lateral stability and concrete stresses during lifting, storage, shipping and erection shall be in accordance with the PCI Recommended Practice for Lateral Stability of Precast, Prestressed Concrete Bridge Girders, First Edition, Publication CB-02-16-E and the AASHTO LRFD Bridge Design Specifications edition identified in the Contract documents. The following design criteria shall be met:

1. Factor of Safety against cracking shall be at least 1.0
2. Factor of Safety against failure shall be at least 1.5
3. Factor of Safety against rollover shall be at least 1.5
4. Allowable concrete stresses shall be as specified in Section 6-02.3(25)L3

The analysis shall address any effects on girder vertical deflection (camber), "A" dimensions at centerline of bearings and deck screed cambers (C).

Shipping and handling details provided in the Contract documents have been determined using the following analysis assumptions:

1. Girder dimensions, strand locations and lifting embedment locations are within the tolerances specified in Section 6-02.3(25)I
2. Girder horizontal alignment (sweep) is within the tolerance specified in Section 6-02.3(25)J
3. Girder vertical deflection (camber) at midspan is less than or equal to the value shown in the Plans for shipping
4. Minimum concrete compressive strength at release (f'_{ci}) has been reached before initial lifting from casting bed. Minimum concrete compressive strength at 28 days (f'_c) has been reached before shipping.
5. Height of girder bottom above roadway at shipping supports is less than or equal to 72 inches
6. Height of shipping support roll center above roadway is 24 inches, ± 2 inches
7. Shipping support longitudinal placement (L_1 and L_2) tolerance is ± 6 inches
8. Shipping support lateral placement tolerance is ± 1 inches

9. Shipping supports provide the minimum shipping support rotational spring constant (K_{θ}) and minimum shipping support center-to-center wheel spacings (W_{cc}) shown in the Plans
10. For shipping at highway speeds a $\pm 20\%$ dynamic load allowance (impact) is included with a typical roadway superelevation of 2%
11. For turning at slow speeds, no dynamic load allowance (impact) is included with a maximum roadway superelevation of 6%
12. Wind, centrifugal and seismic forces are not considered

6-02.3(25)L3 Allowable Stresses

Prestressed concrete girder stresses shall be limited to the following values at all stages of construction and in service:

Condition	Stress	Location	Allowable Stress (ksi)
Temporary Stress at Transfer and Lifting from Casting Bed	Tensile	In areas without bonded reinforcement sufficient to resist the tensile force in the concrete	$0.0948\lambda\sqrt{f'_{ci}} \leq 0.2$
		In areas with bonded reinforcement sufficient to resist the tensile force in the concrete	$0.24\lambda\sqrt{f'_{ci}}$
	Compressive	All locations	$0.65f'_{ci}$
Temporary Stress at Shipping and Erection	Tensile	In areas without bonded reinforcement sufficient to resist the tensile force in the concrete	$0.0948\lambda\sqrt{f'_c} \leq 0.2$
		In areas with bonded reinforcement sufficient to resist the tensile force in the concrete	$0.19\lambda\sqrt{f'_c}$
		In areas with bonded reinforcement sufficient to resist the tensile force in the concrete when shipping at 6% superelevation, without impact	$0.24\lambda\sqrt{f'_c}$
	Compressive	All locations	$0.65f'_c$
Final Stresses at Service Load	Tensile	Precompressed tensile zone	0.0
	Compressive	Effective prestress and permanent loads	$0.45f'_c$

		Effective prestress, permanent loads and transient (live) loads	$0.60f'_c$
Final Stresses at Fatigue Load	Compressive	Fatigue I Load Combination plus one-half effective prestress and permanent loads	$0.40f'_c$

Variables are as defined in the AASHTO LRFD Bridge Design Specifications.

6-02.3(25)M Shipping

The last four paragraphs are deleted and replaced with the following:

Girder lateral stability and stresses during shipping shall be in accordance with Section 6-02.3(25)L1.

If the Contractor elects to assemble spliced prestressed concrete girders into shipping configurations not shown in the Contract documents, the Contractor shall submit a Type 2E Working Drawing analyzing girder lateral stability and concrete stresses in accordance with Section 6-02.3(25)L2 before shipping.

6-02.3(25)N Prestressed Concrete Girder Erection

The second sentence of the first paragraph is revised to read:

The erection plan shall conform to Section 6-02.3(25)L1.

The last paragraph is revised to read:

Stop plates and dowel bars for prestressed concrete girders shall be set with either epoxy grout conforming to Section 9-26.3 or type IV epoxy bonding agent conforming to Section 9-26.1.

6-02.3(25)O Girder to Girder Connections

The second paragraph is revised to read:

Prestressed concrete girders shall be constructed in the following sequence:

1. If required, deflections shall be equalized in accordance with the Contractor's equalization plan.
2. Any intermediate diaphragms shall be placed and any weld ties shall be welded in accordance with Section 6-03.3(25). Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.
3. Any keyways between adjacent girders shown in the Plans to receive grout shall be filled flush with the surrounding surfaces using a grout conforming to Section 9-20.3(2).
4. Equalization equipment shall not be removed and other construction equipment shall not be placed on the structure until intermediate diaphragms

and keyway grout have attained a minimum compressive strength of 2,500 psi.

6-02.3(26)D2 Test Block Dimensions

The first sentence is revised to read:

The dimensions of the test block perpendicular to the tendon in each direction shall be the smaller of twice the minimum edge distance or the minimum spacing specified by the special anchorage device manufacturer, with the stipulation that the concrete cover over any confining reinforcing steel or supplementary skin reinforcement shall be appropriate for the project-specific application and circumstances.

6-02.3(26)E2 Ducts for External Exposed Installation

In the first paragraph, "ASTM D3350" is revised to read "ASTM D3035".

In the fourth paragraph, "ASTM D3505" is revised to read "ASTM D3035".

6-02.3(26)G Tensioning

Item number 1 of the second paragraph is revised to read:

1. All concrete has reached a compressive strength of at least 4,000 psi or the strength specified in the Plans. When tensioning takes place prior to 28-day compressive strength testing on concrete sampled in accordance with Section 6-02.3(25)H, compressive strength shall be verified on field cured cylinders in accordance with the FOP for AASHTO T23.

6-02.3(27)A Use of Self-Consolidating Concrete for Precast Units

Item number 2 of the first paragraph is revised to read:

2. Precast reinforced concrete three-sided structures, box culverts and split box culverts in accordance with Section 7-02.3(6).

6-03.AP6

Section 6-03, Steel Structures

January 3, 2017

6-03.3(33) Bolted Connections

In this section, "AASHTO M253" is revised to read "ASTM F3125 Grade A490", "ASTM F1852" is revised to read "ASTM F3125 Grade F1852", and "ASTM A325" is revised to read "ASTM F3125 Grade A325".

In the headings of Table 3, "A 325" is revised to read "ASTM F3125 Grade A325".

In the headings of Table 3, "M 253" is revised to read "ASTM F3125 Grade A490".

6-05.AP6

Section 6-05, Piling

August 1, 2016

In this section, the words “capacity” and “capacities” are replaced with “resistance” and “resistances”, respectively.

6-05.3(1) Piling Terms

The third paragraph is revised to read:

Overdriving – Over-driving of piles occurs when the ultimate bearing resistance calculated from the equation in Section 6-05.3(12), or the wave equation driving criteria if applicable, exceeds the ultimate bearing resistance required in the Contract in order to reach the minimum tip elevation specified in the Contract, or as required by the Engineer.

The first sentence of the last paragraph is revised to read:

Minimum Tip Elevation – The minimum tip elevation is the elevation to which the pile tip shall be driven.

6-05.3(3)A Casting and Stressing

The last sentence of the third paragraph is revised to read:

If the corrective action is not acceptable to the Engineer, the piling(s) will be subject to rejection by the Engineer.

6-05.3(5) Manufacture of Steel Piles

This section is supplemented with the following new paragraph:

At least 14-days prior to the start of production of the piling, the Contractor shall advise the Engineer of the production schedule. The Contractor shall give the Inspector safe and free access to the Work. If the Inspector observes any nonspecification Work or unacceptable quality control practices, the Inspector will advise the plant manager. If the corrective action is not acceptable to the Engineer, the piling(s) will be subject to rejection by the Engineer.

6-05.3(9)A Pile Driving Equipment Approval

The first sentence of the second paragraph is revised to read:

The Contractor shall submit Type 2E Working Drawings consisting of a wave equation analysis for all pile driving systems used to drive piling with required maximum driving resistances of greater than 300 tons.

6-07.AP6

Section 6-07, Painting

August 7, 2017

6-07.3(2) Submittals

This section is revised to read:

1
2 The Contractor shall submit a painting plan consisting of one comprehensive submittal
3 including all components described in this Section. The Contractor shall submit Type 2
4 Working Drawings of the painting plan components.

5
6 For shop application of paint, the painting plan shall include the documents and
7 samples listed in Sections 6-07.3(2)B, 6-07.3(2)C, and 6-07.3(2)E.

8
9 For field application of paint, the painting plan shall include the documents and
10 samples listed in Section 6-07.3(2)A through 6-07.3(2)F.

11 12 **6-07.3(2)A Work Force Qualifications Submittal Component**

13 Item number 2 is revised to read:

- 14
15 2. Resumé of qualifications and contact information for the Contractor's on-site
16 supervisors. Each on-site supervisor shall have 3 years' minimum of industrial
17 painting field experience with 1 year minimum of field supervisory or management
18 experience in bridge painting projects.

19 20 **6-07.3(2)D Hazardous Waste Containment, Collection, Testing, and Disposal** 21 **Submittal Component**

22 This section is revised to read:

23
24 The hazardous waste containment, collection, testing, and disposal submittal
25 component of the painting plan shall include the following:

- 26
27 1. Abrasive blasting containment system attachment and support in accordance
28 with Section 6-07.3(10)A, with a complete description of each attachment
29 device.
30
31 2. Details of jobsite material storage facilities and containment waste storage
32 facilities, including location, security, and environmental control.
33
34 3. Methods and materials used to contain, collect, and dispose of all
35 containment waste and all construction-related waste, including transportation
36 of waste.
37
38 4. Details of the containment waste sampling plan conforming to WAC 173-303
39 for waste designated as dangerous waste or extremely hazardous waste.
40
41 5. The name of, and contact information for, the accredited analytical laboratory
42 performing the testing of the containment waste samples in accordance with
43 Section 6-07.3(10)F.
44
45 6. Process for tracking the disposal of hazardous waste, including a sample form
46 of the tracking documentation.
47
48 7. When a wind speed threshold is specified, a description of the method to
49 lower or withdraw tarps, plastic exterior, and other containment components

1 presenting an exposed face to wind, and the estimated time required to
2 accomplish this action.

- 3
4 8. Provisions for dust and debris collection, ventilation, and auxiliary lighting
5 within the containment system.
6

7 **6-07.3(2)E Cleaning and Surface Preparation Equipment Submittal**
8 **Component**

9 This section, including title, is revised to read:

10
11 **6-07.3(2)E Cleaning and Surface Preparation Submittal Component**

12 The cleaning and surface preparation submittal component of the painting plan shall
13 include the following:

- 14
15 1. Details of the abrasive blast cleaning operation, including:
16
17 a. Description of the abrasive blast cleaning procedure.
18
19 b. Type, manufacturer, and brand of abrasive blast material and all
20 associated additives, including Materials Safety Data Sheets (MSDS).
21
22 c. Description of the abrasive blast cleaning equipment to be used.
23

24 **6-07.3(3)A Quality Control and Quality Assurance for Shop Application of**
25 **Paint**

26 In this section, "approved" is revised to read "accepted".
27

28 **6-07.3(3)B Quality Control and Quality Assurance for Field Application of**
29 **Paint**

30 The first sentence of the first paragraph is revised to read:

31
32 For field application of paint, the Contractor shall conduct quality control inspections as
33 required by SSPC-PA 1, using the personnel and the processes outlined in the painting
34 plan.
35

36 The second paragraph is revised to read:

37
38 A Type 1 Working Drawing consisting of the Contractor's daily quality control report,
39 signed and dated by the Contractor's quality control inspector, accompanied by copies
40 of the test results of quality control tests performed on the work covered by the daily
41 quality control report, shall be submitted before the end of the next day's work shift.
42

43 In the third paragraph, "approval" is revised to read "acceptance".
44

45 Item number 2 of the fourth paragraph is deleted.
46

47 In the fourth paragraph, items 3, 4 and 5 are renumbered to 2, 3 and 4, respectively.
48

49 **6-07.3(9)F Shop Surface Cleaning and Preparation**

50 In the first sentence, "approved" is revised to read "accepted".

1
2 **6-07.3(9)G Application of Shop Primer Coat**

3 In the first sentence of the first paragraph, "approval" is revised to read "acceptance".

4
5 The last sentence of the first paragraph is revised to read:

6
7 Primer shall be applied with the spray nozzles and pressures recommended by the
8 manufacturer of the paint system, to attain the film thicknesses specified.

9
10 In the third paragraph, the first sentence is revised to read:

11
12 The Contractor shall provide access to the steel to permit inspection by the Engineer.

13
14 **6-07.3(9)I Application of Field Coatings**

15 The following new paragraph is inserted before to the first paragraph:

16
17 An on-site supervisor shall be present for each work shift at the bridge site.

18
19 In the fourth paragraph (after the preceding Amendment is applied), "approved" is deleted
20 from the first sentence.

21
22 The first sentence of the last paragraph is revised to read:

23
24 All paint damage that occurs shall be repaired in accordance with the manufacturer's
25 written recommendations.

26
27 **6-07.3(10)A Containment**

28 The first four paragraphs are deleted and replaced with the following three paragraphs:

29
30 The containment system shall be in accordance with SSPC Technology Guide No. 6,
31 Guide for Containing Surface Preparation Debris Generated During Paint Removal
32 Operations Class 1. The containment system shall fully enclose the steel to be painted
33 and not allow any material to escape the containment system. The Contractor shall
34 protect the surrounding environment from all debris or damage resulting from the
35 Contractor's operations.

36
37 Except as otherwise specified in the Contract, the containment length shall not exceed
38 the length of a span (defined as pier to pier). The containment system shall not cause
39 any damage to the existing structure. Attachment devices shall not mark or otherwise
40 damage the steel member to which they are attached. Field-welding of attachments to
41 the existing structure will not be allowed. The Contractor shall not drill holes into the
42 existing structure or through existing structural members except as shown in the
43 Contractor's painting plan Working Drawing submittal.

44
45 Emissions shall be assessed by Visible Emission Observations (Method A) in SSPC
46 Technology Update No. 7 Section 6.2 and shall be limited to the Level A Acceptance
47 Criteria Option Level 0 Emissions standard. If visible emissions occur or if failure to the
48 containment system occurs or if signs of failure to the containment system are present,
49 the Contractor shall stop work immediately. Work shall not resume until the failure has
50 been corrected to the satisfaction of the Engineer.

1
2 **6-07.3(10)B Bird Guano, Fungus, and Vegetation Removal**

3 The last paragraph is revised to read:

4
5 Bird guano, bird nesting materials, fungus, and vegetative growth shall be disposed of
6 at a land disposal site accepted by the Engineer. The Contractor shall submit a Type 1
7 Working Drawing consisting of a copy of the disposal receipt, which shall include a
8 description of the disposed material.
9

10 **6-07.3(10)C Dry Cleaning**

11 This section is revised to read:

12
13 Dry cleaning shall include removal of accumulated dirt and debris on the surfaces to be
14 painted. Collected dirt and debris shall be disposed of at a land disposal site accepted
15 by the Engineer. The Contractor shall submit a Type 1 Working Drawing consisting of a
16 copy of the disposal receipt, which shall include a description of the disposed material.
17

18 **6-07.3(10)D Surface Preparation Prior to Overcoat Painting**

19 The second paragraph is revised to read:

20
21 Following any preparation by SSPC-SP1, all steel surfaces to be painted shall be
22 prepared in accordance with SSPC-SP 7, brush-off blast cleaning. Surfaces
23 inaccessible to brush-off blast shall be prepared in accordance with SSPC-SP 15,
24 commercial grade power tool cleaning, as allowed by the Engineer.
25

26 The first sentence of the third paragraph is revised to read:

27
28 Following brush-off blast cleaning, the Contractor shall perform spot abrasive blast
29 cleaning in accordance with SSPC-SP 6, commercial blast cleaning.
30

31 In the fifth sentence of the third paragraph, "approved" is revised to read "accepted".

32
33 The second sentence of the last paragraph is deleted.
34

35 **6-07.3(10)F Collecting, Testing, and Disposal of Containment Waste**

36 The third, fourth and fifth paragraphs are deleted and replaced with the following two new
37 paragraphs:
38

39 Containment waste is defined as all paint chips and debris removed from the steel
40 surface and all abrasive blast media, as contained by the containment system. After all
41 waste from the containment system has been collected, the Contractor shall collect
42 representative samples of the components that field screening indicates are lead-
43 contaminated material. The Contractor shall collect at least one representative sample
44 from each container. The Contractor may choose to collect a composite sample of
45 each container, but the composite sample must consist of several collection points (a
46 minimum of 3 random samples) that are representative of the entire contents of the
47 container and representative of the characteristics of the type of waste in the container.
48 In accordance with WAC 173-303-040, a representative sample means "a sample
49 which can be expected to exhibit the average properties of the sample source."
50

The debris shall be tested for metals using the Toxicity Characteristics Leaching Procedure (TCLP) and EPA Methods 1311 and 6010. At a minimum, the materials should be analyzed for the Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). Pursuant to the Dangerous Waste (DW) Regulations Chapter 173-303-90(8)(c) WAC, "Any waste that contains contaminants which occur at concentrations at or above the DW threshold must be designated as DW." All material within each individual container or containment system that designates as DW shall be disposed of at a legally permitted Subtitle C Hazardous Waste Landfill. All material within each individual container or containment system that designate below the DW threshold, will be designated as "Solid Waste" and shall be disposed of at a legally permitted Subtitle D Landfill. Disposal shall be in accordance with WAC 173-303 for waste designated "Dangerous Waste" and pursuant to WAC 173-350 for waste designated as "Solid Waste".

The first sentence of the fifth to last paragraph is revised to read:

The Contractor shall submit a Type 1 Working Drawing consisting of two copies of the transmittal documents or bill of lading listing the waste material shipped from the construction site to the waste disposal site.

6-07.3(10)G Treatment of Pack Rust and Gaps

In this section, "approved by the Engineer" is revised to read "accepted by the Engineer".

6-07.3(10)H Paint System

In the last paragraph, "approved" is revised to read "allowed".

6-07.3(10)I Paint Color

In the last sentence, "approved" is revised to read "allowed".

6-07.3(10)J Mixing and Thinning Paint

In the third paragraph, "approved" is revised to read "allowed".

6-07.3(10)O Applying Field Coatings

The following new paragraph is inserted before the first paragraph:

An on-site supervisor shall be present for each work shift at the bridge site.

In the sixth paragraph (after the preceding Amendment is applied), "approved" and "approval" are revised to read "accepted" and "acceptance", respectively.

In the seventh paragraph (after the preceding Amendment is applied), "approval" is revised to read "concurrence".

The second sentence of the last paragraph is revised to read:

Any plank removal or cutting shall be done with the concurrence of the Engineer.

6-07.3(10)P Field Coating Repair

In the second to last sentence, "approved" is revised to read "accepted".

The last sentence is deleted.

6-07.3(11)A Painting of Galvanized Surfaces

In the last sentence, "approval" is revised to read "acceptance".

6-07.5 Payment

The following new paragraph is inserted after the paragraph following the Bid item

"Cleaning and Painting - _____", lump sum:

When a weather station is specified, all costs in connection with furnishing, installing, operating, and removing the weather station, including furnishing mounting hardware and repeaters, accessories and wireless display console units, processing and submitting daily weather data reports, maintenance and upkeep, shall be included in the lump sum Contract price for "Cleaning And Painting – _____".

6-08.AP6

Section 6-08, Waterproofing

January 3, 2017

This section and all subsections, including title, is revised to read:

6-08 Bituminous Surfacing on Structure Decks

6-08.1 Description

This Work consists of removing and placing Hot Mix Asphalt (HMA) or Bituminous Surface Treatment (BST) directly on or over a Structure. This Work also includes performing concrete bridge deck repair, applying waterproofing membrane, and sealing paving joints.

6-08.2 Materials

Materials shall meet the requirements of the following sections:

Bituminous Surface Treatment	5-02.2
Hot Mix Asphalt	5-04.2
Joint Sealants	9-04.2
Closed Cell Foam Backer Rod	9-04.2(3)A
Waterproofing Membrane (Deck Seal)	9-11
Bridge Deck Repair Material	9-20.5

6-08.3 Construction Requirements

6-08.3(1) Definitions

Adjusted Removal Depth – the Bituminous Pavement removal depth specified by the Engineer to supersede the Design Removal Depth after review of the Contractor survey of the existing Bituminous Pavement grade profile.

Bituminous Pavement – the surfacing material containing an asphalt binder.

Design Removal Depth – the value shown in the "pavement schedule" or elsewhere in the Plans to indicate the design thickness of Bituminous Pavement to be removed.

Final Grade Profile – the compacted finished grade surface of completed Bituminous Pavement surfacing consisting of a vertical profile and superelevation cross-slope, developed by the Engineer for Grade Controlled Structure Decks based on the Contractor survey.

Grade Controlled – a Structure Deck requiring restriction of Bituminous Pavement work, including restriction of pavement removal methods and restriction of overlay pavement thicknesses.

Structure Deck – the bridge deck (concrete or timber), bridge approach slab, top of concrete box culvert, or other concrete surfaces over or upon which existing Bituminous Pavement is removed and new Bituminous Pavement is applied.

6-08.3(2) Contractor Survey for Grade Controlled Structure Decks

Prior to removing existing Bituminous Pavement from a Grade Controlled Structure Deck, the Contractor shall complete a survey of the existing surface for use in establishing the existing cross section and grade profile elevations. When removal of Bituminous Pavement is to be achieved by rotary milling/planing, the Contractor's survey shall also include the depths of the existing surfacing at each survey point.

The Contractor is responsible for all calculations, surveying, installation of control points, and measuring required for setting, maintaining and resetting equipment and materials necessary for the construction of the overlay to the Final Grade Profile.

6-08.3(2)A Survey Requirements

The Contractor shall establish at least two primary survey control points for controlling actual Bituminous Pavement removal depth and the Final Grade Profile. Horizontal control shall be by station and offset which shall be tied to either the Roadway centerline or the Structure centerline. Vertical control may be an assumed datum established by the Contractor.

Primary control points shall be described by station or milepost and offset on the baseline selected by the Contractor. The Contractor may expand the survey control information to include secondary horizontal and vertical control points as needed for the project.

Survey information collected shall include station or milepost, offset, and elevation for each lane line and curb line. Survey information shall be collected at even 20 foot station intervals, and along the centerline of each bridge expansion joint. The survey shall extend 300'-0" beyond the bridge back of pavement seat or end of Structure Deck. The survey information shall include the top of Bituminous Pavement elevation and, when rotary milling/planing equipment is used, the corresponding depth of Bituminous Pavement to the Structure Deck. The Contractor shall ensure a surveying accuracy to within ± 0.01 feet for vertical control and ± 0.2 feet for horizontal control.

Voids in HMA created by the Contractor's Bituminous Pavement depth measurements shall be filled by material conforming to Section 9-20 or another material acceptable to the Engineer.

6-08.3(2)B Survey Submittal

The Contractor's survey records shall include descriptions of all survey control points including station/milepost, offset, and elevations of all secondary control points. The Contractor shall maintain survey records of sufficient detail to allow the survey to be reproduced. The Contractor shall submit a Type 2 Working Drawing consisting of the compiled survey records and information. Survey data shall be submitted as an electronic file in Microsoft Excel format.

6-08.3(2)C Final Grade Profile and Adjusted Removal Depth

Based on the results of the survey, the Engineer may develop a Final Grade Profile and Adjusted Removal Depth. If they are developed, the Final Grade Profile and Adjusted Removal Depth will be provided to the Contractor within three working days after receiving the Contractor's survey information. When provided, the Adjusted Removal Depth supersedes the Design Removal Depth to become the Bituminous Pavement removal depth for that Structure Deck.

6-08.3(3) General Bituminous Pavement Removal Requirements

The Contractor shall remove Bituminous Pavement and associated deck repair material from Structure Decks to the horizontal limits shown in the Plans and to either the specified or adjusted Bituminous Pavement removal depth as applicable.

Removal of Bituminous Pavement within 12-inches of existing permanent features that limit the reach of the machine or the edge of the following items shall be by hand or by hand operated (nominal 30-pounds class) power tools: existing bridge expansion joint headers; steel expansion joint assemblies; concrete butt joints between back of pavement seats and bridge approach slabs, bridge drain assemblies; three beam post steel anchorage assemblies fastened to the side or top of the Structure Deck.

When removing Bituminous Pavement with a planer, Section 5-04.3(14) shall apply. If the planer contacts the Structure Deck in excess of the specified planing depth tolerance, or contacts steel reinforcing bars at any time, the Contractor shall immediately cease planing operations and notify the Engineer. Planing operations shall not resume until completion of the appropriate adjustments to the planing machine and receiving the Engineer's concurrence to resume.

6-08.3(4) Partial Depth Removal of Bituminous Pavement from Structure Decks

The depth of surfacing removal, as measured to the bottom of the lowest milling groove generated by the rotary milling/planing machine shall be +0.01, -0.02-feet of the specified or Adjusted Removal Depth as applicable.

1 **6-08.3(5) Full Depth Removal of Bituminous Pavement from Structure**
2 **Decks**

3 **6-08.3(5)A Method of Removal**

4 The Contractor shall perform full depth removal by a method that does
5 not damage or remove the Structure Deck in excess of the specified
6 Bituminous Pavement removal tolerance. The Contractor shall submit a
7 Type 2 Working Drawing consisting of the proposed methods and
8 equipment to be used for full depth removal.
9

10 **6-08.3(5)B Planer Requirements for Full Depth Removal**

11 The final planed surface shall have a finished surface with a tolerance of
12 +0.01, -0.02 feet within the planed surface profile, as measured from a
13 10-foot straight edge. Multiple passes of planing to achieve smoothness
14 will not be allowed.
15

16 In addition to Section 6-08.3(3), the planing equipment shall conform to
17 the following additional requirements:
18

- 19 1. The cutting tooth spacing on the rotary milling head shall be less
20 than or equal to ¼ inch.
21
- 22 2. The rotary milling/planing machine shall have cutting teeth that
23 leave a uniform plane surface at all times. All teeth on the mill
24 head shall be kept at a maximum differential tolerance of ⅜-inch
25 between the shortest and longest tooth, as measured by a
26 straight edge placed the full width of the rotary milling head.
27
- 28 3. Cutting tips shall be replaced when 30 percent of the total length
29 of the cutting tip material remains.
30

31 Prior to each day's Bituminous Pavement removal operations, the
32 Contractor shall confirm to the satisfaction of the Engineer that the rotary
33 head cutting teeth are within the specified tolerances.
34

35 **6-08.3(5)C Structure Deck Cleanup after Bituminous Pavement**
36 **Removal**

37 Waterproofing membrane that is loose or otherwise not firmly bonded to
38 the Structure Deck shall be removed as an incidental component of the
39 Work of surfacing removal. Existing waterproofing membrane bonded to
40 the Structure Deck need not be removed.
41

42 **6-08.3(6) Repair of Damage due to Bituminous Pavement Removal**
43 **Operations**

44 All concrete bridge deck, pavement seat, and steel reinforcing bar damage
45 due to the Contractor's surfacing removal operations shall be repaired by the
46 Contractor in accordance with Section 1-07.13, and as specified below.
47

48 Damaged concrete in excess of the specified Bituminous Pavement removal
49 tolerance shall be repaired in accordance with Section 6-08.3(7), with the
50 bridge deck repair material placed to the level of the surrounding bridge deck
51 and parallel to the final grade paving profile.

Damaged steel reinforcing bar shall be repaired as follows:

1. Damage to steel reinforcing bar resulting in a section loss less than 20-percent of the bar with no damage to the surrounding concrete shall be left in place and shall be repaired by removing the concrete to a depth $\frac{3}{4}$ -inches around the top steel reinforcing bar and placing bridge deck repair material accepted by the Engineer to the level of the bridge deck and parallel to the final grade paving profile.
2. Damage to steel reinforcing bar resulting in a section loss of 20-percent or more in one location, bars partially or completely removed from the bridge deck, or where there is a lack of bond to the concrete, shall be repaired by removing the adjacent concrete and splicing a new bar of the same size. Concrete shall be removed to provide a $\frac{3}{4}$ -inch minimum clearance around the bars. The splice bars shall extend a minimum of 40 bar diameters beyond each end of the damage.

6-08.3(7) Concrete Deck Repair

This Work consists of repairing the concrete deck after Bituminous Pavement has been removed.

6-08.3(7)A Concrete Deck Preparation

The Contractor, with the Engineer, shall inspect the exposed concrete deck to establish the extent of bridge deck repair in accordance with Section 6-09.3(6), except item 4 in Section 6-09.3(6) does not apply. Areas of Structure Deck left with existing well bonded waterproof membrane after full depth Bituminous Pavement removal are exempt from this inspection requirement.

All loose and unsound concrete within the repair area shall be removed with jackhammers or chipping hammers no more forceful than the nominal 30 pounds class, or other mechanical means acceptable to the Engineer, and operated at angles less than 45 degrees as measured from the surface of the deck to the tool. If unsound concrete exists around the existing steel reinforcing bars, or if the bond between concrete and steel reinforcing bar is broken, the Contractor shall remove the concrete to provide a $\frac{3}{4}$ inch minimum clearance to the bar. The Contractor shall take care to prevent damage to the existing steel reinforcing bars and concrete to remain.

After removing sufficient concrete to establish the limits of the repair area, the Contractor shall make $\frac{3}{4}$ inch deep vertical saw cuts and maintain square edges at the boundaries of the repair area. The exposed steel reinforcing bars and concrete in the repair area shall be abrasive blasted and blown clean just prior to placing the bridge deck repair material.

6-08.3(7)B Ultra-Low Viscosity, Two-Part Liquid, Polyurethane-Hybrid Polymer Concrete

The ultra-low viscosity, two-part liquid, polyurethane-hybrid polymer concrete shall be mixed in accordance with the manufacturer's recommendations.

Aggregate shall conform to the gradation limit requirements recommended by the manufacturer. The aggregate and the ultra-low viscosity, two-part liquid, polyurethane-hybrid polymer concrete shall be applied to the repair areas in accordance with the sequence and procedure recommended by the manufacturer.

All repairs shall be float finished flush with the surrounding surface within a tolerance of $\frac{1}{8}$ inch of a straight edge placed across the full width and breadth of the repair area.

6-08.3(7)C Pre-Packaged Cement Based Repair Mortar

The Contractor shall mix the pre-packaged cement based repair mortar using equipment, materials and proportions, batch sizes, and process as recommended by the manufacturer.

All repairs shall be float finished flush with the surrounding surface within a tolerance of $\frac{1}{8}$ inch of a straight edge placed across the full width and breadth of the repair area.

6-08.3(7)D Cure

All bridge deck repair areas shall be cured in accordance with the manufacturer's recommendations and attain a minimum compressive strength of 2,500 psi before allowing vehicular and foot traffic on the repair and placing waterproofing membrane on the bridge deck over the repair.

6-08.3(8) Waterproof Membrane for Structure Decks

This work consists of furnishing and placing a waterproof sheet membrane system over a prepared Structure Deck prior to placing an HMA overlay. The waterproof membrane system shall consist of a sheet membrane adhered to the Structure Deck with a primer.

The Contractor shall comply with all membrane manufacturer's installation recommendations.

6-08.3(8)A Structure Deck Preparation

The Structure Deck and ambient air temperatures shall be above 50°F and the Structure Deck shall be surface-dry at the time of the application of the primer and membrane.

All areas of a Structure Deck that have fresh cast bridge deck concrete less than 28 days old (not including bridge deck repair concrete placed in accordance with Section 6-08.3(7)) shall cure for a period of time recommended by the membrane manufacturer, or as specified by the Engineer, before application of the membrane.

The entire Structure Deck and the sides of the curb and expansion joint headers to the height of the HMA overlay shall be free of all foreign material such as dirt, grease, etc. Prior to applying the primer or sheet membrane, all dust and loose material shall be removed from the Structure Deck with compressed air. All surface defects such as spalled areas, cracks, protrusions, holes, sharp edges, ridges, etc., and other surface imperfections greater than ¼ inch in width shall be corrected prior to application of the membrane.

6-08.3(8)B Applying Primer

The primer shall be applied to the cleaned deck surfaces at the rate according to the procedure recommended by the membrane manufacturer. All surfaces to be covered by the membrane shall be thoroughly and uniformly coated with primer. Structure Deck areas left with existing well bonded waterproof membrane after bituminous surfacing removal shall receive an application of primer in accordance with the membrane manufacturer's recommendations. Precautionary measures shall be taken to ensure that pools and thick layers of primer are not left on the deck surface. The membrane shall not be applied until the primer has cured or volatile material has substantially dissipated, in accordance with the membrane manufacturer's recommendations.

The primer and waterproof membrane shall extend from the bridge deck up onto the curb face and expansion joint header face the thickness of the HMA overlay. The membrane shall adhere to the vertical surface.

6-08.3(8)C Placing Waterproof Membrane

Membrane application shall begin at the low point on the deck, and continue in a lapped shingle pattern. The overlap shall be a minimum of six inches or greater if recommended by the membrane manufacturer. Membrane seams shall be sealed as recommended by the membrane manufacturer. Hand rollers or similar tools shall be used on the applied membrane to assure firm and uniform contact with the primed Structure surfaces.

The fabric shall be neatly cut and contoured at all expansion joints and drains. The cuts at bridge drains shall be two right angle cuts made to the inside diameter of the bridge deck drain outlet, after which the corners of the waterproof membrane shall be turned down into the drains and laid in a coating of primer.

6-08.3(8)D Membrane Repair and Protection

The waterproof membrane will be visually inspected by the Engineer for uniformity, tears, punctures, bonding, bubbles, wrinkles, voids and other defects. All such deficiencies shall be repaired in accordance with the membrane manufacturer's recommendations prior to placement of the HMA overlay.

The membrane material shall be protected from damage due to the paving operations in accordance with the membrane manufacturer's

recommendations. No traffic or equipment except that required for the actual waterproofing and paving operations will be permitted to travel or rest on the membrane until it is covered by the HMA overlay. The use of windrows is not allowed for laydown of HMA on a membrane.

Where waterproofing membrane is placed in stages or applied at different times, a strip of temporary paper shall be used to protect the membrane overlap from the HMA hand removal methods.

6-08.3(9) Placing Bituminous Pavement on Structure Decks

HMA overlay shall be applied on Grade Controlled Structure Decks using reference lines for vertical control in accordance with Section 5-04.3(3)C.

The compacted elevation of the HMA overlay on Structure Decks shall be within ± 0.02 feet of the specified overlay thickness or Final Grade Profile as applicable. Deviations from the final grade paving profile in excess of the specified tolerance and areas of non-conforming surface smoothness shall be corrected in accordance with Section 5-04.3(13).

Final grade Roadway transitions to a Structure Deck with Bituminous Pavement shall not exceed a 0.20 percent change in grade in accordance with the bridge deck transition for HMA overlay Standard Plan, unless shown otherwise in the Plans.

Final grade compacted HMA elevations shall be higher than an adjacent concrete edge by $\frac{1}{4}$ inch $\pm \frac{1}{8}$ inch at all expansion joint headers and concrete butt joints as shown in the concrete to asphalt butt joint details of the bridge paving joint seals Standard Plan. This also applies to steel edges within the limits of the overlay such as bridge drain frames and steel joint riser bars at bridge expansion joints.

6-08.3(9)A Protection of Structure Attachments and Embedments

The Contractor is responsible for protecting all Structure attachments and embedments from the application of BST and HMA.

Drainage inlets that are to remain open, and expansion joints, shall be cleaned out immediately after paving is completed. Materials passing through expansion joints shall be removed from the bridge within 10 working days.

All costs incurred by the Contractor in protective measures and clean up shall be included in the unit Contract prices for the associated Bid items of Work.

6-08.3(10) HMA Compaction on Structure Decks

Compaction of HMA on Structure Decks shall be in accordance with Section 5-04.3(10).

Work rejected in accordance with Section 5-04.3(11) shall include the materials, work, and incidentals to repair an existing waterproof membrane damaged by the removal of the rejected work.

1
2 **6-08.3(11) Paved Panel Joint Seals and HMA Sawcut and Seal**

3 Bridge paving joint seals shall be installed in accordance with Section 5-
4 04.3(12)B and the details shown in the Plans and Standard Plans.
5

6 When concrete joints are exposed after removal of Bituminous Pavement, the
7 joints shall be cleaned and sealed in accordance with Section 5-01.3(8) and
8 the paved panel joint seal details of the bridge paving joint seals Standard
9 Plan, including placement of the closed cell backer rod at the base of the
10 cleaned joint. If waterproofing membrane is required, the membrane shall be
11 slack or folded at the concrete joint to allow for Structure movements without
12 stress to the membrane. After placement of the HMA overlay, the second
13 phase of the paved panel joint seal shall be completed by sawing the HMA
14 and sealing the sawn joint in accordance with Section 5-04.3(12)B2.
15

16 **6-08.4 Measurement**

17 Removing existing Bituminous Pavement from Structure Decks will be measured
18 by the square yard of Structure Deck surface area with removed overlay.
19

20 Bridge deck repair will be measured by the square foot surface area of deck
21 concrete removed with the measurement taken at the plane of the top mat of steel
22 reinforcing bars.
23

24 Waterproof membrane will be measured by the square yard surface area of
25 Structure Deck and curb and header surface area covered by membrane.
26

27 **6-08.5 Payment**

28 Payment will be made for each of the following Bid items when they are included in
29 the Proposal:
30

31 "Structure Surveying", lump sum.
32

33 "Removing Existing Overlay From Bridge Deck____", per square yard.
34 The unit Contract price per square yard for "Removing Existing Overlay From
35 Bridge Deck____", shall be full pay for performing the Work as specified for full
36 removal of Bituminous Pavement on Structure Decks, including the removal of
37 existing waterproof membrane and disposing of materials.
38

39 "Bridge Deck Repair Br. No.____", per square foot.
40 The unit Contract price per square foot for "Bridge Deck Repair Br. No.____"
41 shall be full pay for performing the Work as specified, including removing and
42 disposing of the concrete within the repair area and furnishing, placing,
43 finishing, and curing the repair concrete.
44

45 "Waterproof Membrane Br. No.____", per square yard.
46 The unit Contract price per square yard for "Waterproof Membrane Br.
47 No.____" shall be full pay for performing the Work as specified, including
48 repairing any damaged or defective waterproofing membrane and repair of
49 damaged HMA overlay.
50

6-09.AP6

Section 6-09, Modified Concrete Overlays

April 4, 2016

6-09.3(8)A Quality Assurance for Microsilica Modified and Fly Ash Modified Concrete Overlays

The first sentence of the first paragraph is revised to read the following two new sentences:

The Engineer will perform slump, temperature, and entrained air tests for acceptance in accordance with Section 6-02.3(5)D and as specified in this Section after the Contractor has turned over the concrete for acceptance testing. Concrete samples for testing shall be supplied to the Engineer in accordance with Section 6-02.3(5)E.

The last paragraph is deleted.

6-09.3(8)B Quality Assurance for Latex Modified Concrete Overlays

The first two paragraphs are deleted and replaced with the following:

The Engineer will perform slump, temperature, and entrained air tests for acceptance in accordance with Section 6-02.3(5)D and as specified in this Section after the Contractor has turned over the concrete for acceptance testing. The Engineer will perform testing as the concrete is being placed. Samples shall be taken on the first charge through each mobile mixer and every other charge thereafter. The sample shall be taken after the first 2 minutes of continuous mixer operation. Concrete samples for testing shall be supplied to the Engineer in accordance with Section 6-02.3(5)E.

The second to last sentence of the last paragraph is revised to read:

Recommendations made by the technical representative on or off the jobsite shall be adhered to by the Contractor.

6-10.AP6

Section 6-10, Concrete Barrier

August 7, 2017

6-10.3(5) Temporary Concrete Barrier

This section title is revised to read:

Temporary Barrier

The first paragraph is revised to read:

For temporary barrier, the Contractor may use precast concrete barrier or temporary steel barrier. Temporary concrete barrier shall comply with Standard Plan requirements and cross-sectional dimensions, except that: (1) it may be made in other lengths than those shown in the Standard Plan, and (2) it may have permanent lifting holes no larger than 4 inches in diameter or lifting loops. Temporary steel barrier shall be certified that it meets the requirements of NCHRP 350 or MASH Test Level 3 or 4 and shall be installed in accordance with the manufacturer's recommendations.

1 **6-10.4 Measurement**

2 The first sentence of the second paragraph is revised to read:

3
4 Temporary barrier will be measured by the linear foot along the completed line and
5 slope of the barrier, one time only for each setup of barrier protected area.
6

7 **6-10.5 Payment**

8 The Bid item "Temporary Conc. Barrier", per linear foot, and the paragraph following this Bid
9 item, is revised to read:

10
11 "Temporary Barrier", per linear foot.

12
13 The unit Contract price per linear foot for "Temporary Barrier" shall be full pay for all
14 costs, including furnishing, installing, connecting, anchoring, maintaining, temporary
15 storage, and final removal of the temporary barrier.
16

17 6-12.AP6

18 **Section 6-12, Noise Barrier Walls**
19 **January 3, 2017**

20 **6-12.3(9) Access Doors and Concrete Landing Pads**

21 The first sentence of the last paragraph is revised to read:

22
23 The Contractor shall construct concrete landing pads for each access door location as
24 shown in the Plans.
25

26 **6-12.5 Payment**

27 In the paragraph following the bid item "Noise Barrier Wall Access Door", per each,
28 "concrete landing pad" is revised to read "concrete landing pads".
29

30 6-14.AP6

31 **Section 6-14, Geosynthetic Retaining Walls**
32 **January 3, 2017**

33 **6-14.3(2) Submittals**

34 The first sentence of the first paragraph is revised to read:

35
36 The Contractor shall submit Type 2E Working Drawings consisting of detailed plans for
37 each wall.
38

39 **6-14.5 Payment**

40 The bid item "Concrete Fascia Panel", per square foot, and the paragraph following this bid
41 item are revised to read:

42
43 "Concrete Fascia Panel For Geosynthetic Wall", per square foot.
44

45 All costs in connection with constructing the concrete fascia panels as specified shall
46 be included in the unit Contract price per square foot for "Concrete Fascia Panel For
47 Geosynthetic Wall", including all steel reinforcing bars, premolded joint filler,
48 polyethylene bond breaker strip, joint sealant, PVC pipe for weep holes, exterior

1 surface finish, and pigmented sealer (when specified), constructing and placing the
2 concrete footing, edge beam, anchor beam, anchor rod assembly, and backfill.

3
4 6-19.AP6

5 **Section 6-19, Shafts**

6 **January 3, 2017**

7 **6-19.3 Construction Requirements**

8 This section is supplemented with the following new subsection:

9 10 **6-19.3(10) Engineer's Final Acceptance of Shafts**

11 The Engineer will determine final acceptance of each shaft, based on the
12 nondestructive QA test results and analysis for the tested shafts, and will provide a
13 response to the Contractor within 3 working days after receiving the test results and
14 analysis submittal.

15 16 **6-19.3(1)B Nondestructive Testing of Shafts**

17 This section's content is deleted and replaced with the following new subsections:

18 19 **6-19.3(1)B1 Nondestructive Quality Assurance (QA) Testing of Shafts**

20 Unless otherwise specified in the Special Provisions, the Contractor shall perform
21 nondestructive QA testing of shafts, except for those constructed completely in the dry.
22 Either crosshole sonic log (CSL) testing in accordance with ASTM D 6760 or thermal
23 integrity profiling (TIP) testing in accordance with ASTM D 7949 shall be used.

24 25 **6-19.3(1)B2 Nondestructive Quality Verification (QV) Testing of Shafts**

26 The Contracting Agency may perform QV nondestructive testing of shafts that have
27 been QA tested by the Contractor. The Contracting Agency may test up to ten percent
28 of the shafts. The Engineer will identify the shafts selected for QV testing and the
29 testing method the Contracting Agency will use.

30
31 The Contractor shall accommodate the Contracting Agency's nondestructive testing.

32 33 **6-19.3(2) Shaft Construction Submittal**

34 This section is revised to read:

35
36 The shaft construction submittal shall be comprised of the following four components:
37 construction experience; shaft installation narrative; shaft slurry technical assistance;
38 and nondestructive QA testing personnel. The submittals shall be Type 2 Working
39 Drawings, except the shaft slurry technical assistance and nondestructive QA testing
40 personnel submittals shall be Type 1.

41
42 This section is supplemented with the following new subsection:

43 44 **6-19.3(2)D Nondestructive QA Testing Organization and Personnel**

45 The Contractor shall submit the names of the testing organizations, and the names of
46 the personnel who will conduct nondestructive QA testing of shafts. The submittal shall
47 include documentation that the qualifications specified below are satisfied. For TIP
48 testing, the testing organization is the group that performs the data analysis and

1 produces the final report. The testing organizations and the testing personnel shall
2 meet the following minimum qualifications:

- 3
- 4 1. The testing organization shall have performed nondestructive tests on a
5 minimum of three deep foundation projects in the last two years.
- 6
- 7 2. Personnel conducting the tests for the testing organization shall have a
8 minimum of one year experience in nondestructive testing and interpretation.
- 9
- 10 3. The experience requirements for the organization and personnel shall be
11 consistent with the testing methods the Contractor has selected for
12 nondestructive testing of shafts.
- 13
- 14 4. Personnel preparing test reports shall be a Professional Engineers, licensed
15 under Title 18 RCW, State of Washington, and in accordance with WAC 196-
16 23-020.
- 17

18 **6-19.3(3) Shaft Excavation**

19 The second paragraph is revised to read:

20
21 Shaft excavation shall not be started until the Contractor has received the Engineer's
22 acceptance for the reinforcing steel centralizers required when the casing is to be
23 pulled during concrete placement.

24
25 This section is supplemented with the following:

26
27 Except as otherwise noted, the Contractor shall not commence subsequent shaft
28 excavations until receiving the Engineer's acceptance of the first shaft, based on the
29 results and analysis of the nondestructive testing for the first shaft. The Contractor may
30 commence subsequent shaft excavations prior to receiving the Engineer's acceptance
31 of the first shaft, provided the following condition is satisfied:

32
33 The Engineer permits continuing with shaft construction based on the Engineer's
34 observations of the construction of the first shaft, including, but not limited to,
35 conformance to the shaft installation narrative in accordance with Section 6-
36 19.3(2)B, and the Engineer's review of Contractor's daily reports and Inspector's
37 daily logs concerning excavation, steel reinforcing bar placement, and concrete
38 placement.

39 40 **6-19.3(5)B Steel Reinforcing Bar Cage Centralizers**

41 This section is supplemented with the following new sentence:

42
43 The Contractor shall furnish and install additional centralizers as required to maintain
44 the specified concrete cover throughout the length of the shaft.

45 46 **6-19.3(5)C Concrete Cover Over Steel Reinforcing Bars**

47 In the table, the second column (including heading) is revised to read:
48

Minimum Concrete Cover, and Concrete Cover Tolerance, Except at Permanent Slip Casing (Inches)
3, -1½
4, -2
4, -2
6, -3

The following new paragraph is inserted after the table:

The concrete cover tolerances specified above apply to the concrete cover specified in the Plans, even if it exceeds the minimum concrete cover.

6-19.3(6) Access Tubes for Crosshole Sonic Log (CSL) Testing

This section title is revised to read:

6-19.3(6) Contractor Furnished Accessories for Nondestructive QA Testing

This section is supplemented with the following three new subsections:

6-19.3(6)D Shafts Requiring Thermal Wire

The Contractor shall furnish and install thermal wire in all shafts receiving the thermal wire method of TIP testing, except as otherwise noted in Section 6-19.3(1)B1.

6-19.3(6)E Thermal Wire and Thermal Access Points (TAPs)

The thermal wire and associated couplers shall be obtained from the source specified in the Special Provisions.

The Contractor shall securely attach the thermal wire to the interior of the reinforcement cage of the shaft in conformance with the supplier's instructions. At a minimum, one thermal wire shall be furnished and installed for each foot of shaft diameter, rounded to the nearest whole number, as shown in the Plans. The number of thermal wires for shaft diameters specified as "X feet 6 inches" shall be rounded up to the next higher whole number. The thermal wires shall be placed around the shaft, inside the spiral or hoop reinforcement, and tied to the vertical reinforcement with plastic "zip" ties at a maximum spacing of 2-feet. Steel tie wire shall not be used.

The thermal wire shall be installed in straight alignment and taut, but with enough slack to not be damaged during reinforcing cage lofting. The wires shall be as near to parallel to the vertical axis of the reinforcement cage as possible. The thermal wire shall extend from the bottom of the reinforcement cage to the top of the shaft, with 15-feet of slack wire provided above the top of shaft. Care shall be taken to prevent damaging the thermal wires during reinforcement cage installation and concrete placement operations in the shaft excavation.

After completing shaft reinforcement cage fabrication at the site and prior to installation of the cage into the shaft excavation, the Contractor shall install and connect thermal access points (TAPs) to the thermal wires. The TAPs shall record data for at least one hour after the cage is placed in the excavation to measure the slurry temperature and enable the steel and slurry temperatures to equilibrate prior to placing concrete in the

shaft. The TAPs shall record and store data every 15 minutes. The TAPs shall remain active for a minimum of 36 hours.

Prior to beginning concrete placement the TAPs shall be checked to ensure they are recording data and that the wires have not been damaged. If a TAP unit is not functioning due to a damaged wire, the Contractor shall repair or replace the wire. If a TAP unit fails or a wire breaks after concrete placement has started, the Contractor shall not stop the concrete placement operation to repair the wire.

6-19.3(6)F Use of Access Tubes for TIP Testing Under the Thermal Probe Method

The Contractor may use access tubes for TIP testing under the thermal probe method. Access tubes shall be cared for in accordance with Section 6-19.3(6)C. Prior to TIP testing under the thermal probe method, the water in each tube shall be removed, collected, and stored in an insulated container. The access tube shall be blown dry and swabbed to remove residual water. After TIP testing, the collected and stored tube water shall be introduced back into the access tube. New potable water may be used, provided the water temperature is not more than 10°F cooler than the average concrete temperature measured by the probe.

6-19.3(6)A Shafts Requiring CSL Access Tubes

This section, including title, is revised to read:

6-19.3(6)A Shafts Requiring Access Tubes

The Contractor shall furnish and install access tubes in all shafts receiving CSL testing or the thermal probe method of TIP testing, except as otherwise noted in Section 6-19.3(1)B1.

6-19.3(6)B Orientation and Assembly of the CSL Access Tubes

This section's title is revised to read:

6-19.3(6)B Orientation and Assembly of the Access Tubes

6-19.3(6)C Care for CSL Access Tubes from Erection through CSL Testing

This section's title is revised to read:

6-19.3(6)C Care for Access Tubes from Erection Through Nondestructive QA Testing

The second sentence is revised to read:

The Contractor shall keep all of a shaft's access tubes full of water through the completion of nondestructive QA testing of that shaft.

6-19.3(7)A Concrete Class for Shaft Concrete

This section is revised to read:

Shaft concrete shall be Class 5000P conforming to Section 6-02.

6-19.3(7)B Concrete Placement Requirements

The last sentence of the last paragraph is revised to read:

The Section 6-02.3(6) restriction for 5 feet maximum free fall shall not apply to placement of concrete into a shaft.

6-19.3(7)I Requirements for Placing Concrete Above the Top of Shaft

This section is revised to read:

Concrete shall not be placed above the top of shaft (for column splice zones, columns, footings, or shaft caps) until the Contractor receives the Engineer's acceptance of nondestructive QA testing, if performed at that shaft, and acceptance of the shaft.

6-19.3(9) Nondestructive Testing of Shafts (Crosshole Sonic Log (CSL) Testing)

This section, including title, is revised to read:

6-19.3(9) Nondestructive QA Testing of Shafts

The Contractor shall provide nondestructive QA testing and analysis on all shafts with access tubes or thermal wires and TAPs facilitating the testing (See Section 6-19.3(1)B). The testing and analysis shall be performed by the testing organizations identified by the Contractor's submittal in accordance with Section 6-19.3(2)D.

The Engineer may direct that additional testing be performed at a shaft if anomalies or a soft bottom are detected by the Contractor's testing. If additional testing at a shaft confirms the presence of a defect(s) in the shaft, the testing costs and the delay costs resulting from the additional testing shall be borne by the Contractor in accordance with Section 1-05.6. If the additional testing indicates that the shaft has no defect, the testing costs and the delay costs resulting from the additional testing will be paid by the Contracting Agency in accordance with Section 1-05.6, and, if the shaft construction is on the critical path of the Contractor's schedule, a time extension equal to the delay created by the additional testing will be granted in accordance with Section 1-08.8.

6-19.3(9)A Schedule of CSL Testing

This section, including title, is revised to read:

6-19.3(9)A TIP Testing Using Thermal Probes or CSL Testing

If selected as the nondestructive QA testing method by the Contractor, TIP testing using thermal probes, or CSL testing shall be performed after the shaft concrete has cured at least 96 hours. Additional curing time prior to testing may be required if the shaft concrete contains admixtures, such as set retarding admixture or water-reducing admixture, added in accordance with Section 6-02.3(3). The additional curing time prior to testing required under these circumstances shall not be grounds for additional compensation or extension of time to the Contractor in accordance with Section 1-08.8.

6-19.3(9)B Inspection of CSL Access Tubes

This section's title is revised to read:

6-19.3(9)B Inspection of Access Tubes

6-19.3(9)C Engineer's Final Acceptance of Shafts

This section, including title, is revised to read:

1
2 **6-19.3(9)C TIP Testing With Thermal Wires and TAPs**

3 If selected as the nondestructive QA testing method by the Contractor, TIP testing with
4 thermal wires and TAPs (See Section 6-19.3(6)E) shall be performed. The TIP testing
5 shall commence at the beginning of the concrete placement operation, recording
6 temperature readings at 15-minute intervals until the peak temperature is captured in
7 the data. Additional curing time may be required if the shaft concrete contains
8 admixtures, such as set retarding admixture or water-reducing admixture, added in
9 accordance with Section 6-02.3(3). The additional curing time required under these
10 circumstances shall not be grounds for additional compensation or extension of time to
11 the Contractor in accordance with Section 1-08.8.

12
13 TIP testing shall be conducted at all shafts in which thermal wires and TAPs have been
14 installed for thermal wire analysis (Section 6-19.3(6)A).

15
16 **6-19.3(9)D Requirements to Continue Shaft Excavation Prior to Acceptance of**
17 **First Shaft**

18 This section, including title, is revised to read:

19
20 **6-19.3(9)D Nondestructive QA Testing Results Submittal**

21 The Contractor shall submit the results and analysis of the nondestructive QA testing
22 for each shaft tested. The Contractor shall submit the test results within three working
23 days of testing. Results shall be a Type 1 Working Drawing presented in a written
24 report.

25
26 TIP reports shall include:

- 27
28 1. A map or plot of the wire/tube location within the shaft and their position
29 relative to a known and identifiable location, such as North.
30
31 2. Graphical displays of temperature measurements versus depth of each wire
32 or tube for the analysis time selected, overall average temperature with depth,
33 shaft radius or diameter with depth, concrete cover versus cage position with
34 depth, and effective radius.
35
36 3. The report shall identify unusual temperatures, particularly significantly cooler
37 local deviations from the overall average.
38
39 4. The report shall identify the location and extent where satisfactory or
40 questionable concrete is identified.
41
42 a. Satisfactory (S) - 0 to 6% Effective Radius Reduction and Cover Criteria
43 Met
44
45 b. Questionable (Q) - Effective Local Radius Reduction > 6%, Effective
46 Local Average Diameter Reduction > 4%, or Cover Criteria Not Met
47
48 5. Variations in temperature between wire/tubes (at each depth) which in turn
49 correspond to variations in cage alignment.
50

- 1 6. Where shaft specific construction information is available (e.g. elevations of
2 the top of shaft, bottom of casing, bottom of shaft, etc.), these values shall be
3 noted on all pertinent graphical displays.
4

5 CSL reports shall include:
6

- 7 1. A map or plot of the tube location within the shaft and their position relative to
8 a known and identifiable location, such as North.
9
10 2. Graphical displays of CSL Energy versus Depth and CSL signal arrival time
11 versus depth or velocity versus depth.
12
13 3. The report shall identify the location and extent where good, questionable,
14 and poor concrete is identified, where no signal was received, or where water
15 is present.
16
17 a. Good (G) - No signal distortion and decrease in signal velocity of 10% or
18 less is indicative of good quality concrete.
19
20 b. Questionable (Q) - Minor signal distortion and a lower signal amplitude
21 with a decrease in signal velocity between 10% and 20%.
22
23 c. Poor (P) - Severe signal distortion and much lower signal amplitude with
24 a decrease in signal velocity of 20% or more.
25
26 d. No Signal (NS) - No signal was received.
27
28 e. Water (W) - A measured signal velocity of nominally $V = 4,800$ to $5,000$
29 fps.
30

31 All QA test reports will provide a recommendation to accept the shaft as-is,
32 recommendation for further review by the Engineer, or will provide a plan for further
33 testing, investigation or repair to address any deficiencies identified by the testing.
34

35 **6-19.3(9)E Additional CSL Testing**

36 This section, including title, is revised to read:
37

38 **6-19.3(9)E Vacant**

40 **6-19.3(9)I Requirements for CSL Access Tubes and Cored Holes After CSL 41 Testing**

42 This section's title is revised to read:
43

44 **6-19.3(9)I Requirements for Access Tubes and Cored Holes After CSL Testing**

46 **6-19.4 Measurement**

47 This section is revised to read:
48

Constructing shafts will be measured by the linear foot. The linear foot measurement will be calculated using the top of shaft elevation and the bottom of shaft elevation for each shaft as shown in the Plans.

Rock excavation for shaft, including haul, will be measured by the linear foot of shaft excavated. The linear feet measurement will be computed using the top of the rock line, defined as the highest bedrock point within the shaft diameter, and the bottom elevation shown in the Plans.

QA shaft test will be measured once per shaft tested.

6-19.5 Payment

This section is revised to read:

Payment will be made for the following Bid items when they are included in the Proposal:

“Constructing___Diam. Shaft”, per linear foot.

The unit Contract price per linear foot for “Constructing___Diam. Shaft” shall be full pay for performing the Work as specified, including:

1. Soil excavation for shaft, including all costs in connection with furnishing, mixing, placing, maintaining, containing, collecting, and disposing of all mineral, synthetic and water slurry, and disposing of groundwater collected by the excavated shaft.
2. Furnishing and placing temporary shaft casing, including temporary casing in addition to the required casing specified in the Special Provisions, and including all costs in connection with completely removing the casing after completing shaft construction.
3. Furnishing permanent casing for shaft.
4. Placing permanent casing for shaft.
5. Casing shoring, including all costs in connection with furnishing and installing casing shoring above the specified upper limit for casing shoring but necessary to provide for sufficient water head pressure to resist artesian water pressure present in the shaft excavation, removing casing shoring, and placing seals when required.
6. Furnishing and placing steel reinforcing bar and epoxy-coated steel reinforcing bar, including furnishing and installing steel reinforcing bar centralizers.
7. Installation of CSL tubes or thermal wires.
8. Furnishing, placing and curing concrete to the top of shaft or to the construction joint at the base of the shaft-column splice zone as applicable.

Payment for "Constructing___Diam. Shaft" will be made upon Engineer acceptance of the shaft, including completion of satisfactory QA shaft tests as applicable.

"Rock Excavation For Shaft Including Haul", per linear foot.

When rock excavation is encountered, payment for rock excavation is in addition to the unit Contract price per linear foot for "Constructing___Diam. Shaft"

"Shoring Or Extra Excavation Cl. A - ___", lump sum.

The lump sum Contract price for "Shoring Or Extra Excavation Cl. A - ___" shall be full pay for performing the Work as specified, including all costs in connection with all excavation outside the limits specified for soil and rock excavation for shaft including haul, all temporary telescoping casings, and all temporary casings beyond the limits of required temporary casing specified in the Special Provisions.

"QA Shaft Test", per each.

The unit Contract price per each for "QA Shaft Test" shall be full pay for performing the Work as specified, including operating all associated accessories necessary to record and process data and develop the summary QA test reports. Section 1-04.6 does not apply to this bid item.

"Removing Shaft Obstructions", estimated.

Payment for removing, breaking-up, or pushing aside shaft obstructions, as defined in Section 6-19.3(3)E, will be made for the changes in shaft construction methods necessary to deal with the obstruction. The Contractor and the Engineer shall evaluate the effort made and reach agreement on the equipment and employees utilized, and the number of hours involved for each. Once these cost items and their duration have been agreed upon, the payment amount will be determined using the rate and markup methods specified in Section 1-09.6. For the purpose of providing a common proposal for all Bidders, the Contracting Agency has entered an amount for the item "Removing Shaft Obstructions" in the Bid Proposal to become a part of the total Bid by the Contractor.

If drilled shaft tools, cutting teeth, casing or Kelly bar is damaged as a result of the obstruction removal work, the Contractor will be compensated for the costs to repair this equipment in accordance with Section 1-09.6.

If shaft construction equipment is idled as a result of the Work required to deal with the obstruction and cannot be reasonably reassigned within the project, then standby payment for the idled equipment will be added to the payment calculations. If labor is idled as a result of the Work required to deal with the obstruction and cannot be reasonably reassigned within the project, then all labor costs resulting from Contractor labor agreements and established Contractor policies will be added to the payment calculations.

The Contractor shall perform the amount of obstruction Work estimated by the Contracting Agency within the original time of the Contract. The Engineer will consider a time adjustment and additional compensation for costs related to the extended duration of the shaft construction operations, provided:

1. The dollar amount estimated by the Contracting Agency has been exceeded, and
2. The Contractor shows that the obstruction removal Work represents a delay to the completion of the project based on the current progress schedule provided in accordance with Section 1-08.3.

7-02.AP7

Section 7-02, Culverts

January 3, 2017

7-02.2 Materials

The following three new items are inserted after the item "Aggregate for Portland Cement Concrete:

Gravel Backfill for Pipe Zone Bedding	9-03.12(3)
Butyl Rubber Sealant	9-04.11
External Sealing Band	9-04.12

The last paragraph is deleted.

7-02.3(6) Precast Reinf. Conc. Three Sided Structures, Box Culverts and Split Box Culverts

This section is supplemented with the following new paragraph:

When the Plans include a complete set of design details for a Structure (defining panel shapes and dimensions, concrete strength requirements, and steel reinforcing bar, joint, and connection details), the design and load rating preparation and calculation submittal requirements of Sections 7-02.3(6)A1 and 7-02.3(6)A2 do not apply for the components shown in the Plans, but all other requirements of this Section remain in effect. The Contractor may propose alternate concrete culvert designs, accommodating the same rise, span, and length as shown in the Plans, to replace the Structure details shown in the Plans. If an alternate concrete culvert design is proposed, all of the requirements of this Section, including design and load rating preparation and calculation submittal, apply.

7-02.3(6)A General

This section is supplemented with the following two new paragraphs:

Tolerances for PRCTSS shall be as follows:

1. Internal Dimensions – The internal dimension shall not vary more than 1 percent or 2 inches, whichever is less, from the Plan dimensions. The haunch dimensions shall not vary more than $\frac{3}{4}$ inch from the Plan dimensions.
2. Slab and Wall Thickness – The slab and wall thickness shall not be less than that shown in the Plans by more than 5 percent or $\frac{1}{2}$ inch, whichever is greater. A thickness more than that required in the Plans will not be a cause for rejection if proper joining is not affected.

3. Length of Opposite Surfaces – Variations in lengths of two opposite surfaces of the three-sided section shall not be more than $\frac{3}{4}$ inch unless beveled sections are being used to accommodate a curve in the alignment.
4. Reinforcing steel placement shall meet the tolerances specified in Section 6-02.3(24)C.

Tolerances for PRCBC and PRCSBC shall be as follows:

1. Internal Dimensions – The internal dimensions shall not vary more than 1 percent from the Plan dimensions. If haunches are used, the haunch dimensions shall not vary more than $\frac{1}{4}$ inch from the Plan dimensions.
2. Slab and Wall Thickness – The slab and wall thickness shall not be less than that shown in the Plans by more than 5 percent or $\frac{3}{16}$ inch, whichever is greater. A thickness more than that required in the Plans will not be a cause for rejection.
3. Length of Opposite Box Segments – Variations in lengths of two opposite surfaces of the box segments shall not be more than $\frac{1}{8}$ inch per foot of internal span, with a maximum of $\frac{5}{8}$ inch for all sizes through 7 feet internal span, and a maximum of $\frac{3}{4}$ inch for internal spans greater than 7 feet, except where beveled sections are being used to accommodate a curve in the alignment.
4. Length of Box Segments – The underrun in length of a segment shall not be more than $\frac{1}{8}$ inch per foot of length with a maximum of $\frac{1}{2}$ inch in any box segment.
5. Length of Legs and Slabs – The variation in length of the legs shall not be more than $\frac{1}{8}$ inch per foot of the rise of the leg per leg with a maximum of $\frac{5}{8}$ inches. The differential length between opposing legs of the same segment shall not be more than $\frac{1}{2}$ inch. Length of independent top slab spans shall not vary by more than $\frac{1}{8}$ inch per foot of span of the top slab, with a maximum of $\frac{5}{8}$ inches.
6. Reinforcing steel placement shall meet the tolerances specified in Section 6-02.3(24)C.

This section is supplemented with the following new subsection:

7-02.3(6)A5 Wingwalls and Retaining Walls

Wingwalls and retaining walls (including cutoff walls and headwalls) shall be constructed in accordance with the Contractor's design and Working Drawing submittal or when the Plans include a complete set of design details for a wall (defining panel shapes and dimensions, concrete strength requirements, and steel reinforcing bar, joint, and connection details), the details shown in the Plans.

Precast concrete construction shall conform to Sections 6-02.3(28) and 6-11.3(3).

Culvert bedding material shall be furnished, placed, and compacted in accordance with Section 7-02.3(6)A4.

7-02.3(6)A1 Design Criteria

The first sentence of the last paragraph is revised to read:

Whenever the minimum finished backfill or surfacing depth above the top of the Structure is less than 1'-0" (except when the top of the Structure is directly exposed to vehicular traffic), either all steel reinforcing bars in the span unit shall be epoxy-coated with 2" minimum concrete cover from the face of concrete to the face of the top mat of steel reinforcing bars, or the minimum concrete cover shall be 2½".

The last sentence of the last paragraph is revised to read:

Concrete cover from the face of any concrete surface to the face of any steel reinforcement shall be 1-inch minimum end clearance at all joints, and 2-inches minimum at all other locations.

7-02.3(6)A2 Submittals

The first paragraph is revised to read:

The Contractor shall submit shop drawings of the precast Structures. Fabrication shop drawings replicating complete design details when shown in the Plans shall be Type 2 Working Drawings. Submittals completing the design based on the schematic geometric requirements shown in the Plans, or proposing a Contractor designed alternative concrete culvert Structure shall be Type 2E Working Drawings with supporting design calculations.

The last paragraph is revised to read:

For precast Structures with a span length greater than 20-feet (as defined in Section 7-02.3(6)A1), except when the depth of fill above the top of culvert exceeds the Structure span length, a Type 2E Working Drawing shall be submitted consisting of a load rating report prepared in accordance with the AASHTO Manual for Bridge Evaluation and WSDOT Bridge Design Manual LRFD M 23-50 Chapter 13. Soil pressures used shall include effects from the backfill material and compaction methods, and shall be in accordance with the WSDOT Geotechnical Design Manual M 46-03 and the geotechnical report prepared for the project.

7-02.3(6)A3 Casting

This section is revised to read:

Concrete shall conform to Section 6-02.3(28)B, with a 28-day compressive strength as specified in the Plans or the Working Drawings submittal.

7-02.3(6)A4 Excavation and Bedding Preparation

The last paragraph is revised to read:

The upper layer of bedding course shall be a 6-inch minimum thickness layer of culvert bedding material, defined as granular material either conforming to Section 9-03.12(3)

or to AASHTO Grading No. 57 as specified in Section 9-03.1(4)C. The plan limits of the culvert bedding material shall extend 1-foot beyond the plan limits of the culvert or the Structure footing as applicable. The culvert bedding material shall be compacted in accordance with the Section 2-09.3(1)E requirements for gravel backfill for drains. After compaction, the culvert bedding material shall be screeded transversely to the specified line and grade. Voids in the screeded culvert bedding material shall be filled and then rescreeded prior to erecting the precast Structure.

7-02.3(6)B3 Erection

The last paragraph is revised to read:

Adjacent precast sections shall be connected by welding the weld-tie anchors in accordance with Section 6-03.3(25). Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties. The weld-tie anchor spacing shall not exceed 6'-0". After connecting the weld-tie anchors, the Contractor shall paint the exposed metal surfaces with one coat of field primer conforming to Section 9-08.1(2)F. Keyways shall be filled with grout conforming to Section 9-20.3(2).

7-02.3(6)C1 Casting

This section is revised to read:

PRCSBC shall consist of lid elements and "U" shaped base elements. The vertical legs of the "U" shaped base elements shall be full height matching the rise of the culvert, except as otherwise specified for culvert spans greater than 20-feet. For PRCSBC spans greater than 20-feet (as defined in Section 7-02.3(6)A1), the lid elements may include vertical legs of a maximum length of 4-feet.

All vertical and horizontal joints of PRCBC and PRCSBC elements shall be tongue and groove type joints, except PRCBC and PRCSBC of 20-foot span or less may have keyway joints connected by weld-tie anchors in accordance with Section 6-02.3(25)O. The weld-tie anchor spacing shall not exceed 6'-0". There shall be at least two galvanized steel tie plates across each top unit tongue and groove joint and each tongue and groove joint between upper and lower units, unless otherwise shown in the Plans or required by the seismic designed completed in accordance with Section 7-02.3(6)A1.

7-02.3(6)C3 Erection

This section is revised to read:

PRCBC and PRCSBC shall be erected and backfilled in accordance with the erection sequence specified in the Working Drawing submittal, and the construction equipment restrictions specified in Section 6-02.3(25)O.

The Contractor shall install a continuous strip of butyl rubber sealant within all tongue and groove joints prior to connecting the precast elements together. The butyl rubber sealant shall have a minimum cross section of 1/2-inch by 1 1/2-inch, unless otherwise shown in the Plans.

After connecting the joints with weld-tie anchors, the Contractor shall paint the exposed metal surfaces with one coat of field primer conforming to Section 9-08.1(2)F. Keyways shall be filled with grout conforming to Section 9-20.3(2).

The Contractor shall wrap all exterior joints along the top and sides of the PRCBC and PRCSBC with a 12-inch wide strip of external sealing band centered about the joint and adhesively bonded to the concrete surface.

Backfill beside the PRCBC and PRCSBC shall be brought up in sequential layers, compacted concurrently. The difference in backfill height on opposing sides of the Structure shall not exceed 2-feet.

7-02.4 Measurement

This section is supplemented with the following:

Culvert bedding material will be measured by the cubic yard of material placed.

7-02.5 Payment

This section is supplemented with the following:

"Culvert Bedding Material", per cubic yard.

7-08.AP7

Section 7-08, General Pipe Installation Requirements January 3, 2017

7-08.3(1)A Trenches

The second sentence of the last paragraph is revised to read:

The embankment material shall be compacted to 95 percent of maximum density and the moisture content at the time of compaction shall be between optimum and 3 percentage points below optimum as determined by the Compaction Control Tests specified in Section 2-03.3(14)D.

7-09.AP7

Section 7-09, Water Mains April 3, 2017

7-09.3(24)D Dry Calcium Hypochlorite

The second paragraph is revised to read:

The number of grams of 70 percent test calcium hypochlorite required for a 20-foot length of pipe equals $0.238 \times d^2$, in which "d" is the diameter in inches.

8-01.AP8

Section 8-01, Erosion Control and Water Pollution Control August 1, 2016

8-01.2 Materials

This section is supplemented with the following new paragraph:

Recycled concrete, in any form, shall not be used for any Work defined in Section 8-01.

8-01.3(7) Stabilized Construction Entrance

The last sentence of the first paragraph is revised to read:

Material used for stabilized construction entrance shall be free of extraneous materials that may cause or contribute to track out.

8-01.3(8) Street Cleaning

This section is revised to read:

Self-propelled street sweepers shall be used to remove and collect sediment and other debris from the Roadway, whenever required by the Engineer. The street sweeper shall effectively collect these materials and prevent them from being washed or blown off the Roadway or into waters of the State. Street sweepers shall not generate fugitive dust and shall be designed and operated in compliance with applicable air quality standards.

Material collected by the street sweeper shall be disposed of in accordance with Section 2-03.3(7)C.

Street washing with water will require the concurrence of the Engineer.

8-09.AP8

Section 8-09, Raised Pavement Markers

January 3, 2017

8-09.5 Payment

In the last paragraph, "flaggers and spotters" is revised to read "flaggers".

8-10.AP8

Section 8-10, Guide Posts

January 4, 2016

8-10.3 Construction Requirements

The last sentence of the second paragraph is deleted.

8-11.AP8

Section 8-11, Guardrail

January 17, 2017

8-11.3(1)C Terminal and Anchor Installation

This section is supplemented with the following new paragraph:

Beam Guardrail Non-flared Terminals for Type 1 guardrail shall meet the crash test and evaluation criteria of NCHRP 350 or the Manual for Assessing Safety Hardware (MASH). Beam Guardrail Non-flared Terminals for Type 31 guardrail shall meet the crash test and evaluation criteria of MASH.

1
2 **8-11.3(1)F Removing and Resetting Beam Guardrail**

3 The last sentence of the first paragraph is deleted.
4

5 **8-11.5 Payment**

6 The paragraph following the Bid item "Removing and Resetting Beam Guardrail", per linear
7 foot is revised to read:
8

9 The unit Contract price per linear foot for "Removing and Resetting Beam Guardrail"
10 shall be full payment for all costs to perform the Work as described in Section 8-
11 11.3(1)F, except for replacement posts and blocks.
12

13 The paragraph following the Bid item "Raising Existing Beam Guardrail", per linear foot is
14 revised to read:
15

16 The unit Contract price per linear foot for "Raising Existing Beam Guardrail" shall be full
17 payment for all costs to perform the Work as described in Section 8-11.3(1)E, except
18 for replacement posts and blocks.
19

20 8-20.AP8

21 **Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation**
22 **Systems, and Electrical**
23 **August 7, 2017**

24 **8-20.1 Description**

25 This section is supplemented with the following new subsection:
26

27 **8-20.1(3) Permitting and Inspections**

28 Electrical installations are subject to electrical inspection in accordance with RCW
29 19.28.101. Electrical inspections may only be performed by an electrical inspector
30 meeting the requirements of RCW 19.28.321. Electrical installations will not be
31 accepted until they have been inspected and approved by an electrical inspector as
32 required by this Section. This inspection is required even if there is no new electrical
33 service or new electrical meter being installed in the Contract.
34

35 Installations within WSDOT right of way are subject to a minimum of a final inspection
36 by a WSDOT certified electrical inspector as allowed by RCW 19.28.141. A separate
37 permit is not required for electrical installations within WSDOT right of way. Additional
38 inspections may be required at the discretion of the Engineer.
39

40 Installations outside of WSDOT right of way are subject to permitting and inspection by
41 the Washington State Department of Labor and Industries (L&I) or a local jurisdiction
42 approved for that location by L&I. Approved local jurisdictions and their contacts may
43 be found on the L&I website at
44 <http://www.lni.wa.gov/TradesLicensing/Electrical/FeePermlnsp/CityInspectors/>.
45

46 **8-20.1(1) Regulations and Code**

47 The second paragraph is revised to read:
48

Wherever reference is made in these Specifications or in the Special Provisions to the Code, the rules, or the standards mentioned above, the reference shall be construed to mean the code, rule, or standard that is in effect on the Bid advertisement date.

8-20.3(5)A General

The last paragraph is revised to read:

Immediately after the sizing mandrel has been pulled through, install an equipment grounding conductor if applicable (see Section 8-20.3(9)) and any new or existing wire or cable as specified in the Plans. Where conduit is installed for future use, install a 200-pound minimum tensile strength pull string with the equipment grounding conductor. The pull string shall be attached to duct plugs or caps at both ends of the conduit.

8-20.3(5)A1 Fiber Optic Conduit

The last paragraph is deleted.

8-20.3(5)B Conduit Type

The second and third paragraphs are deleted and replaced with the following new paragraph:

PVC and HDPE conduits shall be Schedule 80 unless installed as innerduct.

8-20.3(5)D Conduit Placement

Item number 2 is revised to read:

2. 24-inches below the top of the untreated surfacing on a Roadbed.

8-20.3(9) Bonding, Grounding

The following two new paragraphs are inserted after the first paragraph:

Install an equipment grounding conductor in all new conduit, whether or not the equipment grounding conductor is called for in the wire schedule.

For each new conduit with innerduct install an equipment grounding conductor in only one of the innerducts unless otherwise required by the NEC or the Plans.

The fourth paragraph (after the preceding Amendments are applied) is revised to read:

Bonding jumpers and equipment grounding conductors meeting the requirements of Section 9-29.3(2)A3 shall be minimum #8 AWG, installed in accordance with the NEC. Where existing conduits are used for the installation of new circuits, an equipment grounding conductor shall be installed unless an existing equipment ground conductor, which is appropriate for the largest circuit, is already present in the existing raceway. The equipment ground conductor between the isolation switch and the sign lighter fixtures shall be minimum #14 AWG stranded copper conductor. Where parallel circuits are enclosed in a common conduit, the equipment-grounding conductor shall be sized by the largest overcurrent device serving any circuit contained within the conduit.

The second sentence of the fifth paragraph (after the preceding Amendments are applied) is revised to read:

A non-insulated stranded copper conductor, minimum #8 AWG with a full circle crimp on connector (crimped with a manufacturer recommended crimper) shall be connected to the junction box frame or frame bonding stud, the other end shall be crimped to the equipment bonding conductor, using a "C" type crimp connector.

The last two sentences of the sixth paragraph (after the preceding Amendments are applied) are revised to read:

For light standards, signal standards, cantilever and sign bridge Structures the supplemental grounding conductor shall be #4 AWG non-insulated stranded copper conductor. For steel sign posts which support signs with sign lighting or flashing beacons the supplemental grounding conductor shall be #6 AWG non insulated stranded copper conductor.

The fourth to last paragraph is revised to read:

Install a two grounding electrode system at each service entrance point, at each electrical service installation and at each separately derived power source. The service entrance grounding electrode system shall conform to the "Service Ground" detail in the Standard Plans. If soil conditions make vertical grounding electrode installation impossible an alternate installation procedure as described in the NEC may be used. Maintain a minimum of 6 feet of separation between any two grounding electrodes within the grounding system. Grounding electrodes shall be bonded copper, ferrous core materials and shall be solid rods not less than 10 feet in length if they are 1/2 inch in diameter or not less than 8 feet in length if they are 5/8 inch or larger in diameter.

8-20.3(13)A Light Standards

The first sentence in the second to last paragraph is revised to read:

All new and relocated metal light standards shall be numbered for identification using painted 4 inch block gothic letters (similar to series C highway lettering) and numbers installed 3 feet above the base facing the Traveled Way.

The numbered list in the second to last paragraph is deleted and replaced with the following:

NN
CC-SSSS
VVV

Where:

- NN** – Is the pole number as identified in the Plans. May be one or more characters.
- CC** – Is the circuit letter as identified in the Plans. May be one or more characters.
- SSSS** – Is the service cabinet number as identified in the Plans. Do not include the two or three letter prefix. Up to four digits - do not include leading zeros.
- VVV** – Is the operating voltage of the luminaire. Always three digits.

1 **8-20.3(13)C Luminaires**

2 The first paragraph is revised to read:

3
4 The Contractor shall mark the installation date on the inside of the luminaire ballast or
5 driver housing using a permanent marking pen.

6
7 8-22.AP8

8 **Section 8-22, Pavement Marking**
9 **August 7, 2017**

10 **8-22.3(6) Removal of Pavement Markings**

11 This section is revised to read:

12
13 Pavement markings to be removed shall be obliterated until all blemishes caused by
14 the pavement marking removal conform to the coloration of the adjacent pavement.

15
16 Grinding to remove pavement markings in their entirety is allowed in areas designated
17 for applications of either Hot Mix Asphalt (HMA) or Bituminous Surface Treatment
18 (BST). Pavement marking removal shall be performed from April 1st through
19 September 30th and only in those areas that shall be paved within the same time
20 window as the grinding, unless otherwise allowed by the Engineer in writing.

21
22 For all cement concrete pavement and areas that will not be overlaid with hot mix
23 asphalt or BST, grinding is allowed to a depth just above the pavement surface and
24 then Water blasting or shot blasting shall be required to remove the remaining
25 pavement markings.

26
27 If in the opinion of the Engineer, the pavement is materially damaged by pavement
28 marking removal, such damage shall be repaired by the Contractor in accordance with
29 Section 1-07.13(1). Sand or other material deposited on the pavement as a result of
30 removing lines and markings shall be removed as the Work progresses to avoid
31 hazardous conditions. Accumulation of sand or other material which might interfere
32 with drainage will not be permitted.

33
34 **8-22.4 Measurement**

35 The first two sentences of the fourth paragraph are revised to read:

36
37 The measurement for "Painted Wide Lane Line", "Plastic Wide Lane Line", "Profiled
38 Plastic Wide Lane Line", "Painted Barrier Center Line", "Plastic Barrier Center Line",
39 "Painted Stop Line", "Plastic Stop Line", "Painted Wide Dotted Entry Line", or "Plastic
40 Wide Dotted Entry Line" will be based on the total length of each painted, plastic or
41 profiled plastic line installed. No deduction will be made for the unmarked area when
42 the marking includes a broken line such as, wide broken lane line, drop lane line, wide
43 dotted lane line or wide dotted entry line.

44
45 **8-22.5 Payment**

46 The following two new Bid items are inserted after the Bid item "Plastic Crosshatch
47 Marking", per linear foot:

48
49 "Painted Wide Dotted Entry Line", per linear foot.

“Plastic Wide Dotted Entry Line”, per linear foot.

9-01.AP9

Section 9-01, Portland Cement August 7, 2017

This section’s title is revised to read:

Cement

9-01.1 Types of Cement

This section is revised to read:

Cement shall be classified as portland cement, blended hydraulic cement, or rapid hardening hydraulic cement.

9-01.2(2) Vacant

This section, including title, is revised to read:

9-01.2(2) Rapid Hardening Hydraulic Cement

Rapid hardening hydraulic cement shall meet the requirements of ASTM C 1600.

9-01.2(3) Low Alkali Cement

This section is renumbered as follows:

9-01.2(1)A Low Alkali Cement

9-01.2(4) Blended Hydraulic Cement

This section is renumbered as follows:

9-01.2(1)B Blended Hydraulic Cement

In the first paragraph, items number 3 through 5 are revised to read:

3. Type IT(PX)(LY), where (PX) equals the targeted percentage of pozzolan, and (LY) equals the targeted percentage of limestone. The pozzolan (PX) shall be Class F fly ash and shall be a maximum of 35 percent. (LY) shall be a minimum of 5 percent and a maximum of 15 percent. Separate testing of each source of fly ash at each proposed replacement level shall be conducted in accordance with ASTM C1012. Expansion at 180 days shall be 0.10 percent or less.
4. Type IT(SX)(LY), where (SX) equals the targeted percentage of slag cement, and (LY) equals the targeted percentage of limestone. (SX) shall be a maximum of 50 percent. (LY) shall be a minimum of 5 percent and a maximum of 15 percent. Separate testing of each source of slag at each proposed replacement level shall be conducted in accordance with ASTM C1012. Expansion at 180 days shall be 0.10 percent or less.

5. Type IL(X), where (X) equals the targeted percentage of limestone, and shall be a minimum of 5 percent and a maximum of 15 percent. Testing shall be conducted in accordance with ASTM C1012. Expansion at 180 days shall be 0.10 percent or less.

9-01.3 Tests and Acceptance

The second paragraph is revised to read:

Cement producers/suppliers that certify portland cement or blended hydraulic cement shall participate in the Cement Acceptance Program as described in WSDOT Standard Practice QC 1. Rapid hardening hydraulic cement producers/suppliers are not required to participate in WSDOT Standard Practice QC 1.

9-03.AP9

Section 9-03, Aggregates

August 7, 2017

9-03.1(1) General Requirements

In this section, each reference to "Section 9-01.2(3)" is revised to read "Section 9-01.2(1)A".

This first paragraph is supplemented with the following:

Reclaimed aggregate may be used if it complies with the specifications for Portland Cement Concrete. Reclaimed aggregate is aggregate that has been recovered from plastic concrete by washing away the cementitious materials.

9-03.1(2) Fine Aggregate for Portland Cement Concrete

This section is revised to read:

Fine aggregate shall consist of natural sand or manufactured sand, or combinations thereof, accepted by the Engineer, having hard, strong, durable particles free from adherent coating. Fine aggregate shall be washed thoroughly to meet the specifications.

9-03.1(2)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 6 and not exceed the following values:

Material finer than No. 200 Sieve	2.5 percent by weight
Clay lumps and friable particles	3.0 percent by weight
Coal and lignite	0.25 percent by weight
Particles of specific gravity less than 2.00	1.0 percent by weight.

Organic impurities shall be tested in accordance with AASHTO T 21 by the glass color standard procedure and results darker than organic plate no. 3 shall be rejected. A darker color results from AASHTO T 21 may be used provided that when tested for the effect of organic impurities on strength of mortar, the relative

strength at 7 days, calculated in accordance with AASHTO T 71, is not less than 95 percent.

9-03.1(4) Coarse Aggregate for Portland Cement Concrete

This section is revised to read:

Coarse aggregate for concrete shall consist of gravel, crushed gravel, crushed stone, or combinations thereof having hard, strong, durable pieces free from adherent coatings. Coarse aggregate shall be washed to meet the specifications.

9-03.1(4)A Deleterious

This section, including title, is revised to read:

9-03.1(4)A Deleterious Substances

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 80 and not exceed the following values:

Material finer than No. 200	1.0 ¹ percent by weight
Clay lumps and Friable Particles	2.0 percent by weight
Shale	2.0 percent by weight
Wood waste	0.05 percent by weight
Coal and Lignite	0.5 percent by weight
Sum of Clay Lumps, Friable Particles, and Chert (Less Than 2.40 specific gravity SSD)	3.0 percent by weight

¹If the material finer than the No. 200 sieve is free of clay and shale, this percentage may be increased to 1.5.

9-03.1(4)C Grading

The following new sentence is inserted at the beginning of the last paragraph:

Where coarse aggregate size 467 is used, the aggregate may be furnished in at least two separate sizes.

9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete

This section is revised to read:

As an alternative to using the fine aggregate sieve grading requirements in Section 9-03.1(2)B, and coarse aggregate sieve grading requirements in Section 9-03.1(4)C, a combined aggregate gradation conforming to the requirements of Section 9-03.1(5)A may be used.

9-03.1(5)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregates $\frac{3}{8}$ inch or larger shall not exceed the values specified in Section 9-03.1(4)A and for aggregates smaller than $\frac{3}{8}$ inch they shall not exceed the values specified in Section 9-03.1(2)A.

1 **9-03.1(5)B Grading**

2 The first paragraph is deleted.

4 **9-03.8(2) HMA Test Requirements**

5 In the table in item number 3, the heading "Statistical and Nonstatistical" is revised to read
6 "Statistical".

8 **9-03.8(7) HMA Tolerances and Adjustments**

9 In the table in item number 1, the column titled "Nonstatistical Evaluation" is deleted.

11 In the table in item 1, the last column titled "Commercial Evaluation" is revised to read
12 "Visual Evaluation".

14 **9-03.11(1) Streambed Sediment**

15 The following three new sentences are inserted after the first sentence of the first
16 paragraph:

18 Alternate gradations may be used if proposed by the Contractor and accepted by the
19 Engineer. The Contractor shall submit a Type 2 Working Drawing consisting of 0.45
20 power maximum density curve of the proposed gradation. The alternate gradation
21 shall closely follow the maximum density line and have Nominal Aggregate Size of no
22 less than 1½ inches or no greater than 3 inches.

24 **9-03.12(4) Gravel Backfill for Drains**

25 The following new sentence is inserted at the beginning of the second paragraph:

27 As an alternative, AASHTO grading No. 57 may be used in accordance with Section 9-
28 03.1(4)C.

30 **9-03.12(5) Gravel Backfill for Drywells**

31 The following new sentence is inserted at the beginning of the second paragraph:

33 As an alternative, AASHTO grading No. 4 may be used in accordance with Section 9-
34 03.1(4)C.

36 **9-03.21(1)B Concrete Rubble**

37 This section, including title, is revised to read:

39 **9-03.21(1)B Recycled Concrete Aggregate**

40 Recycled concrete aggregates are coarse aggregates manufactured from hardened
41 concrete mixtures. Recycled concrete aggregate may be used as coarse aggregate or
42 blended with coarse aggregate for Commercial Concrete. Recycled concrete aggregate
43 shall meet all of the requirements for coarse aggregate contained in Section 9-03.1(4)
44 or 9-03.1(5). In addition to the requirements of Section 9-03.1(4) or 9-03.1(5), recycled
45 concrete shall:

- 47 1. Contain an aggregated weight of less than 1 percent of adherent fines,
48 vegetable matter, plastics, plaster, paper, gypsum board, metals, fabrics,
49 wood, tile, glass, asphalt (bituminous) materials, brick, porcelain or other
50 deleterious substance(s) not otherwise noted;

2. Be free of components such as chlorides and reactive materials that are detrimental to the concrete, unless mitigation measures are taken to prevent recurrence in the new concrete;
3. Have an absorption of less than 10 percent when tested in accordance with AASHTO T 85.
4. Be considered mechanically fractured and therefore be considered part of the total fracture calculation as determined by the FOP for AASHTO T 335.

Recycled concrete aggregate shall be in a saturated condition prior to mixing.

Recycled concrete aggregate shall not be placed below the ordinary high water mark of any surface water of the State.

9-03.21(1)D Recycled Steel Furnace Slag

This section title is revised to read:

Steel Slag

9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material

In the Hot Mix Asphalt column, each value of "20" is revised to read "25".

The last column heading "Steel Furnace Slag" is revised to read "Steel Slag".

The following new row is inserted after the second row:

Coarse Aggregate for Commercial Concrete	9-03.1(4)	0	100	0	0
--	-----------	---	-----	---	---

9-04.AP9

Section 9-04, Joint and Crack Sealing Materials January 3, 2017

This section is supplemented with the following two new subsections:

9-04.11 Butyl Rubber Sealant

Butyl rubber sealant shall conform to ASTM C 990.

9-04.12 External Sealing Band

External sealing band shall by Type III B conforming to ASTM C 877.

9-04.1(2) Premolded Joint Filler for Expansion Joints

This section is supplemented with the following:

As an alternative to the above, a semi-rigid, non-extruding, resilient type, closed-cell polypropylene foam, preformed joint filler with the following physical properties as tested to AASHTO T 42 Standard Test Methods may be used.

Closed-Cell Polypropylene Foam Preformed Joint Filler		
Physical Property	Requirement	Test Method
Water Absorption	< 1.0%	AASHTO T 42
Compression Recovery	> 80%	AASHTO T 42
Extrusion	< 0.1 in.	AASHTO T 42
Density	> 3.5 lbs./cu.ft.	AASHTO T 42
Water Boil (1 hr.)	No expansion	AASHTO T 42
Hydrochloric Acid Boil (1 hr.)	No disintegration	AASHTO T 42
Heat Resistance °F	392°F ± 5°F	ASTM D 5249

9-04.2(1) Hot Poured Joint Sealants

This section's content is deleted and replaced with the following new subsections:

9-04.2(1)A Hot Poured Sealant

Hot poured sealant shall be sampled in accordance with ASTM D5167 and tested in accordance with ASTM D5329.

9-04.2(1)A1 Hot Poured Sealant for Cement Concrete Pavement

Hot poured sealant for cement concrete pavement shall meet the requirements of ASTM D6690 Type IV, except for the following:

1. The Cone Penetration at 25°C shall be 130 maximum.
2. The extension for the Bond, non-immersed, shall be 100 percent.

9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement

Hot poured sealant for bituminous pavement shall meet the requirements of ASTM D6690 Type I or Type II.

9-04.2(1)B Sand Slurry for Bituminous Pavement

Sand slurry is mixture consisting of the following components measured by total weight:

1. Twenty percent CSS-1 emulsified asphalt,
2. Two percent portland cement, and
3. Seventy-eight percent fine aggregate meeting the requirements of 9-03.1(2)B Class 2. Fine aggregate may be damp (no free water).

9-04.2(2) Poured Rubber Joint Sealer

The last paragraph is deleted.

9-04.4(1) Rubber Gaskets for Concrete Pipes and Precast Manholes

"AASHTO M 198" is revised to read "ASTM C 990".

9-04.4(3) Gaskets for Aluminum or Steel Culvert or Storm Sewer Pipe

In the last sentence, "AASHTO M 198" is revised to read "ASTM C 990".

9-06.AP9

Section 9-06, Structural Steel and Related Materials

January 3, 2017

9-06.5(3) High-Strength Bolts

In this section, “ASTM A325” is revised to read “ASTM F3125 Grade A325”, “ASTM A490” is revised to read “ASTM F3125 Grade A490”, and “ASTM F1852” is revised to read “ASTM F3125 Grade F1852”.

In the fifth paragraph, “ASTM-A325” is revised to read “ASTM F3125”.

9-06.12 Bronze Castings

In this section, “AASHTO M107” is revised to read “ASTM B22”.

9-06.16 Roadside Sign Structures

In the first paragraph, “ASTM A325” is revised to read “ASTM F3125 Grade A325”.

9-07.AP9

Section 9-07, Reinforcing Steel

August 1, 2016

9-07.1(1)A Acceptance of Materials

The first sentence of the first paragraph is revised to read:

Reinforcing steel rebar manufacturers shall comply with the National Transportation Product Evaluation Program (NTPEP) Work Plan for Reinforcing Steel (rebar) Manufacturers.

The first sentence of the second paragraph is revised to read:

Steel reinforcing bar manufacturers use either English or a Metric size designation while stamping rebar.

9-07.1(2) Bending

The first two sentences of the first paragraph are deleted and replaced with the following two new sentences:

Steel reinforcing bars shall be cut and bent cold to the shapes shown on the Plans. Fabrication tolerances shall be in accordance with ACI 315.

9-10.AP9

Section 9-10, Piling

August 1, 2016

9-10.3 Cast-In-Place Concrete Piling

This section is revised to read:

Reinforcement for cast-in-place concrete piles shall conform to Section 9-07.2.

9-11.AP9

Section 9-11, Waterproofing

January 3, 2017

This section (and all subsections), including title, is revised to read:

9-11 Waterproof Membrane

9-11.1 Asphalt for Waterproofing

Waterproof membrane shall be a sheet membrane conforming to ASTM D 6153 Type III, the puncture capacity specified below, and either the thin polymer sheet tensile stress or the geotextile and fabric grab tensile strength specified below:

Performance Properties	Test Method	Specification Requirements
Tensile Stress (for Thin Polymer Sheets)	ASTM D 882	75 pounds per inch min.
Grab Tensile Strength (for Geotextiles and Fabrics)	ASTM D 4632 (Woven or Nonwoven)	200 pounds min.
Puncture Capacity (For Thin Polymer Sheets, Geotextiles and Fabrics)	ASTM E 154	200 pounds min.

Waterproofing membrane will be accepted based on a Manufacturer's Certificate of Compliance with each lot of waterproof membrane.

9-11.2 Primer for Waterproof Membrane

The primer for the waterproof membrane shall be appropriate for bonding the sheet membrane to the bridge deck surface and shall be compatible with the membrane in accordance with the waterproof membrane manufacturer's recommendations.

9-14.AP9

Section 9-14, Erosion Control and Roadside Planting

August 7, 2017

9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

The first paragraph is revised to read:

All HECPs shall be made of natural plant fibers unaltered by synthetic materials, and in a dry condition, free of noxious weeds, seeds, chemical printing ink, germination inhibitors, herbicide residue, chlorine bleach, rock, metal, plastic, and other materials detrimental to plant life.

The last sentence of the third paragraph is revised to read the following two sentences:

Under no circumstances will field mixing of additives or components be acceptable, with the exception of seed and water. The product shall be hydrated in accordance with the manufacturer's recommendations.

1 In Table 1 of the fourth paragraph, the following new row is inserted below the table
2 heading:
3

These test requirements apply to the fully mixed product, including tackifiers, dyes, or other additives that may be included in the HECF final product in its sprayable form.

4
5 The last two paragraphs are revised to read:
6

7 If the HECF contains a dye to facilitate placement and inspection of the material, it
8 shall be nontoxic to plants, animals, and aquatic life and shall not stain concrete or
9 painted surfaces.

10
11 The HECF shall not be harmful to plants, animals, and aquatic life.
12

13 **9-14.4(4) Wood Strand Mulch**

14 The last paragraph is revised to read:

15
16 The Contractor shall provide a test report performed in accordance with WSDOT T 125
17 demonstrating compliance to this specification prior to acceptance. This product shall
18 not be harmful to plants, animals, and aquatic life.
19

20 **9-14.4(7) Tackifier**

21 The first paragraph is supplemented with the following:
22

23 Tackifiers shall include a mulch tracer added to visible aid uniform application, and
24 shall not be harmful to plants, animals, or aquatic life.
25

26 The first sentence of the second paragraph is revised to read:
27

28 The Contractor shall provide test results documenting the tackifier and mulch tracer
29 meets the requirements for Acute Toxicity, Solvents, and Heavy Metals as required in
30 Table 1 in Section 9-14.4(2).
31

32 **9-14.4(7)A Organic Tackifier**

33 This section is revised to read:
34

35 Organic tackifiers shall be derived from natural plant sources and shall not be harmful
36 to plants, animals, and aquatic life.
37

38 **9-14.4(7)B Synthetic Tackifier**

39 This section is revised to read:
40

41 Synthetic tackifiers shall not be harmful to plants, animals, and aquatic life.
42

43 **9-14.5(2) Biodegradable Erosion Control Blanket**

44 The first paragraph is revised to read:
45

46 Biodegradable erosion control blankets, including netting if present, shall be made of
47 natural plant fibers unaltered by synthetic materials. All blanket material shall effectively

perform the intended erosion control function until permanent vegetation has been established, or for a minimum of 6 months, whichever comes first.

9-14.5(4)A Biodegradable Check Dams

This section is revised to read:

Biodegradable check dams shall meet the following requirements:

Wattle	Section 9-14.5(5)
Compost Sock	Section 9-14.5(6)
Coir Log	Section 9-14.5(7)

The Contractor may substitute a different biodegradable check dam as long as it complies with the following and is accepted by the Engineer:

1. Made of natural plant fiber unaltered by synthetic material.
2. Netting if present shall be made of natural plant fibers unaltered by synthetic materials. Materials shall effectively perform the intended erosion control function until permanent vegetation has been established or for a minimum of 6 months, whichever comes first.
3. Straw bales shall not be used as check dams.

9-14.5(5) Wattles

This section is revised to read:

Wattles shall consist of cylinders of plant material such as weed-free straw, coir, wood chips, excelsior, or wood fiber or shavings encased within netting made of natural plant fibers unaltered by synthetic materials. Wattles shall be a minimum of 8 inches in diameter. Netting material shall be clean, evenly woven, and free of encrusted concrete or other contaminating materials such as preservatives. Netting material shall be free from cuts, tears, or weak places and shall effectively perform the intended erosion control function until permanent vegetation has been established or for a minimum of 6 months, whichever comes first.

If wood chip filler is used, it shall meet the material requirements as specified in Section 9-14.4(3). If straw filler is used, it shall meet the material requirements as specified in Section 9-14.4(1). If wood shavings are used, 80 percent of the fibers shall have a minimum length of 6 inches between 0.030 and 0.50 inches wide and between 0.017 and 0.13 inches thick.

Stakes for wattles shall be made of wood from untreated Douglas fir, hemlock, or pine species.

9-14.5(6) Compost Socks

This section is revised to read:

Compost socks shall consist of fabric made of natural plant fibers unaltered by synthetic materials. The compost sock shall be filled with Medium Compost as

specified in Section 9-14.4(8). Compost socks shall be at least 8 inches in diameter. The sock shall be clean, evenly woven; free of encrusted concrete or other contaminating materials; free from cuts, tears, broken or missing yarns; free of thin, open, or weak areas; and free of any type of preservative. Sock fabric shall effectively perform the intended erosion control function until permanent vegetation has been established or for a minimum of 6 months, whichever comes first.

Stakes for compost socks shall be made of wood from untreated Douglas fir, hemlock, or pine species.

9-16.AP9

Section 9-16, Fence and Guardrail

January 17, 2017

9-16.3(3) Galvanizing

The first three sentences are deleted and replaced with the following single sentence:

W-beam or thrie beam rail elements and terminal sections shall be galvanized in accordance with AASHTO M 180, Class A, Type II.

9-20.AP9

Section 9-20, Concrete Patching Material, Grout, and Mortar

January 3, 2017

This section is supplemented with the following new subsection:

9-20.5 Bridge Deck Repair Material

Bridge deck repair material shall be either an ultra-low viscosity, two-part liquid, polyurethane-hybrid polymer concrete, or a pre-packaged cement based repair mortar, conforming to the following requirements:

1. Minimum compressive strength of 2,500 psi, in accordance with ASTM C 109.
2. Total soluble chloride ion content by mass of product shall conform to the limits specified in Section 6-02.3(2) for reinforced concrete.
3. Permeability of less than 2,000 coulombs at 56-days in accordance with AASHTO T 277.

If pre-packaged deck repair material does not include coarse aggregate, the Contractor shall extend the mix with coarse aggregate as recommended by the manufacturer.

9-23.AP9

Section 9-23, Concrete Curing Materials and Admixtures

January 3, 2017

9-23.9 Fly Ash

The first paragraph is revised to read:

Fly ash shall conform to the requirements of AASHTO M295 Class C or F including supplementary optional chemical requirements as set forth in Table 2.

The last sentence of the last paragraph is revised to read:

The supplementary optional chemical limits in AASHTO M295 Table 2 do not apply to fly ash used in Controlled Density Fill.

9-23.12 Metakaolin

This section, including title, is revised to read:

9-23.12 Natural Pozzolan

Natural Pozzolans shall be either Metakaolin or ground Pumice and shall conform to the requirements of AASHTO M295 Class N, including supplementary optional chemical requirements as set forth in Table 2.

9-28.AP9

Section 9-28, Signing Materials and Fabrication April 3, 2017

9-28.14(3) Aluminum Structures

This section is revised to read:

Welding of aluminum shall be in accordance with AWS D1.2/D1.2M, latest edition, Structural Welding Code – Aluminum.

Aluminum alloy filler metals utilized on anodized structures shall result in color matching to base metals.

9-29.AP9

Section 9-29, Illumination, Signal, Electrical August 7, 2017

9-29.2 Junction Boxes, Cable Vaults, and Pull Boxes

This section is supplemented with the following new subsections:

9-29.2(5) Testing Requirements

The Contractor shall provide for testing of junction boxes, cable vaults and pull boxes. Junction boxes, cable vaults and pull boxes shall be tested by an independent materials testing facility, and a test report issued documenting the results of the tests performed.

For each junction box, vault and pull box type, the independent testing laboratory shall meet the requirements of AASHTO R 18 for Qualified Tester and Verified Test Equipment. The test shall be conducted in the presence of a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural, and each test sheet shall have the Professional Engineer's original signature, date of signature, original seal, and registration number. One copy of the test report shall be furnished to the Contracting Agency certifying that the box and cover meet or exceed the loading requirements for that box type, and shall include the following information:

1. Product identification.
2. Date of testing.
3. Description of testing apparatus and procedure.
4. All load deflection and failure data.
5. Weight of box and cover tested.
6. Upon completion of the required test(s) the box shall be loaded to failure or to the maximum load possible on the testing machine (70,000 pounds minimum).
7. A brief description of type and location of failure or statement that the testing machine reached maximum load without failure of the box.

9-29.2(5)A Standard Duty Boxes and Vaults

Standard Duty Concrete Junction Boxes, Cable Vaults, and Pull Boxes shall be load tested to 22,500 pounds. The test load shall be applied uniformly through a 10 by 10 by 1-inch steel plate centered on the lid. The test load shall be applied and released ten times, and the deflection at the test load and released state shall be recorded for each interval. At each interval the junction box shall be inspected for lid deformation, failure of the lid/frame welds, vertical and horizontal displacement of the lid/frame, cracks, and concrete spalling.

Concrete junction boxes will be considered to have withstood the test if none of the following conditions are exhibited:

1. Permanent deformation of the lid or any impairment to the function of the lid.
2. Vertical or horizontal displacement of the lid frame.
3. Cracks wider than 0.012 inches that extend 12 inches or more.
4. Fracture or cracks passing through the entire thickness of the concrete.
5. Spalling of the concrete.

9-29.2(5)B Retrofit Security Lids for Standard Duty Concrete Junction Boxes

Security lids used to retrofit existing Standard Duty Concrete Junction Boxes shall be tested as follows:

1. The security lid shall be installed on any appropriately sized box that is currently approved on the Qualified Products List.
2. The security lid and box assembly shall be load tested in accordance with Section 9-29.2(5)A. After the ten load cycles but before loading to failure, the security lid shall be fully opened and removed to verify operability.

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
3. The locking mechanism(s) shall be tested as follows:
 - a. The locking mechanism shall be cycled 250 times (locked, then unlocked again) at room temperature (60-80°F). If there is more than one identical locking mechanism, only one needs to be cycled in this manner.
 - b. Temperature changes should be limited to no more than 60°F per hour.
 - c. The security lid shall be cooled to and held at -30°F for 15 minutes. The locking mechanism shall then be cycled once to verify operation at this temperature.
 - d. The security lid shall be heated to and held at 120-122°F for 15 minutes. The locking mechanism shall then be cycled once to verify operation at this temperature.
 - e. The security lid shall be temperature adjusted to and held at 110°F and 95% humidity for 15 minutes. The locking mechanism shall then be cycled once to verify operation at this temperature and humidity.

24
25
26
27
28
29
30

9-29.2(5)C Standard Duty Non-Concrete Junction Boxes

Non-concrete Junction Boxes shall be tested as defined in the ANSI/SCTE 77 Tier 15 test method using the test load of 22,500 pounds (minimum) in place of the design load during testing. In addition, the Contractor shall provide a Manufacturer Certificate of Compliance for each non-concrete junction box installed.

31
32
33
34
35
36
37
38
39
40
41
42

9-29.2(5)D Heavy-Duty Boxes and Vaults

Heavy-Duty Junction Boxes, Cable Vaults, and Pull Boxes shall be load tested to 46,000 pounds. The test load shall be applied vertically through a 10 by 20 by 1-inch steel plate centered on the lid with an orientation both on the long axis and the short axis of the junction box. The test load shall be applied and released ten times on each axis. The deflection at the test load and released state shall be recorded for each interval. At each interval the test box shall be inspected for lid deformation, failure of the lid or frame welds, vertical and horizontal displacement of the lid frame, cracks, and concrete spalling. After the twentieth loading interval the test shall be terminated with a 60,000 pound load being applied vertically through the steel plate centered on the lid and with the long edge of steel plate orientated parallel to the long axis of the box.

43
44
45

Heavy-Duty Junction Boxes will be considered to have withstood the 46,000 pound test if none of the following conditions are exhibited:

- 46
47
48
49
50
51
1. Permanent deformation of the lid or any impairment to the function of the lid.
 2. Vertical or horizontal displacement of the lid frame.
 3. Cracks wider than 0.012 inches that extend 12 inches or more.

4. Fracture or cracks passing through the entire thickness of the concrete.
5. Spalling of the concrete.

Heavy-Duty Junction Boxes will be considered to have withstood the 60,000 pound test if all of the following conditions are exhibited:

1. The lid is operational.
2. The lid is securely fastened.
3. The welds have not failed.
4. Permanent dishing or deformation of the lid is ¼ inch or less.
5. No buckling or collapse of the box.

9-29.2(1) Standard Duty and Heavy Duty Junction Boxes

This section, including title, is revised to read:

9-29.2(1) Junction Boxes

For the purposes of this Specification concrete is defined as portland cement concrete and non-concrete is all others.

The Contractor shall provide shop drawings for all components, hardware, lid, frame, reinforcement, and box dimensions. The shop drawings shall be prepared by (or under the supervision of) a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural. Each sheet shall carry the following:

1. Professional Engineer's original signature, date of signature, original seal, and registration number. If a complete assembly drawing is included which references additional drawing numbers, including revision numbers for those drawings, then only the complete assembly drawing is required to be stamped.
2. The initials and dates of all participating design professionals.
3. Clear notation of all revisions including identification of who authorized the revision, who made the revision, and the date of the revision.

Design calculations shall carry on the cover page, the Professional Engineer's original signature, date of signature, original seal, and registration number.

For each type of junction box, or whenever there is a change to the junction box design, a proof test, as defined in this Specification, shall be performed and new shop drawings submitted.

9-29.2(1)A Standard Duty Junction Boxes

This section is revised to read:

Standard Duty Junction Boxes are defined as Type 1, 2 and 8 junction boxes and shall have a minimum load rating of 22,500 pounds and be tested in accordance with Section 9-29.2(5). A complete Type 8 Junction Box includes the spread footing shown in the Standard Plans. All Standard Duty Junction Boxes placed in sidewalks, walkways, and shared use paths shall have slip resistant surfaces. Non-slip lids and frames shall be hot dip galvanized in accordance with AASHTO M111.

9-29.2(1)A1 Concrete Junction Boxes

The Standard Duty Concrete Junction Box steel frame, lid support, and lid shall be painted with a black paint containing rust inhibitors or painted with a shop applied, inorganic zinc primer in accordance with Section 6-07.3, or hot-dip galvanized in accordance with AASHTO M 111.

Concrete used in Standard Duty Junction Boxes shall have a minimum compressive strength of 6,000 psi when reinforced with a welded wire hoop, or 4,000 psi when reinforced with welded wire fabric or fiber reinforcement. The frame shall be anchored to the box by welding headed studs $\frac{3}{8}$ by 3 inches long, as specified in Section 9-06.15, to the frame. The wire fabric shall be attached to the studs and frame with standard tie practices. The box shall contain ten studs located near the centerline of the frame and box wall. The studs shall be placed one anchor in each corner, one at the middle of each width and two equally spaced on each length of the box.

Materials for Type 1, 2, and 8 Concrete Junction Boxes shall conform to the following:

Materials	Requirement
Concrete	Section 6-02
Reinforcing Steel	Section 9-07
Fiber Reinforcing	ASTM C1116, Type III
Lid	ASTM A786 diamond plate steel
Slip Resistant Lid	ASTM A36 steel
Frame	ASTM A786 diamond plate steel or ASTM A36 steel
Slip Resistant Frame	ASTM A36 steel
Lid Support	ASTM A36 steel, or ASTM A1011 SS Grade 36 (or higher)
Handle & Handle support	ASTM A36 steel, or ASTM A1011 CS (Any Grade) or SS (Any Grade)
Anchors (studs)	Section 9-06.15
Bolts, Studs, Nuts, Washers	ASTM F593 or A193, Type 304 or 316, or Stainless Steel grade 302, 304, or 316 steel in accordance with approved shop drawing
Locking and Latching Mechanism Hardware and Bolts	In accordance with approved shop drawings

9-29.2(1)A2 Non-Concrete Junction Boxes

Material for the non-concrete junction boxes shall be of a quality that will provide for a similar life expectancy as portland cement concrete in a direct burial application.

Type 1, 2, and 8 non-concrete junction boxes shall have a Design Load of 22,500 pounds and shall be tested in accordance with Section 9-29.2(5). Non-concrete junction boxes shall be gray in color and have an open bottom design with approximately the same inside dimensions, and present a load to the bearing surface that is less than or equal to the loading presented by the concrete junction boxes shown in the Standard Plans. Non-concrete junction box lids shall include a pull slot and embedded 6 by 6 by ¼-inch steel plate, and shall be secured with two ½ inch stainless steel Penta-head bolts recessed into the cover. The tapped holes for the securing bolts shall extend completely through the box to prevent accumulation of debris. Bolts shall conform to ASTM F593, stainless steel.

9-29.2(1)B Heavy-Duty Junction Boxes

The first paragraph is revised to read:

Heavy-Duty Junction Boxes are defined as Type 4, 5, and 6 junction boxes and shall be concrete and have a minimum vertical load rating of 46,000 pounds without permanent deformation and 60,000 pounds without failure when tested in accordance with Section 9-29.2(5).

9-29.2(1)C Testing Requirements

This section is deleted in its entirety.

9-29.2(2) Small Cable Vaults, Standard Duty Cable Vaults, Standard Duty Pull Boxes, and Heavy Duty Pull Boxes

This section, including title, is revised to read:

9-29.2(2) Cable Vaults and Pull Boxes

Cable Vaults and Pull Boxes shall be constructed as a concrete box and as a concrete lid. The lids for Cable Vaults and Pull Boxes shall be interchangeable and both shall fit the same box as shown in the Standard Plans.

The Contractor shall provide shop drawings for all components, including concrete box, Cast Iron Ring, Ductile Iron Lid, Steel Rings, and Lid. In addition, the shop drawings shall show placement of reinforcing steel, knock outs, and any other appurtenances. The shop drawing shall be prepared by or under the direct supervision of a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural. Each sheet shall carry the following:

1. Professional Engineer's original signature, date of signature, original seal, and registration number. If a complete assembly drawing is included which references additional drawing numbers, including revision numbers for those drawings, then only the complete assembly drawing is required to be stamped.
2. The initials and dates of all participating design professionals.

3. Clear notation of all revisions including identification of who authorized the revision, who made the revision, and the date of the revision.

Design calculations shall carry on the cover page, the Professional Engineer's original signature, date of signature, original seal, and registration number.

For each type of box or whenever there is a change to the Cable Vault or Pull box design, a proof test, as defined in this Specification, shall be performed and new shop drawings submitted.

9-29.2(2)A Small Cable Vaults, Standard Duty Cable Vaults, and Standard Duty Pull Boxes

This section's title is revised to read:

9-29.2(2)A Standard Duty Cable Vaults and Pull Boxes

The first paragraph is revised to read:

Standard Duty Cable Vaults and Pull Boxes shall be concrete and have a minimum load rating of 22,500 pounds and be tested in accordance with Section 9-29.2(5). For the purposes of this Section, Small Cable Vaults are considered a type of Standard Duty Cable Vault.

The first sentence of the second paragraph is revised to read:

Concrete for Standard Duty Cable Vaults and Pull Boxes shall have a minimum compressive strength of 4,000 psi.

The first sentence of the third paragraph is revised to read:

All Standard Duty Cable Vaults and Pull Boxes placed in sidewalks, walkways, and shared-use paths shall have slip-resistant surfaces.

The fourth paragraph (up until the colon) is revised to read:

Materials for Standard Duty Cable Vaults and Pull Boxes shall conform to the following:

9-29.2(2)B Heavy-Duty Cable Vaults and Pull Boxes

The first paragraph is revised to read:

Heavy-Duty Cable Vaults and Pull Boxes shall be constructed of concrete having a minimum compressive strength of 4,000 psi, and have a minimum vertical load rating of 46,000 pounds without permanent deformation and 60,000 pounds without failure when tested in accordance with Section 9-29.2(5).

9-29.2(3) Structure Mounted Junction Boxes

The first and second paragraphs are revised to read:

1 Surface mounted junction boxes and concrete embedded junction boxes installed in
2 cast-in-place structures shall be stainless steel NEMA 4X.

3
4 Concrete embedded junction boxes installed in structures constructed by slip forming
5 shall be stainless steel NEMA 3R and shall be adjustable for depth, with depth
6 adjustment bolts, which are accessible from the front face of the junction box with the
7 lid installed.

9 **9-29.3(1) Fiber Optic Cable**

10 This section is revised to read:

11
12 All fiber optic cables shall be single mode fiber optic cables unless otherwise specified
13 in the Contract. All fiber optic cables shall meet the following requirements:

- 14
15 1. Compliance with the current version of ANSI/ICEA S-87-640. A product data
16 specification sheet clearly identifying compliance or a separate letter from
17 manufacturer to state compliance shall be provided.
- 18
19 2. Cables shall be gel free, loose tube, low water peak, and all dielectric with no
20 metallic component.
- 21
22 3. Cables shall not be armored unless specified in the Contract.
- 23
24 4. Cables shall be approved for mid-span entries and be rated by the
25 manufacturer for outside plant (OSP) use, placement in underground ducts,
26 and aerial installations.
- 27
28 5. Fiber counts shall be as specified in the Contract.
- 29
30 6. Fibers and buffer tubes shall be color coded in accordance with the current
31 version of EIA/TIA-598.
- 32
33 7. Fibers shall not have any factory splices.
- 34
35 8. Outer Jacket shall be Type M (Medium Density Polyethylene). Outer jacket
36 shall be free from holes, splits, blisters, or other imperfections and must be
37 smooth and concentric as is consistent with the best commercial practice.
- 38
39 9. A minimum of one (1) rip cord is required for each cable.
- 40
41 10. Cable markings shall meet the following additional requirements:
42
 - 43 a. Color shall be white or silver.
 - 44
45 b. Markings shall be approximately 3 millimeters (118 mils) in height, and
46 dimensioned and spaced to produce good legibility.
 - 47
48 c. Markings shall include the manufacturer's name, year of manufacture, the
49 number of fibers, the words "OPTICAL CABLE", and sequential length
50 marks.
- 51

- 1 d. Sequential length markings shall be in meters or feet, spaced at intervals
2 not more than 1 meter or 2 feet apart, respectively.
3
4 e. The actual cable length shall not be shorter than the cable length
5 marking. The actual cable length may be up to 1% longer than the cable
6 length marking.
7
8 f. Cables with initial markings that do not meet these requirements will not
9 be accepted and may not be re-marked.
10
11 11. Short term tensile strength shall be a minimum of 600 pounds (1bs). Long
12 term tensile strength shall be a minimum of 180 pounds (1bs). Tensile
13 strength shall be achieved using a fiberglass reinforced plastic (FRP) central
14 member and / or aramid yarns.
15
16 12. All cables shall be new and free of material or manufacturing defects and
17 dimensional non-uniformity that would:
18
19 a. Interfere with the cable installation using accepted cable installation
20 practices;
21
22 b. Degrade the transmission performance or environmental resistance after
23 installation;
24
25 c. Inhibit proper connection to interfacing elements;
26
27 d. Otherwise yield an inferior product.
28
29 13. The fiber optic cables shall be shipped on reels with a drum diameter at least
30 20 times the diameter of the cable, in order to prevent damage to the cable.
31 The reels shall be substantial and constructed so as to prevent damage
32 during shipment and handling. Reels shall be labeled with the same
33 information required for the cable markings, with the exception that the total
34 length of cable shall be marked instead of incremental length marks. Reels
35 shall also be labeled with the type of cable.
36

37 This section is supplemented with the following new subsection:
38

39 **9-29.3(1)B Multimode Optical Fibers**

40 Where multimode fiber optic cables are specified in the Contract, the optical fibers shall
41 be one of the following types, as specified in the Contract:
42

- 43 a. Type OM1, meeting the requirements of EIA/TIA 492-AAAA-A or ISO/IEC
44 11801. The fiber core diameter shall be 62.5 µm.
45
46 b. Type OM2, meeting the requirements of EIA/TIA 492-AAAB-A or ISO/IEC
47 11801. The fiber core diameter shall be 50 µm.
48

49 All multimode optical fibers shall have a maximum attenuation of 3.0 dB/km at 850nm
50 and 1.0 dB/km at 1300nm. Completed cable assemblies shall be rated for 1000BaseLX
51 Ethernet communications.

9-29.3(1)A Singlemode Fiber Optic Cable

This section is revised to read:

Single-Mode optical fibers shall be EIA/TIA 492-CAAB or ISO/IEC 11801 Type OS2, low water peak zero dispersion fibers, meeting the requirements of ITU-T G.652.D.

9-29.6 Light and Signal Standards

The third paragraph is revised to read:

Light standard, signal standards, slip base hardware and foundation hardware shall be hot dip galvanized in accordance with AASHTO M 111 and AASHTO M 232. Where colored standards are required, standards shall be powder-coated after galvanizing in accordance with Section 6-07.3(11). The standard color shall be as specified in the Contract.

9-29.6(1) Steel Light and Signal Standards

In the first paragraph, "ASTM A325" is revised to read "ASTM F3125 Grade A325".

9-29.6(2) Slip Base Hardware

In this section, "ASTM A325" is revised to read "ASTM F3125 Grade A325".

9-29.7(2) Fused Quick-Disconnect Kits

The table is supplemented with the following new row:

LED*	10A	10A	20A
------	-----	-----	-----

The following footnote is inserted after the table:

* Applies to all LED luminaires, regardless of wattage. Fuses for LED luminaires shall be slow blow.

9-29.10 Luminaires

The first sentence of the third paragraph is revised to read:

All luminaires shall be provided with markers for positive identification of light source type and wattage in accordance with ANSI C136.15-2011, with the exception that LED luminaires shall be labeled with the wattage of their conventional luminaire equivalents – the text "LED" is optional.

The table in the fourth paragraph is revised to read:

Conventional Lamp Wattage	Conventional Wattage Legend	Equivalent LED Legend
70	7	7E
100	10	10E
150	15	15E
175	17	17E
200	20	20E
250	25	25E

310	31	31E
400	40	40E
700	70	70E
750	75	75E
1,000	X1	X1E

9-29.13(10)C NEMA Controller Cabinets

Item number 6 of the first paragraph is revised to read:

6. LED light strips shall be provided for cabinet lighting. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4100K (cool white) or higher. Two light strips shall be provided. One light strip shall be ceiling mounted and oriented parallel to the door face. The second light strip shall be mounted under the lower shelf, such that the output terminal landings are illuminated. Lighting shall not interfere with the proper operation of any other ceiling or shelf mounted equipment. All lighting fixtures shall energize automatically when any door is opened. Each door switch shall be labeled "Light".

9-29.13(10)D Cabinets for Type 170E and 2070 Controllers

Item number 6 of the first paragraph is revised to read:

6. LED light strips shall be provided for cabinet lighting, powered from the Equipment breaker on the Power Distribution Assembly. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4100K (cool white) or higher. There shall be two light strips for each rack within the cabinet. Lighting shall be ceiling mounted – rack mounted lighting is not permitted. One light strip shall be installed above the front of the rack, oriented parallel to the door face, and placed such that the front of the rack and the rack mounted equipment is illuminated. The second light strip shall be installed above the rear of the rack, oriented perpendicular to the door face, and placed such that the interior of the rack is illuminated. Lighting shall not interfere with the proper operation of any other ceiling mounted equipment. All lighting fixtures above a rack shall energize automatically when either door to that respective rack is opened. Each door switch shall be labeled "Light".

9-29.13(12) ITS Cabinet

Item number 6 of the first paragraph is revised to read:

6. LED light strips shall be provided for cabinet lighting, powered from the Equipment breaker on the Power Distribution Assembly. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4100K (cool white) or higher. There shall be two light strips for each rack within the cabinet. Lighting shall be ceiling mounted – rack mounted lighting is not permitted. One light strip shall be installed above the front of the rack, oriented parallel to the door face, and placed such that the front of the rack and the rack mounted equipment is illuminated. The second light strip shall be installed above the rear of the rack, oriented perpendicular to the door face, and placed such that the interior of the rack is illuminated. Lighting shall not interfere with the proper operation of any other ceiling mounted equipment. All lighting

1 fixtures above a rack shall energize automatically when either door to that
2 respective rack is opened. Each door switch shall be labeled "Light".
3

4 **9-29.25 Amplifier, Transformer, and Terminal Cabinets**

5 Item 2C is revised to read:
6

7	c.	Transformer up to 12.5 KVA	20"	48"	24"
8		Transformer 12.6 to 35 KVA	30"	60"	32"

9
10 The following new sentence is inserted before the last sentence of item number 10:
11

12 There shall be an isolation breaker on the input (line) side of the transformer, and a
13 breaker array on the output (load) side.
14

15 9-30.AP9

16 **Section 9-30, Water Distribution Materials**

17 **August 7, 2017**

18 **9-30.6(3) Service Pipes**

19 This section is supplemented with the following new subsection:
20

21 **9-30.6(3)C PEX-a Tubing**

22 PEX-a tubing shall be a minimum of ¾-inch or a maximum 2-inch in diameter and shall
23 be manufactured in accordance with AWWA C904 and ASTM F876. The tubing shall
24 have a minimum materials designation code of 3306 in accordance with ASTM F876, a
25 pressure rating of 200 psi at 73.4 degrees using a design factor of 0.63 as outlined in
26 PPI TR-3, Part F-7, and shall have a minimum SDR of 9. Tubing color shall be blue in
27 accordance with APWA Uniform color standards.
28

29 **9-30.6(4) Service Fittings**

30 This section is supplemented with the following new paragraph:
31

32 Fittings for PEX-a tubing shall meet the requirements of AWWA C904.
33

34 9-31.AP9

35 **Section 9-31, Elastomeric Pads**

36 **August 7, 2017**

37 This section, including title, is revised to read:
38

39 **9-31 Fabricated Bridge Bearing Assemblies**

40 **9-31.1 Steel Plates and Bars**

41 Steel plates and bars, including anchor array templates, shall conform to ASTM A
42 36.
43

44 Recessed steel surfaces retaining PTFE shall have an average surface roughness
45 of 250-microinches or less.
46

47 Steel surfaces in contact with pre-formed fabric pad or polyether urethane disc
48 shall have an average surface roughness of 250-microinches or less.

Steel surfaces in contact with stainless steel sheet, or with the bearing block of a pin bearing assembly, shall have an average surface roughness of 125-microinches or less.

All other steel surfaces in contact with other fabricated bridge bearing assembly components shall have an average surface roughness of 250-microinches or less.

9-31.2 Stainless Steel

Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in contact with PTFE shall be polished to a Number 8 mirror finish. Stainless steel sheet for fabric pad bearing assemblies shall have a thickness greater than or equal to 14-gage.

Stainless steel countersunk screws shall be hexagon socket type conforming to the geometric requirements of ANSI B 18.3 and shall conform to ASTM F 593 Type 304L.

9-31.3 Bearing Blocks and Keeper Rings

Bearing block forgings for pin bearing assemblies shall conform to Section 9-06.11, including AASHTO M 102 Supplemental Requirement S4. The grade shall be Grade F. The bearing block forging surfaces in contact with other pin bearing assembly components shall have an average surface roughness of 63-microinches or less. All other bearing block forging surfaces shall have an average surface roughness of 250-microinches or less.

Keeper ring forgings for pin bearing assemblies shall conform to Section 9-06.11, and the grade shall be Grade H. All keeper ring surfaces shall have an average surface roughness of 125-microinches or less.

9-31.4 Pin Assembly

Pins shall conform to ASTM A 276 UNS Designation 21800. The pin surfaces in contact with the bearing block shall have an average surface roughness of 63-microinches or less.

Nuts shall conform to ASTM A 563 Grade DH. Nuts with a thread diameter equal to or less than six-inches shall have a minimum Rockwell Hardness of HRc 24. Nuts with a thread diameter greater than six-inches shall have a Rockwell Hardness between HRc 20 and HRc 30.

Washers shall conform to ASTM A 572 Grade 50.

Cotter pins shall be stainless steel.

9-31.5 Welded Shear Connectors

Welded shear connectors shall conform to Section 9-06.15.

9-31.6 Bolts, Nuts and Washers

Bolts, nuts and washers shall conform to Section 9-06.5(3).

9-31.7 Anchor Array Rods, Nuts and Washers

Anchor array rods, nuts and washers shall conform to Section 9-06.5(4). The top 1'-0", minimum, of the exposed end of the anchor rods, and the associated nuts and washers, shall be galvanized in accordance with AASHTO M 232 or ASTM F 2329 as applicable.

Pipe sleeves for anchor array templates shall conform to ASTM A 53 Grade B Type E or S, black.

9-31.8 Bearing Pads

9-31.8(1) Elastomeric Pads

Elastomeric pads shall conform to the requirements of AASHTO M251 unless otherwise specified in the Plans or Special Provisions. The elastomer shall be low-temperature Grade 3 and shall not contain any form of wax. Unless otherwise specified in the Plans or Special Provisions, the elastomer shall have a shear modulus of elasticity of 165 psi at 73°F.

All elastomeric pads with steel laminates shall be cast as units in separate molds and bonded and vulcanized under heat and pressure. Corners and edges of molded pads may be rounded at the option of the Contractor. Radius at corners shall not exceed $\frac{3}{8}$ inch, and radius of edges shall not exceed $\frac{1}{8}$ inch. Elastomeric pads shall be fabricated to meet the tolerances specified in AASHTO M251.

Shims contained in laminated elastomeric pads shall be mill rolled steel sheets not less than 20 gage in thickness with a minimum cover of elastomer on all edges of:

$\frac{1}{4}$ inch for pads less than or equal to 5 inches thick and,

$\frac{1}{2}$ inch for pads greater than 5 inches thick.

Steel shims shall conform to ASTM A1011, Grade 36, unless otherwise noted. All shim edges shall be ground or otherwise treated so that no sharp edges remain.

9-31.8(2) Polytetrafluoroethylene (PTFE)

PTFE shall be unfilled (100-percent virgin) PTFE or fiberglass fiber filled PTFE (or woven fabric PTFE for disc or spherical bearing assemblies) conforming to Section 18.8 of the AASHTO LRFD Bridge Construction Specifications, and the following additional requirements:

1. PTFE shall be unfilled (100-percent virgin) PTFE except where filled PTFE is specified in the Plans.
2. Filled PTFE shall be composed of PTFE resin uniformly blended with 15-percent maximum fiberglass fiber.
3. The substrate shall limit the flow (elongation) of the confined PTFE to not more than 0.009-inch under a pressure of 2,000 psi for 15-minutes at 78°F for a two-inch by three-inch test sample.

4. Unfilled PTFE shall have a hardness of 50 to 65 Durometer D, at 78°F, in accordance with ASTM D 2240.

5. The PTFE may be dimpled.

9-31.8(3) Pre-Formed Fabric Pad

Pre-formed fabric pads shall be composed of multiple layers of duck, impregnated and bound with high-quality oil resistant synthetic rubber, compressed into resilient pads. The pre-formed fabric pads shall conform to MIL C 882 and the following additional requirements:

1. The pre-formed fabric pad shall have a shore A hardness of 90 ± 5 in accordance with ASTM D 2240.
2. The number of plies shall be as required to produce the specified thickness after compression and vulcanization.

9-31.9 Polyether Urethane

Polyether urethane shall be a molded polyether urethane compound conforming to the following properties:

Physical Properties	Specification			
Hardness, Type D durometer	ASTM D 2240	45	55	65
Minimum tensile stress, ksi	ASTM D 412			
At 100-percent elongation		1.5	1.9	2.3
At 200-percent elongation		2.8	3.4	4.0
Minimum tensile strength, ksi	ASTM D 412	4.0	5.0	6.0
Minimum ultimate elongation, percent	ASTM D 412	350	285	220
Maximum compression set (22 hours at 158°F) Method B, percent	ASTM D 395	40	40	40

Required minimums for tensile stress at specific elongations, tensile strength, ultimate elongation, and compression set may be interpolated for durometer hardness values between 45 and 55, and 55 and 65.

9-31.10 Silicone Grease

Silicone grease for use with dimpled PTFE shall conform to SAE AS 8660.

9-31.11 Epoxy Gel

Epoxy gel shall be Type 1, Grade 3, Class A, B, or C, conforming to Section 9-26.1.

9-31.12 Resin Filler

Resin filler shall be a two-component, resin and catalyst, liquid thermoset material, with the following properties:

1. The viscosity of the resin-catalyst mixture shall be 35,000 ± 5,000cP at 75°F immediately after mixing.
2. The flash point shall be 100°F minimum.
3. After mixing, the resin-catalyst mixture shall be pourable for a minimum of 8-minutes at 60°F and shall harden in 15-minutes maximum. Heating of the mixture to a maximum temperature of 250°F after placement is permissible to obtain a full cure.

The properties of the cured resin-catalyst mixture shall be:

1. The fully cured compressive strength shall be 12,000 psi, minimum.
2. The maximum allowable shrinkage shall be 2-percent. To control shrinkage, an inert filler may be used in the resin provided the specified viscosity requirements are met.
3. The hardness shall be between 40 and 55 in accordance with ASTM D 2583.

The resin and catalyst components shall be supplied in separate containers.

9-35.AP9

Section 9-35, Temporary Traffic Control Materials **August 7, 2017**

9-35.12 Transportable Attenuator

The second sentence of the first paragraph is revised to read:

The transportable attenuator shall be mounted on, or attached to, a host vehicle that complies with the manufacturer's recommended weight range.

9-35.14 Portable Temporary Traffic Control Signal

The last sentence of the eighth paragraph is revised to read:

A highly retroreflective yellow strip, 1 inch wide, shall be placed around the perimeter of the face of all vehicle signal backplates to project a rectangular image at night toward oncoming traffic.

SPECIAL PROVISIONS

SPECIAL PROVISIONS

The following Special Provisions are made a part of this contract and supersede any conflicting provisions of the 2016 Standard Specifications for Road, Bridge and Municipal Construction, and the foregoing Amendments to the Standard Specifications.

Several types of Special Provisions are included in this contract; General, Region, Bridges and Structures, and Project Specific. Special Provisions types are differentiated as follows:

(date)	General Special Provision
(*****)	Notes a revision to a General Special Provision and also notes a Project Specific Special Provision.
(Regions ¹ date)	Region Special Provision
(BSP date)	Bridges and Structures Special Provision

General Special Provisions are similar to Standard Specifications in that they typically apply to many projects, usually in more than one Region. Usually, the only difference from one project to another is the inclusion of variable project data, inserted as a "fill-in".

Region Special Provisions are commonly applicable within the designated Region. Region designations are as follows:

<u>Regions</u>	
ER	Eastern Region
NCR	North Central Region
NWR	Northwest Region
OR	Olympic Region
SCR	South Central Region
SWR	Southwest Region
WSF	Washington State Ferries Division

Bridges and Structures Special Provisions are similar to Standard Specifications in that they typically apply to many projects, usually in more than one Region. Usually, the only difference from one project to another is the inclusion of variable project data, inserted as a "fill-in".

Project Specific Special Provisions normally appear only in the contract for which they were developed.

Division 1 General Requirements

DESCRIPTION OF WORK

(March 13, 1995)

This Contract provides for the improvements to the existing diamond interchange at I-5 and 116th Street NE. The project constructs new I-5 ramps, structural earth retaining walls, stormwater treatment facilities, signal, illumination, permanent signing, Intelligent

1 Transportation System, and Temporary Erosion and Sediment Control, and other work, all in
2 accordance with the attached Contract Plans, these Contract Provisions, and the Standard
3 Specifications.
4

5 **1-01 Definition and Terms**

6 **1-01.3 Definitions**

7
8
9 The tenth, eleventh, and twelfth paragraphs of Section 1-01.3 are deleted.

10 The following new terms and definitions are inserted after the twentieth paragraph of Section
11 1-01.3:

12
13 (*****)

14 **Dates**

15 ***Bid Opening Date***

16 The date on which the Contracting Agency publicly opens and reads the Bids.
17

18 ***Award Date***

19 The date of the formal decision of the Contracting Agency to accept the most responsible
20 and responsive Bidder for the Work.
21

22 ***Contract Execution Date***

23 The date the Contracting Agency officially binds the Agency to the Contract.
24

25 ***Notice to Proceed Date***

26 The date stated in the Notice to Proceed on which the Contract time begins.
27

28 ***Substantial Completion Date***

29 The day the Engineer determines the Contracting Agency has full and unrestricted use
30 and benefit of the facilities, both from the operational and safety standpoint, any remaining
31 traffic disruptions will be rare and brief, all the initial plantings are completed, and only
32 minor incidental work, replacement of temporary substitute facilities, plant establishment
33 periods, or correction or repair remains for the Physical Completion of the total Contract.
34

35 ***Physical Completion Date***

36 The day all of the Work is physically completed on the project. All documentation required
37 by the Contract and required by law does not necessarily need to be furnished by the
38 Contractor by this date.
39

40 ***Completion Date***

41 The day all the Work specified in the Contract is completed and all the obligations of the
42 Contractor under the contract are fulfilled by the Contractor. All documentation required
43 by the Contract and required by law must be furnished by the Contractor before
44 establishment of this date.
45

46 ***Final Acceptance Date***

47 The date on which the Contracting Agency accepts the Work as complete.
48

1 The following definitions in Section 1-01.3 are replaced and revised to read:

2
3 (*****)

4 **Award**

5 The formal decision of the Contracting Agency to accept the most responsible and responsive
6 Bidder for the Work.

7
8 **Contracting Agency**

9 Agency of Government that is responsible for the execution and administration of the Contract.
10 "Contracting Agency" refers to the Tulalip Tribes of Washington.

11
12 **Engineer**

13 The Contracting Agency's representative who administers the construction program for the
14 Contracting Agency. "Engineer" shall refer to the State of Washington Department of
15 Transportation.

16
17 **Inspector**

18 The Project Engineer's representative who inspects Contract performance in detail.
19 "Inspector" shall refer to the State of Washington Department of Transportation's employee
20 designated to the Project.

21
22 **Laboratory**

23 The laboratories of the Contracting Agency, or other laboratories the Contracting Agency
24 authorizes to test Work, soils, and materials. "Laboratory" shall refer to the State of
25 Washington Department of Transportation's Material Laboratory.

26
27 **Project Engineer**

28 The Engineer's representative who directly supervises the engineering and administration of
29 a construction project. "Project Engineer" shall refer to the State of Washington Department
30 of Transportation's employee designated to the Project.

31
32 Section 1-01.3 is supplemented with the following:

33
34 (*****)

35 All references to "final contract voucher certification" shall be interpreted to mean the final
36 payment form established by the Contracting Agency.

37
38 The venue of all causes of action arising from the advertisement, award, execution, and
39 performance of the contract shall be specified by the Contracting Agency.

40
41 **Additive**

42 A supplemental unit of work or group of bid items, identified separately in the Bid Proposal,
43 which may, at the discretion of the Contracting Agency, be awarded in addition to the base
44 bid.

45
46 **Alternate**

47 One of two or more units of work or groups of bid items, identified separately in the Bid
48 Proposal, from which the Contracting Agency may make a choice between different methods
49 or material of construction for performing the same work.

1 **Alternative Dispute Resolution**

2 A method of resolving disputes other than arbitration or litigation.

3
4 **Business Day**

5 A business day is any day from Monday through Friday except holidays as listed in Section 1-
6 08.5.

7
8 **Contract Time**

9 The period of time established by the terms and conditions of the Contract within which the
10 Work must be physically completed.

11
12 **Construction Manager**

13 The individual or firm responsible for providing administration, management and related
14 services as required to coordinate the Project, coordinate the Contractors and provide other
15 services identified in the Contract Documents. "Construction Manager" refers to the Tulalip
16 Tribes as represented by the Tulalip Tribes' Project Manager.

17
18 **Indian / Native American**

19 The term "Indian or Native American" shall mean any person who is a member of a federally
20 recognized Indian tribe, and recognized as an Indian by the United States, pursuant to its trust
21 responsibility to American Indians.

22
23 **Liquidated Damages**

24 The sum established in the Contract Documents as the predetermined measure of damages
25 to be paid to the Tulalip Tribes of Washington due to the Contractor's failure to complete the
26 Work, or portions thereof, within stipulated times.

27
28 **NAOB or NAOB's**

29 Native American Owned Business that has been certified by Tulalip TERO.

30
31 **Notice of Intent to Award**

32 The notice provided to the apparently successful Bidder stating that upon satisfactory
33 compliance with all conditions precedent for execution of the Contract Form, within the time
34 specified, the Tulalip Tribes of Washington intends to execute a Contract Form with the Bidder.

35
36 **Notice to Proceed**

37 A notice provided by the Tulalip Tribes of Washington to the Contractor authorizing the
38 Contractor to proceed with the Work and establishing the date for completion of the Work.

39
40 **Preference / Preferred Employee / Hiring**

41 The term "Preferred Employee" shall mean a person entitled to a preference in employment
42 under Ordinance No. 60, who must be hired in tier preference order before a non-Indian
43 person, whenever an opening is available.

44
45 **Regulations / Ordinance**

46 Shall mean the regulations implementing any Ordinance adopted by the Tulalip Tribal
47 Employment Rights Commission and the Tulalip Board of Directors, which is a law within the
48 boundaries of the reservation.

1 **Request for Information (RFI)**

2 Written request from the Contractor to the Tribes Representative, through the Engineer,
3 seeking an interpretation or clarification of the Contract Documents.
4

5 **Reservation**

6 Shall mean all lands and waters within the exterior boundaries of the Tulalip Indian
7 Reservation or within the jurisdiction of the Tulalip Tribes.
8

9 **Samples**

10 Physical examples furnished by the Contractor to illustrate materials, equipment or
11 workmanship and establish Standards by which the Work will be judged.
12

13 **Surety**

14 A person or entity providing a Bid Guaranty or a Bond to a Bidder or a Contractor, as
15 applicable, to indemnify the Tulalip Tribes of Washington against all direct and consequential
16 damages suffered by failure of the Bidder to enter into the Contract, or by failure of the
17 Contractor to perform the Contract and to pay all lawful claims of Subcontractors, Material
18 Suppliers and laborers, as applicable.
19

20 **TERO**

21 Means the "Tulalip Tribal Employment Rights Office".
22

23 **Traffic**

24 Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and
25 equestrian traffic.
26

27 **Tribal Court**

28 Shall mean the tribal court of the Tulalip Tribes of Washington.
29

30 **Tribal Entity**

31 Means all subsidiary entities of the Tulalip Tribes and is intended to be as broad and
32 encompassing as possible to ensure the Ordinance's coverage overall employment and
33 contract activities within the Nation's jurisdiction and the term shall be so interpreted by the
34 Commission and the Courts.
35

36 **Tribal Preference**

37 This is the process of hiring applicants which gives tribal members a higher preference in
38 employment on tribally funded projects or tribal entities.
39

40 **Tribal Member**

41 The term "Tribal Member" and the term "Member" shall mean any person who is an enrolled
42 member of the Tulalip Tribes.
43

44 **Tribe**

45 The term "Tribe" or "Tribes" shall mean the Tulalip Tribes of Washington, unless the context
46 clearly indicates otherwise.
47

48 **Tulalip TERO Code**

49 The Tulalip "Tribal Employment Rights Office" (TERO) Code is the Tribal law which establishes
50 the methods and procedures to give preference to Indians in hiring promotions, training and
51 all other aspects of employment contracting and subcontracting and specifies the methods

and procedures for providing preference to certified NAOB's when contracting and subcontracting for goods or services on the Reservation.

Tulalip Tribes of Washington

The Contracting Agency, Owner or entity for whom the Project is being constructed.

Tulalip Tribes

See Tulalip Tribes of Washington.

Tulalip Tribes' Project Manager

The Tulalip Tribes' representative who provides management and oversight for the project.

Unit Price

An amount stated in the bid as the price per unit of measurement for materials or services described in the Contract Documents, which cost shall include overhead, profit and any other expense for the Work.

Veteran

Shall mean a person who has been honorably discharged from the active, reserve, or National Guard armed forces of the United States including Army, Navy, Marines, Air Force, and Coast Guard.

Warranty

Legally enforceable assurance of the quality and performance of materials and equipment.

Waters of the Tribes

"Waters of the Tribes" means all streams, lakes, ponds, wetlands, salt waters, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon:

- a) The lands, wetlands and tidelands within the boundaries of the Tulalip Tribes Reservation; or
- b) All lands, wetlands or tidelands outside the exterior boundaries of the Reservation which are held in fee by the Tulalip Tribes or held in trust by the United States government for the benefit of the Tulalip Tribes or its individual members; and
- c) All lands, wetlands, or tidelands deemed Tulalip "Indian Country" as defined in 18 U.S.C. 1151.

Work

The construction and services required by the Contract Documents, to include all labor, materials, equipment and services performed or provided by the Contractor for the Project.

1-02 Bid Procedures and Conditions

1-02.1 Prequalification of Bidders

Section 1-02.1 is revised to read:

1 (*****)

2 Prospective Bidder shall submit, or have submitted, a "Standard Questionnaire and Financial
3 Statement" to the Washington State Department of Transportation to determine whether or
4 not the Bidder is qualified to perform Highway, road, or other public work. The questionnaire
5 shall be sworn to before a person authorized to take oaths.
6

7 On the basis of this questionnaire, the Washington State Department of Transportation will
8 either specify the type and amount of Work it considers the prospective Bidder prequalified to
9 perform or advise the prospective Bidder of the reasons they failed to be prequalified. To
10 remain prequalified, the Bidder must submit an updated questionnaire once a year and
11 supplements whenever required by the Washington State Department of Transportation.
12

13 A submittal deadline applies to any prospective Bidder not prequalified or from whom a
14 supplemental questionnaire is due. To be considered a responsible Bidder for this specific
15 project, the questionnaire (or supplement) must be received by the Prequalification Engineer
16 no less than 15 days prior to the scheduled Bid opening.
17

18 The Contracting Agency or the Washington State Department of Transportation may withdraw
19 a Bidder's prequalification or reduce its amount if:
20

- 21 1. The extent of other work the Bidder has under Contract (Contracting Agency, Washington
22 State Department of Transportation, or otherwise) justifies such action, or
23
- 24 2. Past or present work on a Contracting Agency or Washington State Department of
25 Transportation Contract has been less than satisfactory.
26

27 If a Bidder's questionnaire does not contain sufficient information as determined by the
28 Contracting Agency and the Washington State Department of Transportation, the Contracting
29 Agency may declare any Bid submitted by Bidder as non-responsive. After opening Bids, the
30 Contracting Agency may decide that a prequalified Bidder is not responsible and may refuse
31 to accept the Bid on that basis. Such a refusal will be conclusive unless the Bidder appeals
32 pursuant to the terms of the Instructions to Bidders Section 3.6.
33

34 The Bidder shall ensure that the combination of the Bid amount and other Contract work with
35 the Contracting Agency or Washington State Department of Transportation does not exceed
36 the prequalification amount. If this combination does exceed the prequalification amount, the
37 Contracting Agency may determine the Bidder to be not responsible and refuse to Award a
38 Contract.
39

40 Two or more prospective Bidders may, in a joint venture, prequalify and Bid jointly on a single
41 Contract. Each shall have filed a "Standard Questionnaire and Financial Statement". Together
42 they shall also file a standard form of "Individual Project Statement of Joint Venture" and a
43 joint venture agreement in a form acceptable to the Contracting Agency and Washington State
44 Department of Transportation.
45

46 Any joint venture and each of its members is subject to Section 1-02.14.
47

1 **1-02.2 Plans and Specifications**

2
3 Section 1-02.2 is deleted in its entirety. Refer to the Notice to Bidders and the Instructions
4 to Bidders Section 2.10.

5
6 **1-02.4 Examination of Plans, Specifications and Site of Work**

7
8 **1-02.4(2) Subsurface Information**

9 The first paragraph of Section 1-02.4(2) is revised to read:

10
11 (*****)

12 If the Contracting Agency has made subsurface investigation of the site of the proposed Work,
13 the boring log data and soil sample test data accumulated by the Contracting Agency will be
14 made available for inspection by the Bidders. The boring logs, if and when included as an
15 appendix to the Special Provisions, shall be considered as part of the Contract. Any such
16 Subsurface Information are for reference use only and are provided solely to share information
17 available to the Contracting Agency and any use of, or reliance upon, such items by the
18 Contractor is at the risk of the Contractor.

19
20 Section 1-02.4(2) is supplemented with the following:

21
22 (January 2, 2012)

23 The soils information used for study and design of this project is available for review by
24 the bidder at the following location:

25
26 *** Appendix C ***

27
28 The soils information includes the following:

29
30 *** Geotechnical Report I-5, 116th Street NE Interchange Improvements prepared by
31 PanGEO Incorporated dated November 30, 2011.

32
33 Supplemented Final Geotechnical Report I-5, 116th Street NE Interchange
34 Improvements prepared by PanGEO Incorporated dated July 18, 2012.

35
36 Final Geotechnical Report, Bridge Only - I-5 116th Street NE Interchange
37 Improvements prepared by PanGEO Incorporated dated July 10, 2013 ***

38
39 **1-02.5 Proposal Forms**

40 Section 1-02.5 is deleted in its entirety.

41
42 **1-02.6 Preparation of Proposal**

43 The first paragraph of Section 1-02.6 is revised to read:

44
45 (*****)

46 The Contracting Agency will accept only those Proposals properly executed on the forms it
47 provides.

48
49 The third paragraph of Section 1-02.6 is revised to read:

(*****)

In the space provided on the Bid Proposal Form, the Bidder shall confirm that all Addenda have been received.

The fourth paragraph of Section 1-02.6 is deleted in its entirety.

Section 1-02.6 is supplemented with the following:

(*****)

Progress Schedule Minimum Bid

A minimum bid of **\$20,000** lump sum has been established for the item "Type B Progress Schedule." The Contractor's bid shall equal or exceed that amount. If the Contractor's bid is less than the minimum specified amount, the Contracting Agency will unilaterally revise the bid amount to the minimum specified amount and recalculate the Contractor's total bid amount. The corrected total bid amount will be used by the Contracting Agency for award purposes and to fix the amount of the contract bond.

1-02.7 Bid Deposit

Section 1-02.7 is deleted in its entirety.

1-02.9 Delivery of Proposal

Section 1-02.9 is deleted in its entirety.

1-02.10 Withdrawing, Revising, or Supplementing Proposal

Section 1-02.10 is deleted in its entirety.

1-02.11 Combination and Multiple Proposals

Section 1-02.11 is deleted in its entirety.

1-02.12 Public Opening of Proposals

Section 1-02.12 is deleted in its entirety.

1-02.15 Pre Award Information

(August 14, 2013 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the most responsive and responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain a Tulalip Tribes Business License to do business on the Tulalip Indian Reservation,
7. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.

8. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 Award and Execution of Contract

1-03.1 Consideration of Bids

Section 1-03.1 is deleted in its entirety.

1-03.2 Award of Contract

Section 1-03.2 is deleted in its entirety.

1-03.3 Execution of Contract

Section 1-03.3 is deleted in its entirety.

1-03.4 Contract Bond

Section 1-03.4 is deleted in its entirety.

1-03.5 Failure to Execute Contract

Section 1-03.5 is deleted in its entirety.

1-03.6 Return of Bid Deposit

Section 1-03.6 is deleted in its entirety.

1-03.7 Judicial Review

Section 1-03.7 is deleted in its entirety.

1-04 Scope of the Work

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

The second paragraph of Section 1-04.2 is revised to read:

(*****)

Any inconsistency in the parts of the Contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

1. Addenda,
2. Proposal Form,
3. Division 0 – Bidding Requirements,
4. Special Provisions,
5. Contract Form,
6. Contract Plans,
7. Amendments to the Standard Specifications,
8. Standard Specifications,
9. Contracting Agency's Standard Plans or Details (if any), and
10. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.4 Changes

Section 1-04.4 is revised to read:

(*****)

The Engineer, with the approval of the Contracting Agency, reserves the right to make, at any time during the Work, such changes in quantities and such alterations in the Work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the Contract nor release the Surety, and the Contractor agrees to perform the Work as altered. Among others, these changes and alterations may include:

1. Deleting any part of the Work.
2. Increasing or decreasing quantities.
3. Altering Specifications, designs, or both.
4. Altering the way the Work is to be done.
5. Adding new Work.
6. Altering facilities, equipment, materials, services, or sites, provided by the Contracting Agency.
7. Ordering the Contractor to speed up or delay the Work.

The Engineer, with the approval of the Contracting Agency, will issue a written change order for any change unless the remainder of this Section provides otherwise.

If the alterations or changes in quantities significantly change the character of the Work under the Contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the Contract. The basis for the adjustment shall be agreed upon prior to the performance of the Work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable, with the approval of the Contracting Agency. If the alterations or changes in quantities do not significantly change the character of the Work to be performed under the Contract, the altered Work will be paid for as provided elsewhere in the Contract. The term *significant change* shall be construed to apply only to the following circumstances:

- A. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
- B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original Contract quantity. For the purpose of this Section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.

For item 1, an equitable adjustment for deleted Work will be made as provided in Section 1-09.5.

For item 2, if the actual quantity of any item, exclusive of added or deleted amounts included in agreed change orders, increases or decreases by more than 25 percent from the original Plan quantity, the unit Contract prices for that item may be adjusted in accordance with Section 1-04.6.

For any changes except item 1 (deleted Work) or item 2 (increasing or decreasing quantities), the Engineer and the Contracting Agency, will determine if the change should be paid for at unit Contract price(s). If the Engineer and the Contracting Agency determines that the change increased or decreased the Contractor's costs or time to do any of the Work including unchanged Work, the Engineer and the Contracting Agency will make an equitable adjustment

1 to the Contract. The equitable adjustment will be by agreement with the Contractor. However,
2 if the parties are unable to agree, the Engineer and the Contracting Agency will determine the
3 amount of the equitable adjustment in accordance with Section 1-09.4 and adjust the time as
4 the Engineer and the Contracting Agency deem appropriate. Extensions of time will be
5 evaluated in accordance with Section 1-08.8. The Engineer's and Contracting Agency's
6 decision concerning equitable adjustment and extension of time shall be final as provided in
7 Section 1-05.1.

8
9 The Contractor shall proceed with the Work upon receiving:

- 10 1. A written change order approved by the Engineer and Contracting Agency, or
- 11 2. An oral order from the Project Engineer and Contracting Agency before actually
12 receiving the written change order.

13
14 Changes normally noted on field stakes or variations from estimated quantities, except
15 as provided in subparagraph A or B above, will not require a written change order. These
16 changes shall be made at the unit prices that apply. The Contractor shall respond immediately
17 to changes shown on field stakes without waiting for further notice.

18
19 The Contractor shall obtain written consent of the Surety or Sureties if the Engineer or
20 Contracting Agency requests such consent.

21
22 The Contracting Agency has a policy for the administration of cost reduction alternatives
23 proposed by the Contractor. The Contractor may submit proposals for changing the Plans,
24 Specifications, or other requirements of the Contract. These proposals must reduce the cost
25 or time required for construction of the project. When determined appropriate by the
26 Contracting Agency, the Contractor will be allowed to share the savings.

27
28 Guidelines for submitting Cost Reduction Incentive Proposals are available at the Project
29 Engineer's office. The actions and requirements described in the guidelines are not part of the
30 Contract. The guidelines requirements and the Contracting Agency's decision to accept
31 or reject the Contractor's proposal are not subject to arbitration under the arbitration clause
32 or otherwise subject to litigation.

33 34 **1-05 Control of Work**

35 36 **1-05.1 Authority of the Engineer**

37 Section 1-05.1 is revised to read:

38
39 (*****)

40 The Engineer and the Contracting Agency shall be satisfied that all the Work is being done in
41 accordance with the requirements of the Contract. The Contract and Specifications give the
42 Engineer and the Contracting Agency authority over the Work. Whenever it is so provided in
43 this Contract, the decision of the Engineer and Contracting Agency shall be final: provided,
44 however, that if an action is brought within the time allowed in this Contract challenging the
45 Engineer's and Contracting Agency's decision, that decision shall be subject to the
46 scope of judicial review provided in such cases under Washington case law.

47
48 The Engineer's and Contracting Agency's decisions will be final on all questions including, but
49 not limited to, the following:
50

1. Quality and acceptability of materials and Work,
2. Measurement of unit price Work,
3. Acceptability of rates of progress on the Work,
4. Interpretation of Plans and Specifications,
5. Determination as to the existence of changed or differing site conditions,
6. Fulfillment of the Contract by the Contractor,
7. Payments under the Contract including equitable adjustment,
8. Suspension(s) of Work,
9. Termination of the Contract for default or public convenience,
10. Determination as to unworkable days, and
11. Approval of Working Drawings.

The Project Engineer represents the Engineer on the project, with full authority to enforce Contract requirements and carry out the Engineer's and Contracting Agency's orders. If the Contractor fails to respond promptly to the requirements of the Contract or orders from the Engineer and Contracting Agency:

1. The Project Engineer may use Contracting Agency resources, other contractors, or other means to accomplish the Work; and
2. The Contracting Agency will not be obligated to pay the Contractor, and will deduct from the Contractor's payments any costs that result when any other means are used to carry out the Contract requirements or Engineer's orders.

At the Contractor's risk, the Project Engineer with approval of the Contracting Agency may suspend all or part of the Work according to Section 1-08.6.

Nothing in these Specifications or in the Contract requires the Engineer or Contracting Agency to provide the Contractor with direction or advice on how to do the Work. If the Engineer or Contracting Agency approves or recommends any method or manner for doing the Work or producing materials, the approval or recommendation shall not:

1. Guarantee that following the method or manner will result in compliance with the Contract,
2. Relieve the Contractor of any risks or obligations under the Contract, or
3. Create any Contracting Agency liability.

1-05.4 Conformity With And Deviations From Plans And Stakes

Section 1-05.4 is supplemented with the following:

(*****)

Contractor Surveying - Structure

Copies of the Contracting Agency provided primary survey control data are available for the bidder's inspection at the office of the Contracting Agency.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of bridges, noise walls, and retaining walls. Except for the survey control data to be furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

1 The Contractor shall inform the Engineer when monuments are discovered that were not
2 identified in the Plans and construction activity may disturb or damage the monuments. All
3 monuments noted on the Plans "DO NOT DISTURB" shall be protected throughout the length
4 of the project or be replaced at the Contractors expense.

5
6 Detailed survey records shall be maintained, including a description of the work performed on
7 each shift, the methods utilized, and the control points used. The record shall be adequate to
8 allow the survey to be reproduced. A copy of each day's record shall be provided to the
9 Engineer within 3 working days after the end of the shift.

10
11 The meaning of words and terms used in this provision shall be as listed in "Definitions of
12 Surveying and Associated Terms" current edition, published by the American Congress on
13 Surveying and Mapping and the American Society of Civil Engineers.

14
15 The survey work by the Contractor shall include but not be limited to the following:

- 16
17 1. Verify the primary horizontal and vertical control furnished by the Contracting
18 Agency, and expand into secondary control by adding stakes and hubs as well as
19 additional survey control needed for the project. Provide descriptions of secondary
20 control to the Contracting Agency. The description shall include coordinates and
21 elevations of all secondary control points.
- 22
23 2. Establish, by placing hubs and/or marked stakes, the location with offsets of
24 foundation shafts and piles.
- 25
26 3. Establish offsets to footing centerline of bearing for structure excavation.
- 27
28 4. Establish offsets to footing centerline of bearing for footing forms.
- 29
30 5. Establish wing wall, retaining wall, and noise wall horizontal alignment.
- 31
32 6. Establish retaining wall top of wall profile grade.
- 33
34 7. Establish elevation benchmarks for all substructure formwork.
- 35
36 8. Check elevations at top of footing concrete line inside footing formwork immediately
37 prior to concrete placement.
- 38
39 9. Check column location and pier centerline of bearing at top of footing immediately
40 prior to concrete placement.
- 41
42 10. Establish location and plumbness of column forms, and monitor column plumbness
43 during concrete placement.
- 44
45 11. Establish pier cap and crossbeam top and bottom elevations and centerline of
46 bearing.
- 47
48 12. Check pier cap and crossbeam top and bottom elevations and centerline of bearing
49 prior to and during concrete placement.
- 50
51 13. Establish grout pad locations and elevations.

14. Establish structure bearing locations and elevations, including locations of anchor bolt assemblies.
15. Establish box girder bottom slab grades and locations.
16. Establish girder and/or web wall profiles and locations.
17. Establish diaphragm locations and centerline of bearing.
18. Establish roadway slab alignment, grades and provide dimensions from top of girder to top of roadway slab. Set elevations for deck paving machine rails.
19. Establish traffic barrier and curb profile.
20. Profile all girders prior to the placement of any deadload or construction live load that may affect the girder's profile.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with the following primary survey and control information:

1. Descriptions of two primary control points used for the horizontal and vertical control. Primary control points will be described by reference to the project alignment and the coordinate system and elevation datum utilized by the project. In addition, the Contracting Agency will supply horizontal coordinates for the beginning and ending points and for each Point of Intersection (PI) on each alignment included in the project.
2. Horizontal coordinates for the centerline of each bridge pier.
3. Computed elevations at top of bridge roadway decks at one-tenth points along centerline of each girder web. All form grades and other working grades shall be calculated by the Contractor.

The Contractor shall give the Contracting Agency 3 weeks notification to allow adequate time to provide the data outlined in Items 2 and 3 above. The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
1. Stationing on structures		±0.02 feet
2. Alignment on structures		±0.02 feet
3. Superstructure elevations	±0.01 feet variation from plan elevation	
4. Substructure	±0.02 feet variation from Plan grades.	

1
2 The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will
3 not change the requirements for normal checking by the Contractor.
4

5 When staking the following items, the Contractor shall perform independent checks from
6 different secondary control to ensure that the points staked for these items are within the
7 specified survey accuracy tolerances:
8

9 Piles
10 Shafts
11 Footings
12 Columns
13

14 The Contractor shall calculate coordinates for the points associated with piles, shafts, footings
15 and columns. The Contracting Agency will verify these coordinates prior to issuing approval
16 to the Contractor for commencing with the survey work. The Contracting Agency will require
17 up to 7 calendar days from the date the data is received to issuing approval.
18

19 Contract work to be performed using contractor-provided stakes shall not begin until the
20 stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor
21 of responsibility for the accuracy of the stakes.
22

23 **Payment**

24 Payment will be made in accordance with Section 1-04.1 for the following bid item when
25 included in the proposal:
26

27 "Structure Surveying", lump sum.
28

29 The lump sum contract price for "Structure Surveying" shall be full pay for all labor, equipment,
30 materials, and supervision utilized to perform the Work specified, including any resurveying,
31 checking, correction of errors, replacement of missing or damaged stakes, and coordination
32 efforts.
33

34 (*****)

35 **Contractor Surveying - Roadway**

36 Copies of the Contracting Agency provided primary survey control data are available for the
37 bidder's inspection at the office of the Contracting Agency.
38

39 The Contractor shall be responsible for setting, maintaining, and resetting all alignment
40 stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage,
41 surfacing, paving, channelization and pavement marking, illumination and signals, guardrails
42 and barriers, and signing. Except for the survey control data to be furnished by the Contracting
43 Agency, calculations, surveying, and measuring required for setting and maintaining the
44 necessary lines and grades shall be the Contractor's responsibility.
45

46 The Contractor shall inform the Engineer when monuments are discovered that were not
47 identified in the Plans and construction activity may disturb or damage the monuments. All
48 monuments noted on the Plans "DO NOT DISTURB" shall be protected throughout the length
49 of the project or be replaced at the Contractors expense.
50

1 Detailed survey records shall be maintained, including a description of the work performed on
2 each shift, the methods utilized, and the control points used. The record shall be adequate to
3 allow the survey to be reproduced. A copy of each day's record shall be provided to the
4 Engineer within 3 working days after the end of the shift.

5
6 The meaning of words and terms used in this provision shall be as listed in "Definitions of
7 Surveying and Associated Terms" current edition, published by the American Congress on
8 Surveying and Mapping and the American Society of Civil Engineers.

9
10 The survey work shall include but not be limited to the following:

- 11
12 1. Verify the primary horizontal and vertical control furnished by the Contracting
13 Agency, and expand into secondary control by adding stakes and hubs as well as
14 additional survey control needed for the project. Provide descriptions of secondary
15 control to the Contracting Agency. The description shall include coordinates and
16 elevations of all secondary control points.
- 17
18 2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on
19 centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at
20 points on the alignments spaced no further than 50 feet.
- 21
22 3. Establish clearing limits, placing stakes at all angle points and at intermediate points
23 not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond
24 the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the
25 Plans.
- 26
27 4. Establish grading limits, placing slope stakes at centerline increments not more than
28 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning
29 Satellite (GPS) Machine Controls are used to provide grade control, then slope
30 stakes may be omitted at the discretion of the Contractor.
- 31
32 5. Establish the horizontal and vertical location of all drainage features, placing offset
33 stakes to all drainage structures and to pipes at a horizontal interval not greater
34 than 25 feet.
- 35
36 6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade
37 and at the top of each course of surfacing. Subgrade and surfacing stakes shall be
38 set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in
39 curve sections with a radius less than 300 feet, and at 10-foot intervals in
40 intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed
41 at all locations where the roadway slope changes and at additional points such that
42 the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls
43 are used to provide grade control, then roadbed and surfacing stakes may be
44 omitted at the discretion of the Contractor.
- 45
46 7. Establish intermediate elevation benchmarks as needed to check work throughout
47 the project.
- 48
49 8. Provide references for paving pins at 25-foot intervals or provide simultaneous
50 surveying to establish location and elevation of paving pins as they are being
51 placed.

9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

10. The Contractor shall collect additional topographic survey data as needed in order to match into existing roadways. The Contractor shall determine if changes are needed to the profiles or roadway sections shown in the Contract Plans in order to achieve proper smoothness and drainage where matching into existing features, such as a smooth transition from new pavement to existing pavement. The Contractor shall submit these changes to the Project Engineer for review and approval 10 days prior to the beginning of work.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with primary survey control information consisting of descriptions of two primary control points used for the horizontal and vertical control, and descriptions of two additional primary control points for every additional three miles of project length. Primary control points will be described by reference to the project alignment and the coordinate system and elevation datum utilized by the project. In addition, the Contracting Agency will supply horizontal coordinates for the beginning and ending points and for each Point of Intersection (PI) on each alignment included in the project.

The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

1 The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will
2 not change the requirements for normal checking by the Contractor.

3
4 When staking roadway alignment and stationing, the Contractor shall perform independent
5 checks from different secondary control to ensure that the points staked are within the
6 specified survey accuracy tolerances.

7
8 The Contractor shall calculate coordinates for the alignment. The Contracting Agency will
9 verify these coordinates prior to issuing approval to the Contractor for commencing with the
10 work. The Contracting Agency will require up to seven 7 calendar days from the date the data
11 is received.

12
13 Contract work to be performed using contractor-provided stakes shall not begin until the
14 stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor
15 of responsibility for the accuracy of the stakes.

16
17 Stakes shall be marked in accordance with Standard Plan A-10.10. When stakes are needed
18 that are not described in the Plans, then those stakes shall be marked, at no additional cost
19 to the Contracting Agency as ordered by the Engineer.

20
21 ***Payment***

22 Payment will be made in accordance with Section 1-04.1 for the following bid item when
23 included in the proposal:

24
25 "Roadway Surveying", lump sum.

26
27 The lump sum contract price for "Roadway Surveying" shall be full pay for all labor, equipment,
28 materials, and supervision utilized to perform the Work specified, including any resurveying,
29 checking, correction of errors, replacement of missing or damaged stakes, and coordination
30 efforts.

31
32 (*****)

33 ***Licensed Surveyors***

34 The Contractor shall be responsible for reestablishing or locating legal survey markers such
35 as GLO monuments or property corner monuments, conduct boundary surveys to determine
36 Contracting Agency right-of-way locations, and obtain, review and analyze deeds and records
37 as necessary to determine these boundaries. The Contracting Agency will provide "rights of
38 entry" as needed by the Contractor to perform the work.

39
40 The Contractor shall brush out or clear and stake or mark the right-of-way lines as designated
41 by the Engineer.

42
43 The Contractor shall inform the Engineer when monuments are discovered that were not
44 identified in the Plans and construction activity may disturb or damage the monuments. All
45 monuments noted on the Plans "DO NOT DISTURB" shall be protected throughout the length
46 of the project or be replaced at Contractors expense.

47
48 When required, the Contractor shall prepare and file a Record of Survey map in accordance
49 with RCW 58.09 and provide a recorded copy to the Contracting Agency. The Contracting
50 Agency will provide all existing base maps, existing horizontal and vertical control, and other
51 material available with Washington State Plane Coordinate information to the Contractor. The

Contracting Agency will also provide maps, plan sheets, and/or aerial photographs clearly identifying the limits of the areas to be surveyed. The Contractor shall establish Washington State Plane Coordinates on all points required in the Record of Survey and other points designated in the Contract documents.

Existing right of way documentation, existing base maps, existing horizontal and vertical control descriptions, maps, plan sheets, aerial photographs and all other available material may be viewed by prospective bidders at the office of the Contracting Agency.

The Contractor shall perform all of the necessary calculations for the contracted survey work and shall provide copies of these calculations to the Contracting Agency. Electronic files of all survey data shall be provided and in a format acceptable to the Contracting Agency.

All survey work performed by the Contractor shall conform to all applicable sections of the Revised Code of Washington and the Washington Administrative Code.

The Contractor shall provide all traffic control, signing, and temporary traffic control devices in order to provide a safe work zone.

Payment

Payment will be made in accordance with Section 1-09.6 for the following bid item when included in the proposal:

“Licensed Surveying”, Force Account.

For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Licensed Surveying" in the bid proposal to become a part of the total bid by the Contractor.

(April 3, 2017)

Contractor Surveying – ADA Features

ADA Feature Staking Requirements

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, and grades necessary for the construction of the ADA features. Calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility. The Contractor shall build the ADA features within the specifications in the Standard Plans and contract documents.

ADA Feature As-Built Measurements

The Contractor shall be responsible for providing As-Built records of all ADA feature improvements completed in the Contract.

The survey work shall include but not be limited to completing the measurements, recording the required measurements and completing other data fill-ins found on the ADA As-Built Forms, and transmitting the Forms to the Engineer. The ADA As-Built Forms are found at the following website location:

<http://www.wsdot.wa.gov/Design/ADAGuidance.htm>

The transmittal letter shall include a statement signed by the Contractor certifying the accuracy of the measurements.

1
2 In the instance where an ADA Feature does not meet accessibility requirements, all work
3 to replace non-conforming work and then to measure, record the as-built measurements,
4 and transmit the Forms to the Engineer shall be completed at no additional cost to the
5 Contracting Agency, as ordered by the Engineer.
6

7 **Payment**

8 Payment will be made for the following bid item that is included in the Proposal:
9

10 "ADA Features Surveying", lump sum.
11

12 The unit Contract price per lump sum for "ADA Features Surveying" shall be full pay for all the
13 Work as specified.
14

15 **1-05.14 Cooperation With Other Contractors**

16 Section 1-05.14 is supplemented with the following:
17

18 (*****)

19 **Other Contracts Or Other Work**

20 It is anticipated that the following work adjacent to or within the limits of this project will be
21 performed by others during the course of this project and will require coordination of the work:
22

23 WSDOT C-9028 "I-5 Ebey Slough Bridge to SR 531 I/C – Paving & ADA Compliance"
24 Spring 2017 through Fall 2017, Contact Mark Sawyer, (425) 225-8799
25

26 WSDOT "SR 528/55th Dr NE Vic to 83rd Ave NE Vic – Paving & ADA", Approximately
27 May 2017 through October 2017, Contact Dave Lindberg, (425) 225-8725
28

29 WSDOT "Sr529/Northbound Steamboat Slough Bridge – Painting", Approximately May
30 2017 through April 2018, Contact Mark Sawyer, (425) 225-8799
31

32 City of Marysville "1st Street Improvement Project", Approximately May 2017 through
33 September 2017, Contact Jeff Laycock, (360) 363-8100
34

35 City of Marysville "State Ave Intersection Safety Improvements", Approximately May
36 2017 through October 2017, Contact Jeff Laycock, (360) 363-8100
37

38 **1-06 Control of Material**

39 Section 1-06 is supplemented with the following:
40

41 **Buy America**

42
43 (August 6, 2012)

44 In accordance with Buy America requirements contained in 23 CFR 635.410, the major
45 quantities of steel and iron construction material that is permanently incorporated into the
46 project shall consist of American-made materials only. Buy America does not apply to
47 temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and
48 falsework.
49

1 Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the
2 foreign material used does not exceed one-tenth of one percent of the total contract cost or
3 \$2,500.00, whichever is greater.
4

5 American-made material is defined as material having all manufacturing processes occurring
6 domestically. To further define the coverage, a domestic product is a manufactured steel
7 material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or
8 in the territories and possessions of the United States.
9

10 If domestically produced steel billets or iron ingots are exported outside of the area of
11 coverage, as defined above, for any manufacturing process then the resulting product does
12 not conform to the Buy America requirements. Additionally, products manufactured
13 domestically from foreign source steel billets or iron ingots do not conform to the Buy America
14 requirements because the initial melting and mixing of alloys to create the material occurred
15 in a foreign country.
16

17 Manufacturing begins with the initial melting and mixing, and continues through the coating
18 stage. Any process which modifies the chemical content, the physical size or shape, or the
19 final finish is considered a manufacturing process. The processes include rolling, extruding,
20 machining, bending, grinding, drilling, welding, and coating. The action of applying a coating
21 to steel or iron is deemed a manufacturing process. Coating includes epoxy coating,
22 galvanizing, aluminizing, painting, and any other coating that protects or enhances the value
23 of steel or iron. Any process from the original reduction from ore to the finished product
24 constitutes a manufacturing process for iron.
25

26 Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys),
27 scrap (recycled steel or iron), and pig iron ore processed, pelletized, and reduced iron ore.
28

29 The following are considered to be steel manufacturing processes:
30

- 31 1. Production of steel by any of the following processes:
 - 32 a. Open hearth furnace.
 - 33 b. Basic oxygen.
 - 34 c. Electric furnace.
 - 35 d. Direct reduction.
 - 36
 - 37
 - 38
 - 39
 - 40
- 41 2. Rolling, heat treating, and any other similar processing.
- 42
- 43 3. Fabrication of the products.
 - 44 a. Spinning wire into cable or strand.
 - 45 b. Corrugating and rolling into culverts.
 - 46
 - 47
 - 48 c. Shop fabrication.
 - 49
 - 50

1 A certification of materials origin will be required for any items comprised of, or containing,
2 steel or iron construction materials prior to such items being incorporated into the permanent
3 work. The certification shall be on DOT Form 350-109EF provided by the Engineer, or such
4 other form the Contractor chooses, provided it contains the same information as DOT Form
5 350-109EF.
6
7

8 **1-07 Legal Relations and Responsibilities to the Public**

9

10 **1-07.1 Laws to be Observed**

11 The first three paragraphs of Section 1-07.1 are revised to read:
12

13 (*****)

14 The Contractor shall always comply with all Federal, State, Tribal, or local laws, ordinances,
15 and regulations that affect Work under the Contract. The Contractor shall indemnify, defend,
16 and save harmless The Tulalip Tribes (including its Board of Directors and all other officers
17 and employees) and the State (including the Governor, Commission, Secretary, and any
18 agents, officers, and employees) against any claims that may arise because the Contractor
19 (or any employee of the Contractor or Subcontractor or material person) violated a legal
20 requirement.
21

22 The Contractor shall be responsible to immediately report to the Engineer any deviation from
23 the contract provisions pertaining to environmental compliance, including but not limited to
24 spills, unauthorized fill in waters of the Tribes including wetlands, unauthorized fill in waters
25 of the State including wetlands, water quality standards, noise, air quality, etc.
26

27 The Contractor shall be responsible for the safety of all workers and shall comply with all
28 appropriate state safety and health standards, codes, rules, and regulations, including, but
29 not limited to, those promulgated under the Washington Industry Safety and Health Act
30 RCW 49.17 (WISHA) and as set forth in Title 296 WAC (Department of Labor and Industries).
31 In particular the Contractor's attention is drawn to the requirements of WAC 296.800 which
32 requires employers to provide a safe workplace. More specifically WAC 296.800.11025
33 prohibits alcohol and narcotics from the workplace. The Contractor shall likewise be obligated
34 to comply with all federal safety and health standards, codes, rules, and regulations that may
35 be applicable to the Contract Work.
36

37 Section 1-07.1 is supplemented with the following:
38

39 (*****)

40 ***Indian Preference and Tribal Ordinances***

41

42 This project is located on the Tulalip Indian Reservation. It is the Contractor's responsibility to
43 comply with all applicable Tribal laws, codes, ordinances, and regulations. The Contractor
44 shall comply with them in accordance with Section 1-07.1. For informational purposes only,
45 the Work on this project that falls within the Reservation is shown in the bid schedule in
46 Group(s) Schedule A – TULALIP TRIBES, Schedule A - WSDOT (Within Reservation
47 Boundary), Schedule B – WSDOT (outside the Reservation Boundary), Schedule C –
48 Marysville, Schedule D – TULALIP TRIBES Utilities.
49

1 Tribal Employment Rights Ordinances (TEROs), may utilize a variety of tools to encourage
2 Indian employment. These tools may include, but are not limited to, TERO fees, Indian hiring
3 preference, Indian-owned business subcontracting preference and/or an Indian training
4 requirement. Other requirements may be a Tribal business license, a required compliance
5 plan and/or employee registration requirements. Every tribe is different and each may be
6 willing to work cooperatively with the Contractor to develop a strategy that works for both
7 parties. For specific details, the Contractor should contact The Tulalip Tribes' TERO Department
8 at 6406 Marine Drive, Tulalip, Washington 98271, Office (360) 716-4747 or Facsimile (360)
9 716-0249. <http://www.tulaliptribes.com/> .

10
11 The Tulalip Tribes of Washington has the sovereign authority over the lands of the Tulalip
12 Indian Reservation and has the authority to enact and enforce its laws, ordinances codes and
13 regulations. The Contractor shall comply and cooperate with the Tribes and its
14 representatives. The costs related to such compliance shall be borne solely by the Contractor,
15 who is advised to contact the tribal representative listed above, prior to submitting a bid, to
16 assess the impact of compliance on the project.

17
18 Although Indian preference can be compelled and mandated by the Contracting Agency, there
19 is no limitation whereby voluntary Contractor or Subcontractor initiated preferences are given,
20 if otherwise lawful. 41 CFR 60-1.5(a)7 provides as follows:

21
22 Work on or near Indian reservations --- It shall not be a violation of the equal opportunity
23 clause for a construction or non-construction Contractor to extend a publicly announced
24 preference in employment to Indians living on or near an Indian reservation in connection with
25 employment opportunities on or near an Indian reservation. The use of the word near would
26 include all that area where a person seeking employment could reasonably be expected to
27 commute to and from in the course of a work day. Contractors or Subcontractors extending
28 such a preference shall not, however, discriminate among Indians on the basis of religion,
29 sex, or tribal affiliation, and the use of such a preference shall not excuse a Contractor from
30 complying with the other requirements as contained in the August 25, 1981 Department of
31 Labor, Office of Federal Contract Compliance Programs, Government Contractors Affirmative
32 Actions Requirements.

33
34 **TERO Participation shall be evaluated as follows:**

35
36 Counting Tulalip Tribal Member Native American Owned Business or Native American
37 Owned Business Participation

38
39 When a Tulalip Tribal Member NAOB or NAOB participates in a contract, only the value
40 of the work actually performed by the Tulalip Tribal Member NAOB or NAOB will be
41 counted towards the Tulalip Tribal Member NAOB or NAOB subcontracting requirement.

- 42
43 1. Count the entire amount of the portion of the contract that is performed by the Tulalip
44 Tribal owned or Indian-owned enterprise or organization's own forces. Include the
45 cost of supplies and materials obtained by the Tulalip Tribal Member NAOB or
46 NAOB for the work of the contract, including supplies purchased or equipment
47 leased by the Tulalip Tribal Member NAOB or NAOB (except supplies and
48 equipment the lower-tiered Tulalip Tribal Member NAOB or NAOB purchases or
49 leases from the Prime Contractor or its affiliates, unless the Prime Contractor is also
50 a Tulalip Tribal Member NAOB or NAOB). Work performed by a Tulalip Tribal
51 Member NAOB or NAOB, utilizing resources of the Prime Contractor or its affiliates

1 will not be counted toward Tulalip Tribal-owned or Indian owned enterprise or
2 organization goals. In very rare situations, a Tulalip Tribal Member NAOB or NAOB
3 may utilize equipment and or personnel from a non-Tulalip Tribal Member NAOB or
4 NAOB other than the Prime Contractor or its affiliates. Should this situation arise,
5 the arrangement must be short-term and must have prior written approval from the
6 Contracting Agency. The arrangement must not erode a Tulalip Tribal Member
7 NAOB or NAOB's ability to perform a Commercially Useful Function (See
8 discussion of CUF, below).
9

- 10 2. Count the entire amount of fees or commissions charged by a Tulalip Tribal Member
11 NAOB or NAOB firm for providing a bona fide service, such as professional,
12 technical, consultant, or managerial services, or for providing bonds or insurance.
13
- 14 3. When a Tulalip Tribal Member NAOB or NAOB subcontracts part of the work of its
15 contract to another firm, the value of the subcontracted work may be counted toward
16 the Tulalip Tribal Member NAOB or NAOB requirement only if the Tulalip Tribal
17 Member NAOB or NAOB's lower tier subcontractor is also a Tulalip Tribal Member
18 NAOB or NAOB. Work that a Tulalip Tribal Member NAOB or NAOB subcontracts
19 to a non-Tulalip Tribal Member NAOB or NAOB does not count toward the Tulalip
20 Tribal Member NAOB or NAOB contracting requirement.
21
- 22 4. When a non-Tulalip Tribal Member NAOB or NAOB subcontractor further
23 subcontracts to a lower-tier subcontractor or supplier who is a certified Tulalip Tribal
24 owned or Indian-owned enterprise or organization, then that portion of the work
25 further subcontracted may be counted toward the Tulalip Tribal Member NAOB or
26 NAOB requirement, so long as it is a distinct clearly defined portion of the work of
27 the subcontract that the Tulalip Tribal Member NAOB or NAOB is performing in a
28 commercially useful function with its own forces.
29
- 30 5. Continue to count the work subcontracted to a decertified Tulalip Tribal-owned or
31 Indian owned enterprise or organization after decertification, provided the prime
32 contractor had a subcontract in force before the decertification and the prime
33 contractor's actions did not influence the Tulalip Tribal-owned or Indian-owned
34 enterprise's or organization's decertification.
35

36 **Commercially Useful Function**

37

38 Payments to a Tulalip Tribal Member NAOB or NAOB will count toward Tulalip Tribal
39 Member NAOB or NAOB requirements only if the Tulalip Tribal Member NAOB or NAOB
40 is performing a commercially useful function on the contract.
41

- 42 1. A Tulalip Tribal Member NAOB or NAOB performs a commercially useful function
43 when it is responsible for execution of the work of the contract and is carrying out
44 its responsibilities by actually performing, managing, and supervising the work
45 involved. To perform a commercially useful function, the Tulalip Tribal Member
46 NAOB or NAOB must also be responsible, with respect to materials and supplies
47 used on the contract, for negotiating price, determining quality and quantity,
48 ordering the material, installing (if applicable) and paying for the material itself. Two
49 party checks are not allowed.
50

- 1 2. A Tulalip Tribal Member NAOB or NAOB does not perform a commercially useful
2 function if its role is limited to that of an extra participant in a transaction, contract,
3 or project through which funds are passed in order to obtain the appearance of
4 Tulalip Tribal Member NAOB or NAOB participation.
5

6 **Trucking**

7 Use the following factors in determining whether a Tulalip Tribal Member NAOB or NAOB
8 trucking company is performing a commercially useful function:
9

- 10 1. The Tulalip Tribal Member NAOB or NAOB must be responsible for the
11 management and supervision of the entire trucking operation for which it is listed
12 on a particular contract.
13
14 2. The Tulalip Tribal Member NAOB or NAOB must itself own and, with its own
15 workforce, operate at least one fully licensed, insured, and operational truck used
16 on the contract.
17
18 3. The Tulalip Tribal Member NAOB or NAOB receives credit only for the total value
19 of the transportation services it provides on the contract using trucks it owns or
20 leases, licenses, insures, and operates with drivers it employs.
21
22 4. For purposes of this paragraph a lease must indicate that the Tulalip Tribal-owned
23 or Indian owned enterprise or organization has exclusive use of and control over
24 the truck. This does not preclude the leased truck from working for others during
25 the term of the lease with the consent of the Tulalip Tribal Member NAOB or NAOB,
26 so long as the lease gives the Tulalip Tribal Member NAOB or NAOB absolute
27 priority for use of the leased truck. Leased trucks must display the name and
28 identification number of the Tulalip Tribal Member NAOB or NAOB.
29
30 5. The Tulalip Tribal Member NAOB or NAOB may lease trucks from another Tulalip
31 Tribal Member NAOB or NAOB and may enter an agreement with an owner-
32 operator who is certified as a Tulalip Tribal Member NAOB or NAOB. The Tulalip
33 Tribal Member NAOB or NAOB who leases trucks from another Tulalip Tribal
34 Member NAOB or NAOB or employs a Tulalip Tribal Member NAOB or NAOB
35 owner-operator receives credit for the total value of the transportation services the
36 lessee Tulalip Tribal Member NAOB or NAOB provides on the contract.
37
38 6. The Tulalip Tribal Member NAOB or NAOB may also lease trucks from a non-Tulalip
39 Tribal Member NAOB or NAOB and may enter an agreement with an owner-
40 operator who is a non- Tulalip Tribal Member NAOB or NAOB. The Tulalip Tribal
41 Member NAOB or NAOB who leases trucks from a non- Tulalip Tribal Member
42 NAOB or NAOB or employs a non-Tulalip Tribal Member NAOB or NAOB owner-
43 operator is entitled to credit only for the fee or commission it receives as a result of
44 the lease arrangement. The Tulalip Tribal Member NAOB or NAOB does not receive
45 credit for the total value of the transportation services provided by the lessee, since
46 these services are not provided by a Tulalip Tribal Member NAOB or NAOB.
47
48 7. In any lease or owner-operator situation, as described in paragraphs 5 & 6 above,
49 the following rules shall apply:
50

- A written lease/rental agreement on all trucks leased or rented, showing the true ownership and the terms of the rental must be submitted and approved by the Contracting Agency prior to the beginning of the work. The agreement must show the lessor's name, trucks to be leased, and agreed upon amount or method of payment (hour, ton, or per load). All lease agreements shall be for a long-term relationship, rather than for the individual project. Does not apply to owner-operator arrangements.
- Only the vehicle, (not the operator) is leased or rented. Does not apply to owner-operator arrangements.

8. In order for Tulalip Tribal Member NAOB or NAOB project requirements to be credited, Tulalip Tribal Member NAOB or NAOB trucking firms must be covered by a subcontract or a written agreement approved by the Contracting Agency prior to performing their portion of the work.

Expenditures Paid to Other Tulalip Tribal Member Native American Owned Business or Native American Owned Business

Expenditures paid to other Tulalip Tribal Member Native American Owned Business or Native American Owned Business for materials or supplies may be counted toward Tulalip Tribal Member NAOB or NAOB requirements as provided in the following:

Manufacturer

1. Counting

If the materials or supplies are obtained from a Tulalip Tribal Member NAOB or NAOB manufacturer, count 100 percent of the cost of the materials or supplies toward Tulalip Tribal Member NAOB or NAOB requirements.

2. Definition

To be a manufacturer, the firm operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

3. In order to receive credit as a Tulalip Tribal Member NAOB or NAOB manufacturer, the firm must have received an "on-site" review and been approved by TERO to operate as a Tulalip Tribal Member NAOB or NAOB manufacturing firm prior to bid opening. Use of a Tulalip Tribal Member NAOB or NAOB manufacturer that has not received an on-site review and approval by TERO prior to bid opening will result in the bid being declared non-responsive, unless the contribution of the manufacturer was not necessary to meet the project requirement. To schedule a review, the manufacturing firm must submit a written request to TERO and may not receive credit towards Tulalip Tribal Member NAOB or NAOB participation until the completion of the review. Once a firm's manufacturing process has been approved in writing, it is not necessary to resubmit the firm for approval unless the manufacturing process has substantially changed. Information on approved manufacturers (per contract) may be obtained from TERO.

1 **Regular Dealer**

2
3 1. Counting

4
5 If the materials or supplies are purchased from a Tulalip Tribal Member NAOB or
6 NAOB regular dealer, 10 percent of the cost of the materials or supplies will count
7 toward Tulalip Tribal Member NAOB or NAOB requirements.

8
9 2. Definition

10
11 a) To be a regular dealer, the firm must own, operate or maintain a store,
12 warehouse, or other establishment in which the materials, supplies, articles or
13 equipment of the general character described by the specifications and
14 required under the contract are bought, kept in stock, and regularly sold or
15 leased to the public in the usual course of business. It must also be an
16 established, regular business that engages, as its principal business and under
17 its own name, in the purchase and sale or lease of the products in question.

18
19 b) A person may be a regular dealer in such bulk items as petroleum products,
20 steel, cement, gravel, stone, or asphalt without owning, operating, or
21 maintaining a place of business, as provided elsewhere in this specification, if
22 the person both owns and operates distribution equipment for the products.
23 Any supplementing of regular dealers' own distribution equipment shall be by
24 a long-term lease agreement and not on an ad hoc or contract-by-contract
25 basis.

26
27 c) Packagers, brokers, manufacturers' representatives, or other persons who
28 arrange or expedite transactions are not regular dealers.

29
30 Regular dealer status is granted on a contract-by-contract basis. To obtain
31 regular dealer status, a formal written request must be made by the interested
32 supplier (potential regular dealer) to TERO. TERO must be in receipt of this
33 request at least 7 calendar days prior to bid opening. Included in the request
34 shall be a full description of the project, type of business operated by the Tulalip
35 Tribal Member NAOB or NAOB, and the manner the Tulalip Tribal Member
36 NAOB or NAOB will operate as a regular dealer on the specific contract. Once
37 the request is reviewed by TERO, the Tulalip Tribal Member NAOB or NAOB
38 supplier requesting it will be notified in writing whether regular dealer status
39 was approved. Tulalip Tribal Member Native American Owned Business or
40 Native American Owned Business that are approved as regular dealers for a
41 contract (whenever possible) will be listed on the Tulalip Tribes TERO's Native
42 American Owned Business (NAOB) registry Internet Homepage at:
43 www.tulaliptero.com/Home/Contractors/NAOBRegistryReport.aspx prior to
44 the time of bid opening. In addition, bidders may request confirmation of the
45 Tulalip Tribal Member NAOB or NAOB supplier's approval to operate as a
46 regular dealer on a specific contract by writing the TERO Department, 6406
47 Marine Drive, Tulalip, WA 98271 or by phone at (360) 716-4747. Use of a
48 supplier that has not received approval as a regular dealer prior to bid opening
49 will result in the bid being declared nonresponsive, unless the contribution of
50 the regular dealer was not necessary to meet the project requirement.

Materials or Supplies Purchased from a Tulalip Tribal Member NAOB or NAOB
With respect to materials or supplies purchased from a Tulalip Tribal Member
NAOB or NAOB who is neither a manufacturer nor a regular dealer, the entire
amount of fees or commissions charged for assistance in the procurement of
the materials and supplies, or fees or transportation charges for the delivery of
materials or supplies required on a job site may be counted toward the goal.
No part of the cost of the materials and supplies themselves may be applied
toward Tulalip Tribal Member NAOB or NAOB requirements.

Eligibility

To be eligible for award of the contract, the bidder must properly complete and submit
the List of Tulalip Tribal Member NAOB Subcontractor(s) and or Supplier(s) and the List
of NAOB Subcontractor(s) and or Supplier(s) which have been made a part of the
bidder's Bid Proposal Form. The above named lists contained in Section IV of the Bid
Proposal Form will be used by the Contracting Agency in determining whether the
bidder's bid proposal satisfies the Tulalip Tribal Member NAOB and NAOB requirements.

For each Tulalip Tribal Member NAOB and NAOB described in the Bid Proposal Form
Section IV – List of Lower Tiered Subcontractor(s) and or Supplier(s), the bidder shall
state the project role and work item in which that Tulalip Tribal Member NAOB or NAOB
will participate. A general description of the work to be performed by the Tulalip Tribal
Member NAOB or NAOB shall be included. If a Tulalip Tribal Member NAOB or NAOB
will perform a partial item of work, the bidder shall also include a dollar amount for each
partial item of work. The bidder shall also include a dollar amount for each Tulalip Tribal
Member NAOB or NAOB listed in Section IV that will be applied towards meeting or
exceeding the assigned Tulalip Tribal Member NAOB and NAOB contract requirements.

In the event of arithmetic errors in completing the Bid Proposal Form Section IV, the
amount listed to be applied towards the requirement for each Tulalip Tribal Member
NAOB and NAOB shall govern and the Tulalip Tribal Member NAOB and NAOB total
shall be adjusted accordingly. The information and commitments demonstrated in the
Bid Proposal Form Section IV shall become a condition of any subsequent award of a
contract to that bidder and the Bid Proposal Form itself shall become a part of the
subsequent contract.

The Contracting Agency shall consider as non-responsive and shall reject any bid
proposal submitted that does not contain a Completed Section IV of the Bid Proposal
Form or contains a List of Tulalip Tribal Member NAOB Subcontractor(s) and or
Supplier(s) and or a List of NAOB Subcontractor(s) and or Supplier(s) that fails to
demonstrate that the bidder will meet the Tulalip Tribal Member NAOB or NAOB contract
requirements.

Procedures Between Award and Execution

After award of the contract, the successful bidder shall provide the additional information
described below. A failure to comply shall result in the forfeiture of the bidder's proposal bond
or deposit.

The Contracting Agency will notify the successful bidder of the award of the contract in writing
and will include a request for a further breakdown of the Tulalip Tribal Member NAOB and

1 NAOB information. After award and prior to execution of the contract, the bidder shall submit
2 the following items:

3
4 (1) Additional information for all successful Tulalip Tribal Member NAOB and NAOB as
5 shown on the List of Tulalip Tribal Member NAOB Subcontractor(s) and or Supplier(s)
6 and the List of NAOB Subcontractor(s) and or Supplier(s) included in Section IV of the
7 Bid Proposal Form:

- 8
- 9 • Correct business name, federal employee identification number (if available), and
10 mailing address.
 - 11
 - 12 • List of all bid items assigned to each successful Tulalip Tribal Member NAOB or
13 NAOB, including unit prices and extensions.
 - 14
 - 15 • Description of partial items (if any) to be sublet to each successful Tulalip Tribal
16 Member NAOB or NAOB specifying the distinct elements of work under each item
17 to be performed by the Tulalip Tribal Member NAOB or NAOB and including the
18 dollar value of the Tulalip Tribal Member NAOB or NAOB.
 - 19
 - 20 • Submit evidence of certification issued by the Tulalip TERO Offices for the Tulalip
21 Tribal Member NAOB or NAOB.
 - 22

23 Total amounts shown for each Tulalip Tribal Member NAOB and NAOB shall not be less
24 than the amount shown on the Bid Proposal Form Section IV. This submittal, showing
25 the Tulalip Tribal Member NAOB and NAOB work item breakdown, when accepted by
26 the Contracting Agency and resulting in contract execution, shall become a part of the
27 contract. A breakdown that does not conform to the List of Tulalip Tribal Member NAOB
28 Subcontractor(s) and or Supplier(s) and the List of NAOB Subcontractor(s) and or
29 Supplier(s) included in Section IV of the Bid Proposal Form or that demonstrates a lesser
30 amount of Tulalip Tribal Member NAOB or NAOB participation than that included in the
31 Certification will be returned for correction. The contract will not be executed by the
32 Contracting Agency until a satisfactory breakdown has been submitted.

33 ***Procedures After Execution***

34 **Reporting**

35
36
37
38 The Contractor shall submit a "Quarterly Report of Amounts Credited as Tulalip Tribal
39 Member NAOB and NAOB Participation" (actual payments) on a quarterly basis for any
40 calendar quarter in which Tulalip Tribal Member NAOB and NAOB work is accomplished
41 or upon completion of the project, as appropriate. The quarterly reports are due on
42 January 20th, April 20th, July 20th, and October 20th of each year. The dollars reported
43 will be in accordance with the "Counting Tulalip Tribal Member Native American Owned
44 Business or Native American Owned Business Participation" section of this specification.

45
46 In the event that the payments to a Tulalip Tribal Member NAOB or NAOB have been
47 made by an entity other than the Prime Contractor (as in the case of a lower-tier
48 subcontractor or supplier), then the Prime Contractor shall obtain the quarterly report,
49 including the signed affidavit, from the paying entity and submit the report to the
50 Contracting Agency.

Damages for Noncompliance

When a Contractor violates the Tulalip Tribal Member NAOB and or NAOB provisions of the contract, the Contracting Agency may incur damages. These damages consist of additional administrative costs including, but not limited to, the inspection, supervision, engineering, compliance, and legal staff time and expenses necessary for investigating, reporting, and correcting violations. Damages attributable to a Contractor's violations of the Tulalip Tribal Member NAOB and or NAOB provisions may be deducted from progress payments due to the Contractor or from retainage withheld by the Contracting Agency as allowed by the Contract documents. Before any money is withheld, the Contractor will be provided with a notice of the basis of the violations and an opportunity to respond.

The Contracting Agency's decision to recover damages for a Tulalip Tribal Member NAOB and or NAOB provision violation does not limit its ability to suspend or revoke the Contractor's pre-qualification status or seek other remedies as allowed by tribal, federal or State law. In appropriate circumstances, the Contracting Agency may also refer the Contractor to Tribal, State, or Federal authorities for additional sanctions.

1-07.2 State Sales Tax

Section 1-07.2, including its sub-sections, in its entirety is revised to read:

(*****)

The Tulalip Tribes of Washington is a federally recognized Indian Tribal government with a constitution and bylaws approved by the United States Secretary of the Interior. See: 65 Federal Register 13298, 13301 (March 13, 2000). As a recognized tribal government, The Tulalip Tribes of Washington and all of its governmental agencies, is a tax exempt entity. See: 26 USC §7871, and Washington Administrative Code Excise Tax Rule 192 (WAC 458-20-192). A majority of the project is Tax Exempt from all Sales and/or Use Taxes for all materials and supplies incorporated in construction of the work that become a permanent part of the Project and some B&O taxes. Upon request a Tax Exemption form may be obtained from The Tulalip Tribes. For that portion of the project this is not with in the exterior boundaries of The Tulalip Indian Reservation certain Washington State Taxes will apply.

The work on this contract is to be performed in Indian Country for an Indian Tribe and such work is exempt from State Sales and Use Tax and upon lands whose ownership may obligate the Contractor to pay State sales tax and other taxes on portions of the project work as follows:

1. The provisions of WAC 458-20-192(5)(a)(ii) apply to the following listed portions of the project:

The areas within the Tulalip Indian Reservation Boundary (all land west of Section line 8, 9.) are exempt from State Sales and Use Taxes. Certain B&O taxes are exempt also. Bidders shall consult with the State Department of Revenue regarding the potential tax liability.

2. The Contractor may be required to pay State Sales Tax and other taxes outside of the Tulalip Tribes Reservation portions of the project:

1 The areas outside of the Tulalip Indian Reservation Boundary (all land east of Section
2 line 8, 9.) may be subject to State Sales and Use Taxes. Certain B&O taxes are exempt
3 also. Bidders shall consult with the State Department of Revenue regarding the potential
4 tax liability.

5
6 For bidding purposes the Contracting Agency has segregated the plan quantities which
7 are within the Tulalip Tribes Reservation and outside of the Tulalip Tribes Reservation.
8 These approximate quantities are shown on the Summary of Quantities sheets
9

10 The Washington State Department of Revenue has issued special rules on the State sales
11 tax. The Contractor should contact the Washington State Department of Revenue for answers
12 to questions in this area. The Contracting Agency will not adjust its payment if the Contractor
13 bases a bid on a misunderstood tax liability.

14
15 The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract
16 amounts.

17
18 The Contractor shall not collect from the Contracting Agency, retail sales tax on the full
19 contract price. The Contracting Agency will not add this sales tax to each payment to the
20 Contractor.

21 22 **1-07.3 Forest Protection and Merchantable Timber Requirements**

23 24 **1-07.3(1) Forest Fire Prevention**

25 Section 1-07.3(1) is revised to read:
26

27 (*****)
28 When the Work is in or next to Tribal, State or Federal forests, the Contractor shall know and
29 observe all laws and rules (Tribal, State or Federal) on fire prevention and sanitation. The
30 Contractor shall ask the Tulalip Tribes' Forestry Manager and local forest supervisor or
31 regional manager, as applicable, to outline requirements for permits, sanitation, firefighting
32 equipment, and burning.
33

34 The Contractor shall take all reasonable precautions to prevent and suppress forest fires. In
35 case of forest fire, the Contractor shall immediately notify The Tulalip Tribes and the nearest
36 forest headquarters of its exact site and shall make every effort to suppress it. If needed, the
37 Contractor shall require his/her employees and those of any Subcontractor to work under
38 forest officials in fire-control efforts.
39

40 **1-07.3(2) Merchantable Timber Requirements**

41 Section 1-07.3(2) is revised to read:
42

43 (*****)
44 When merchantable timber is to be cut, the Contractor shall obtain a permit from The Tulalip
45 Tribes Forestry Department or the appropriate regional office of the State Department of
46 Natural Resources and comply fully with the laws and regulations of The Tulalip Tribes and
47 the State Forest Practices Act, as applicable.
48

49 No person may export from the United States, or sell, trade, exchange, or otherwise convey
50 to any other person for the purpose of export from the United States, timber originating from
51 the project.

1
2 The Contractor shall comply with the Forest Resources Conservation and Shortage Relief
3 Amendments Act of 1993 (Public Law 103-45) and the Washington State Log Export
4 Regulations (WAC 240-15).
5

6 **1-07.5 Environmental Regulations**

7 Section 1-07.5 is supplemented with the following:
8

9 (September 20, 2010)

10 ***Environmental Commitments***

11 The following Provisions summarize the requirements, in addition to those required elsewhere
12 in the Contract, imposed upon the Contracting Agency by the various documents referenced
13 in the Special Provision PERMITS AND LICENSES. Throughout the work, the Contractor shall
14 comply with the following requirements:
15

16 (August 3, 2009)

17 The intentional bypass of stormwater from all or any portion of a stormwater treatment
18 system is prohibited without the approval of the Engineer.
19

20 (*****)

21 No Contractor staging areas will be allowed within 100 feet of any waters of the State
22 including wetlands.
23

24 (August 3, 2009)

25 ***Payment***

26 All costs to comply with this special provision for the environmental commitments and
27 requirements are incidental to the contract and are the responsibility of the Contractor. The
28 Contractor shall include all related costs in the associated bid prices of the contract.
29

30 **1-07.5(1) General**

31 The second paragraph of Section 1-07.5(1) is revised to read:
32

33 (*****)

34 The Contractor shall be responsible to immediately report to the Engineer any deviation from
35 the contract provisions pertaining to environmental compliance, including but not limited to
36 spills, unauthorized fill in waters of the Tribes including wetlands, unauthorized fill in waters of
37 the State including wetlands, water quality standards, noise, air quality, etc.
38

39 Item 3 in the third paragraph of Section 1-07.5(1) is revised to read:
40

- 41 3. No equipment shall enter waters of the Tribes or waters of the State, except as may be
42 specified in the Contract.
43

1 **1-07.5(2) State Department of Fish and Wildlife**

2 The first paragraph of Section 1-07.5(2) is revised to read:

3
4 (*****)

5 In doing the Work located within the Tulalip Indian Reservation boundaries the Contractor
6 shall follow the laws, ordinances, rules and regulations of the Tulalip Tribes. Contractor shall
7 consult with the Tulalip Tribes' Natural Resources Department for specific requirements in
8 completing the Work on the reservation. In doing the Work located outside the boundaries of
9 the Tulalip Tribes Reservation, the Contractor shall:

10
11 **1-07.5(3) State Department of Ecology**

12 The first paragraph of Section 1-07.5(3) is revised to read:

13
14 (*****)

15 In doing the Work located within the Tulalip Indian Reservation boundaries the Contractor
16 shall follow the laws, ordinances, rules and regulations of the Tulalip Tribes. Contractor shall
17 consult with the Tulalip Tribes' Natural Resources Department for specific requirements in
18 completing the Work on the reservation. In doing the Work located outside the boundaries of
19 the Tulalip Tribes Reservation, the Contractor shall:

20
21 Items 4 and 8 in the first paragraph of Section 1-07.5(3) are revised to read:

22
23 (*****)

- 24 4. Perform Work in such a manner that all materials and substances not specifically identified
25 in the Contract documents to be placed in the water do not enter waters of the Tribes or
26 waters of the State, including wetlands. These include, but are not limited to, petroleum
27 products, hydraulic fluid, fresh concrete, concrete wastewater, process wastewater, slurry
28 materials and waste from shaft drilling, sediments, sediment-laden water, chemicals, paint,
29 solvents, or other toxic or deleterious materials.
- 30 8. Notify the Engineer and Ecology Department immediately should oil, chemicals,
31 or sewage spill into waters of the Tribes or waters of the State.

32
33 **1-07.5(4) Air Quality**

34 The first paragraph of Section 1-07.5(4) is revised to read:

35
36 (*****)

37 The Contractor shall comply with all rules of local air pollution authorities. If there are none,
38 air-quality rules of the State Department of Ecology shall govern the Work located outside the
39 boundaries of the Tulalip Tribes Reservation. The Contractor shall consult with the Tulalip
40 Tribes' Natural Resources Department to ascertain the applicable laws, ordinances, rules and
41 regulations governing the Work on the Tulalip Indian Reservation.

42
43 **1-07.6 Permits and Licenses**

44 Section 1-07.6 is supplemented with the following:

45
46 (*****)

47 The Contracting Agency has secured the below-listed permit(s) for this project. A copy of the
48 permit(s) will be provided by the Contracting Agency prior to construction. All contacts with the
49 permitting agency concerning the below-listed permit(s) shall be through the Engineer. The
50 Contractor shall obtain additional permits as necessary as well as meet the conditions of the
51 secured permits as prescribed in the permit documentation. All costs to obtain and comply

with additional permits and complying with the permits obtained by the Tribes shall be included in the applicable bid items for the work involved. Copies of these permits are required to be onsite at all times.

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
NPDES Construction Stormwater General Permit	Department of Ecology	This permit will be provided prior to construction
NPDES Construction Stormwater General Permit	EPA	This permit will be provided prior to construction
Grading Permit	Tulalip Tribes	This permit will be provided prior to construction

The Contractor shall obtain Right of Way use permits from the City of Marysville as required. There is no separate bid item for acquiring this permit. This cost shall be incorporated within associated bid items for work within the City of Marysville.

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

(March 13, 1995)

If the sources of materials provided by the Contractor necessitates hauling over roads other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

1-07.9 Wages

1-07.9(1) General

Section 1-07.9(1) is supplemented with the following:

(*****)

The Federal wage rates incorporated in this contract have been established by the Secretary of Labor under United States Department of Labor General Decision No. WA150001.

The State rates incorporated in this contract are applicable to all construction activities associated with this contract.

(April 2, 2007)

Application of Wage Rates for the Occupation of Landscape Construction

State prevailing wage rates for public works contracts are included in this contract and show a separate listing for the occupation:

Landscape Construction, which includes several different occupation descriptions such as: Irrigation and Landscape Plumbers, Irrigation and Landscape Power Equipment Operators, and Landscaping or Planting Laborers.

In addition, federal wage rates that are included in this contract may also include occupation descriptions in Federal Occupational groups for work also specifically identified with landscaping such as:

Laborers with the occupation description, Landscaping or Planting, or

Power Equipment Operators with the occupation description, Mulch Seeding Operator.

If Federal wage rates include one or more rates specified as applicable to landscaping work, then Federal wage rates for all occupation descriptions, specific or general, must be considered and compared with corresponding State wage rates. The higher wage rate, either State or Federal, becomes the minimum wage rate for the work performed in that occupation.

Contractors are responsible for determining the appropriate crafts necessary to perform the contract work. If a classification considered necessary for performance of the work is missing from the Federal Wage Determination applicable to the contract, the Contractor shall initiate a request for approval of a proposed wage and benefit rate. The Contractor shall prepare and submit Standard Form 1444, Request for Authorization of Additional Classification and Wage Rate available at <http://www.wdol.gov/docs/sf1444.pdf>, and submit the completed form to the Project Engineer's office. The presence of a classification wage on the Washington State Prevailing Wage Rates For Public Works Contracts does not exempt the use of form 1444 for the purpose of determining a federal classification wage rate.

1-07.11 Requirements for Nondiscrimination

Section 1-07.11 is supplemented with the following:

(August 5, 2013)

Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Contractor's attention is called to the Equal Opportunity Clause and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth herein.
2. The goals and timetables for minority and female participation set by the Office of Federal Contract Compliance Programs, expressed in percentage terms for the Contractor's aggregate work force in each construction craft and in each trade on all construction work in the covered area, are as follows:

Women - Statewide

<u>Timetable</u>	<u>Goal</u>
Until further notice	6.9%

Minorities - by Standard Metropolitan Statistical Area (SMSA)

Spokane, WA:

SMSA Counties:

Spokane, WA	2.8
-------------	-----

WA Spokane.

Non-SMSA Counties	3.0
-------------------	-----

WA Adams; WA Asotin; WA Columbia; WA Ferry; WA Garfield; WA Lincoln,
WA Pend Oreille; WA Stevens; WA Whitman.

1	Richland, WA	
2	SMSA Counties:	
3	Richland Kennewick, WA	5.4
4	WA Benton; WA Franklin.	
5	Non-SMSA Counties	3.6
6	WA Walla Walla.	
7		
8	Yakima, WA:	
9	SMSA Counties:	
10	Yakima, WA	9.7
11	WA Yakima.	
12	Non-SMSA Counties	7.2
13	WA Chelan; WA Douglas; WA Grant; WA Kittitas; WA Okanogan.	
14		
15	Seattle, WA:	
16	SMSA Counties:	
17	Seattle Everett, WA	7.2
18	WA King; WA Snohomish.	
19	Tacoma, WA	6.2
20	WA Pierce.	
21	Non-SMSA Counties	6.1
22	WA Clallam; WA Grays Harbor; WA Island; WA Jefferson; WA Kitsap; WA	
23	Lewis; WA Mason; WA Pacific; WA San Juan; WA Skagit; WA Thurston;	
24	WA Whatcom.	
25		
26	Portland, OR:	
27	SMSA Counties:	
28	Portland, OR-WA	4.5
29	WA Clark.	
30	Non-SMSA Counties	3.8
31	WA Cowlitz; WA Klickitat; WA Skamania; WA Wahkiakum.	
32		

These goals are applicable to each nonexempt Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, or federally assisted project, contract, or subcontract until further notice. Compliance with these goals and time tables is enforced by the Office of Federal Contract compliance Programs.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, in each construction craft and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goal shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 1 3. The Contractor shall provide written notification to the Office of Federal Contract
2 Compliance Programs (OFCCP) within ten working days of award of any construction
3 subcontract in excess of \$10,000 or more that are Federally funded, at any tier for
4 construction work under the contract resulting from this solicitation. The notification shall
5 list the name, address and telephone number of the Subcontractor; employer
6 identification number of the Subcontractor; estimated dollar amount of the subcontract;
7 estimated starting and completion dates of the subcontract; and the geographical area
8 in which the contract is to be performed. The notification shall be sent to:

9
10 U.S. Department of Labor
11 Office of Federal Contract Compliance Programs Pacific Region
12 Attn: Regional Director
13 San Francisco Federal Building
14 90 – 7th Street, Suite 18-300
15 San Francisco, CA 94103(415) 625-7800 Phone
16 (415) 625-7799 Fax
17

18 Additional information may be found at the U.S. Department of Labor website:
19 <http://www.dol.gov/ofccp/TAguides/ctaguide.htm>
20

- 21 4. As used in this Notice, and in the contract resulting from this solicitation, the Covered
22 Area is as designated herein.
23

24 Standard Federal Equal Employment Opportunity Construction Contract Specifications
25 (Executive Order 11246)
26

- 27 1. As used in these specifications:

- 28
29 a. Covered Area means the geographical area described in the solicitation from
30 which this contract resulted;
31
32 b. Director means Director, Office of Federal Contract Compliance Programs,
33 United States Department of Labor, or any person to whom the Director
34 delegates authority;
35
36 c. Employer Identification Number means the Federal Social Security number
37 used on the Employer's Quarterly Federal Tax Return, U. S. Treasury
38 Department Form 941;
39
40 d. Minority includes:
41
42 (1) Black, a person having origins in any of the Black Racial Groups of
43 Africa.
44
45 (2) Hispanic, a fluent Spanish speaking, Spanish surnamed person of
46 Mexican, Puerto Rican, Cuban, Central American, South American, or
47 other Spanish origin.
48
49 (3) Asian or Pacific Islander, a person having origins in any of the original
50 peoples of the Pacific rim or the Pacific Islands, the Hawaiian Islands
51 and Samoa.

(4) American Indian or Alaskan Native, a person having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith effort to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of this Special Provision. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall

document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunity and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the U.S. Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- 1 g. Review, at least annually, the company's EEO policy and affirmative action
2 obligations under these specifications with all employees having any
3 responsibility for hiring, assignment, layoff, termination or other employment
4 decisions including specific review of these items with on-site supervisory
5 personnel such as Superintendents, General Foremen, etc., prior to the
6 initiation of construction work at any job site. A written record shall be made
7 and maintained identifying the time and place of these meetings, persons
8 attending, subject matter discussed, and disposition of the subject matter.
9
- 10 h. Disseminate the Contractor's EEO policy externally by including it in any
11 advertising in the news media, specifically including minority and female news
12 media, and providing written notification to and discussing the Contractor's
13 EEO policy with other Contractors and Subcontractors with whom the
14 Contractor does or anticipates doing business.
15
- 16 i. Direct its recruitment efforts, both oral and written to minority, female and
17 community organizations, to schools with minority and female students and to
18 minority and female recruitment and training organizations serving the
19 Contractor's recruitment area and employment needs. Not later than one
20 month prior to the date for the acceptance of applications for apprenticeship or
21 other training by any recruitment source, the Contractor shall send written
22 notification to organizations such as the above, describing the openings,
23 screening procedures, and tests to be used in the selection process.
24
- 25 j. Encourage present minority and female employees to recruit other minority
26 persons and women and where reasonable, provide after school, summer and
27 vacation employment to minority and female youth both on the site and in other
28 areas of a Contractor's work force.
29
- 30 k. Validate all tests and other selection requirements where there is an obligation
31 to do so under 41 CFR Part 60-3.
32
- 33 l. Conduct, at least annually, an inventory and evaluation of all minority and
34 female personnel for promotional opportunities and encourage these
35 employees to seek or to prepare for, through appropriate training, etc., such
36 opportunities.
37
- 38 m. Ensure that seniority practices, job classifications, work assignments and other
39 personnel practices, do not have a discriminatory effect by continually
40 monitoring all personnel and employment related activities to ensure that the
41 EEO policy and the Contractor's obligations under these specifications are
42 being carried out.
43
- 44 n. Ensure that all facilities and company activities are nonsegregated except that
45 separate or single-user toilet and necessary changing facilities shall be
46 provided to assure privacy between the sexes.
47
- 48 o. Document and maintain a record of all solicitations of offers for subcontracts
49 from minority and female construction contractors and suppliers, including
50 circulation of solicitations to minority and female contractor associations and
51 other business associations.

1
2 p. Conduct a review, at least annually, of all supervisors' adherence to and
3 performance under the Contractor's EEO policies and affirmative action
4 obligations.
5

- 6 8. Contractors are encouraged to participate in voluntary associations which assist in
7 fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of
8 a contractor association, joint contractor-union, contractor-community, or other similar
9 group of which the Contractor is a member and participant, may be asserted as fulfilling
10 any one or more of the obligations under 7a through 7p of this Special Provision provided
11 that the Contractor actively participates in the group, makes every effort to assure that
12 the group has a positive impact on the employment of minorities and women in the
13 industry, ensure that the concrete benefits of the program are reflected in the
14 Contractor's minority and female work-force participation, makes a good faith effort to
15 meet its individual goals and timetables, and can provide access to documentation which
16 demonstrate the effectiveness of actions taken on behalf of the Contractor. The
17 obligation to comply, however, is the Contractor's and failure of such a group to fulfill an
18 obligation shall not be a defense for the Contractor's noncompliance.
19
- 20 9. A single goal for minorities and a separate single goal for women have been established.
21 The Contractor, however, is required to provide equal employment opportunity and to
22 take affirmative action for all minority groups, both male and female, and all women, both
23 minority and non-minority. Consequently, the Contractor may be in violation of the
24 Executive Order if a particular group is employed in substantially disparate manner (for
25 example, even though the Contractor has achieved its goals for women generally, the
26 Contractor may be in violation of the Executive Order if a specific minority group of
27 women is underutilized).
28
- 29 10. The Contractor shall not use the goals and timetables or affirmative action standards to
30 discriminate against any person because of race, color, religion, sex, or national origin.
31
- 32 11. The Contractor shall not enter into any subcontract with any person or firm debarred
33 from Government contracts pursuant to Executive Order 11246.
34
- 35 12. The Contractor shall carry out such sanctions and penalties for violation of these
36 specifications and of the Equal Opportunity Clause, including suspensions, terminations
37 and cancellations of existing subcontracts as may be imposed or ordered pursuant to
38 Executive Order 11246, as amended, and its implementing regulations by the Office of
39 Federal Contract Compliance Programs. Any Contractor who fails to carry out such
40 sanctions and penalties shall be in violation of these specifications and Executive Order
41 11246, as amended.
42
- 43 13. The Contractor, in fulfilling its obligations under these specifications, shall implement
44 specific affirmative action steps, at least as extensive as those standards prescribed in
45 paragraph 7 of this Special Provision, so as to achieve maximum results from its efforts
46 to ensure equal employment opportunity. If the Contractor fails to comply with the
47 requirements of the Executive Order, the implementing regulations, or these
48 specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
49
- 50 14. The Contractor shall designate a responsible official to monitor all employment related
51 activity to ensure that the company EEO policy is being carried out, to submit reports

1 relating to the provisions hereof as may be required by the government and to keep
2 records. Records shall at least include, for each employee, their name, address,
3 telephone numbers, construction trade, union affiliation if any, employee identification
4 number when assigned, social security number, race, sex, status (e.g., mechanic,
5 apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per
6 week in the indicated trade, rate of pay, and locations at which the work was performed.
7 Records shall be maintained in an easily understandable and retrievable form; however,
8 to the degree that existing records satisfy this requirement, the Contractors will not be
9 required to maintain separate records.

- 10
11 15. Nothing herein provided shall be construed as a limitation upon the application of other
12 laws which establish different standards of compliance or upon the application of
13 requirements for the hiring of local or other area residents (e.g., those under the Public
14 Works Employment Act of 1977 and the Community Development Block Grant
15 Program).
- 16
17 16. Additional assistance for Federal Construction Contractors on contracts administered by
18 Washington State Department of Transportation or by Local Agencies may be found at:

19
20 Washington State Dept. of Transportation
21 Office of Equal Opportunity
22 PO Box 47314
23 310 Maple Park Ave. SE
24 Olympia WA
25 98504-7314
26 Ph: 360-705-7090
27 Fax: 360-705-6801
28 <http://www.wsdot.wa.gov/equalopportunity/default.htm>
29

30 (April 3, 2017)

31 ***Special Training Provisions***

32 **General Requirements**

33 The Contractor's equal employment opportunity, affirmative action program shall include
34 the requirements set forth below. The Contractor shall provide on-the-job training aimed
35 at developing trainees to journeyman status in the trades involved. The number of
36 training hours shall be *** 800 ***. Trainees shall not be assigned less than 400 hours.
37 The Contractor may elect to accomplish training as part of the work of a subcontractor,
38 however, the Prime Contractor shall retain the responsibility for complying with these
39 Special Provisions. The Contractor shall also ensure that this training provision is made
40 applicable to any subcontract that includes training.

41 **Trainee Approval**

42 The Federal government requires Contracting Agencies to include these training
43 provisions as a condition attached to the receipt of Federal highway funding. The Federal
44 government has determined that the training and promotion of members of certain
45 minority groups and women is a primary objective of this training provision. The
46 Contractor shall make every effort to enroll minority groups and women trainees to the
47 extent such persons are available within a reasonable recruitment area. This training
48 provision is not intended and shall not be used to discriminate against any applicant for
49 training, whether that person is a minority, woman or otherwise. A non-minority male
50 trainee or apprentice may be approved provided the following requirements are met:
51

1. The Contractor is otherwise in compliance with the contract's Equal Employment Opportunity and On-the-Job Training requirements and provides documentation of the efforts taken to fill the specific training position with either minorities or females
2. or, if not otherwise in compliance, furnishes evidence of his/her systematic and direct recruitment efforts in regard to the position in question and in promoting the enrollment and/or employment of minorities and females in the craft which the proposed trainee is to be trained
3. and the Contractor has made a good faith effort towards recruiting of minorities and women. As a minimum this good faith effort shall consist of the following:
 - Distribution of written notices of available employment opportunities with the Contractor and enrollment opportunities with its unions. Distribution should include but not be limited to; minority and female recruitment sources and minority and female community organizations;
 - Records documenting the Contractor's efforts and the outcome of those efforts, to employ minority and female applicants and/or refer them to unions;
 - Records reflecting the Contractor's efforts in participating in developing minority and female on-the-job training opportunities, including upgrading programs and apprenticeship opportunities;
 - Distribution of written notices to unions and training programs disseminating the Contractor's EEO policy and requesting cooperation in achieving EEO and OJT obligations.

No employee shall be employed as a trainee in any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman. The Contractor's records shall document the methods for determining the trainee's status and findings in each case. When feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

For the purpose of this specification, acceptable training programs are those employing trainees/apprentices registered with the following:

1. Washington State Department of Labor & Industries — State Apprenticeship Training Council (SATC) approved apprenticeship agreement:
 - a. Pursuant to RCW 49.04.060, an apprenticeship agreement shall be;
 - i. an individual written agreement between an employer and apprentice

- ii. a written agreement between (an employer or an association of employers) and an organization of employees describing conditions of employment for apprentices
- iii. a written statement describing conditions of employment for apprentices in a plant where there is no bona fide employee organization.

All such agreements shall conform to the basic standards and other provisions of RCW Chapter 49.

2. Apprentices must be registered with U.S. Department of Labor — Apprenticeship Training, Employer, and Labor Services (ATELS) approved program.

Or

3. Trainees participating in a non-ATELS/SATC program, which has been approved by the contracting agency for the specific project.
4. For assistance in locating trainee candidates, the Contractor may call WSDOT's OJT Support Services Technical Advisor at (360) 704-6314.

Obligation to Provide Information

Upon starting a new trainee, the Contractor shall furnish the trainee a copy of the approved program the Contractor will follow in providing the training. Upon completion of the training, the Contractor shall provide the Contracting Agency with a certification showing the type and length of training satisfactorily completed by each trainee.

Training Program Approval

The Training Program shall meet the following requirements:

1. The Training Program (DOT Form 272-049) must be submitted to the Engineer for approval prior to commencing contract work and shall be resubmitted when modifications to the program occur.
2. The minimum length and type of training for each classification will be as established in the training program as approved by the Contracting Agency.
3. The Training Program shall contain the trades proposed for training, the number of trainees, the hours assigned to the trade and the estimated beginning work date for each trainee.
4. Unless otherwise specified, Training Programs will be approved if the proposed number of training hours equals the training hours required by contract and the trainees are not assigned less than 400 hours each.
5. After approval of the training program, information concerning each individual trainee and good faith effort documentation shall be submitted on (DOT Form 272-050.)

6. In King County, laborer trainees or apprentices will not be approved on contracts containing less than 2000 training hours as specified in this Section. In King County, no more than twenty percent (20%) of hours proposed for trainees or apprentices shall be in the laborer classification when the contract contains 2000 or more hours of training as specified in this Section. Trainees shall not be assigned less than 400 hours.
7. Flagging programs will not be approved. Other programs that include flagging training will only be approved if the flagging portion is limited to an orientation of not more than 20 hours.
8. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Some off-site training is permissible as long as the training is an integral part of an approved training program.
9. It is normally expected that a trainee will begin training on the project as soon as feasible after start of work, utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or upon completion of the training program. It is not required that all trainees be on board for the entire length of the contract. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.
10. Wage Progressions: Trainees will be paid at least the applicable ratios or wage progressions shown in the apprenticeship standards published by the Washington State Department of Labor and Industries. In the event that no training program has been established by the Department of Labor and Industries, the trainee shall be paid in accordance with the provisions of RCW 39.12.021 which reads as follows:

Apprentice workmen employed upon public works projects for whom an apprenticeship agreement has been registered and approved with the State Apprenticeship Council pursuant to RCW 49.04, must be paid at least the prevailing hourly rate for an apprentice of that trade. Any workman for whom an apprenticeship agreement has not been registered and approved by the State Apprenticeship Council shall be considered to be a fully qualified journeyman, and, therefore, shall be paid at the prevailing hourly rate for journeymen.

Compliance

In the event that the Contractor is unable to accomplish the required training hours but can demonstrate a good faith effort to meet the requirements as specified, then the Contracting Agency will adjust the training goals accordingly.

Requirements for Non ATELS/SATC Approved Training Programs

Contractors who are not affiliated with a program approved by ATELS or SATC may have their training program approved provided that the program is submitted for approval on

DOT Form 272-049, and the following standards are addressed and incorporated in the Contractor's program:

- The program establishes minimum qualifications for persons entering the training program.
- The program shall outline the work processes in which the trainee will receive supervised work experience and training on-the-job and the allocation of the approximate time to be spent in each major process. The program shall include the method for recording and reporting the training completed shall be stated.
- The program shall include a numeric ratio of trainees to journeymen consistent with proper supervision, training, safety, and continuity of employment. The ratio language shall be specific and clear as to application in terms of job site and workforce during normal operations (normally considered to fall between 1:10 and 1:4).
- The terms of training shall be stated in hours. The number of hours required for completion to journeyman status shall be comparable to the apprenticeship hours established for that craft by the SATC. The following are examples of programs that are currently approved:

CRAFT	HOURS
Laborer	4,000
Ironworker	6,000
Carpenter	5,200-8,000
Construction Electrician	8,000
Operating Engineer	6,000-8,000
Cement Mason	5,400
Teamster	2,100

- The method to be used for recording and reporting the training completed shall be stated.

Measurement

The Contractor may request that the total number of "training" hours for the contract be increased subject to approval by the Contracting Agency. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other sources do not prohibit other reimbursement. Reimbursement to the Contractor for off-site training as indicated previously may only be made when the Contractor does one or more of the following and the trainees are concurrently employed on a Federal-aid project:

- contributes to the cost of the training,
- provides the instruction to the trainee,
- pays the trainee's wages during the off- site training period.

Reimbursement will be made upon receipt of a certified invoice that shows the related payroll number, the name of trainee, total hours trained under the program, previously

1 paid hours under the contract, hours due this estimate, and dollar amount due this
2 estimate. The certified invoice shall show a statement indicating the Contractor's effort
3 to enroll minorities and women when a new enrollment occurs. If a trainee is participating
4 in a SATC/ATELS approved apprenticeship program, a copy of the certificate showing
5 apprenticeship registration must accompany the first invoice on which the individual
6 appears. Reimbursement for training occurring prior to approval of the training program
7 will be allowed if the Contractor verbally notifies the Engineer of this occurrence at the
8 time the apprentice/trainee commences work. A trainee/apprentice, regardless of craft,
9 must have worked on the contract for at least 20 hours to be eligible for reimbursement.

10 11 **Payment**

12 The Contractor will be reimbursed under the item "Training" per hour for each hour of
13 training for each employee.

14 15 **1-07.11(2) Contractual Requirements**

16 17 **1-07.11(2)A Equal Employment Opportunity (EEO) Responsibilities**

18 Under the heading "Title VI Responsibilities" of Section 1-07.11(2)A, items 4, 5 and 6 in the first
19 paragraph are revised to read:

20
21 (*****)

- 22 4. **Information and Reports** – The Contractor shall provide all information and reports
23 required by the Regulations or directives issued pursuant thereto, and shall permit
24 access to its books, records, accounts, other sources of information, and its facilities
25 as may be determined by The Tulalip Tribes, the Washington State Department of
26 Transportation or the Federal Highway Administration to be pertinent to ascertain
27 compliance with such Regulations, orders and instructions. Where any information
28 required of a Contractor is in the exclusive possession of another who fails or refuses
29 to furnish this information, the Contractor shall so certify to The Tulalip Tribes, the
30 Washington State Department of Transportation, or the Federal Highway
31 Administration as appropriate, and shall set forth what efforts it has made to obtain the
32 information.
- 33
- 34 5. **Sanctions for Noncompliance** – In the event of the Contractor's noncompliance with
35 the nondiscrimination provisions of this Contract, The Tulalip Tribes shall impose such
36 Contract sanctions as it or the Washington State Department of Transportation or the
37 Federal Highway Administration may determine to be appropriate, including, but not
38 limited to:
39 a. Withholding of payments to the Contractor under the Contract until the Contractor
40 complies, and/or;
41 b. Cancellation, termination, or suspension of the Contract, in whole or in part.
- 42
- 43 6. **Incorporation of Provisions** – The Contractor shall include the provisions of
44 paragraphs (1) through (5) in every subcontract, including procurement of materials
45 and leases of equipment, unless exempt by the Regulations, or directives issued
46 pursuant thereto. The Contractor shall take such action with respect to any
47 Subcontractor or procurement as The Tulalip Tribes, the Washington State
48 Department of Transportation or the Federal Highway Administration may direct as a
49 means of enforcing such provisions including sanctions for noncompliance.
50

1 Provided, however, that in the event a Contractor becomes involved in, or is threatened
2 with, litigation with a Subcontractor or supplier as a result of such direction, the
3 Contractor may request The Tulalip Tribes to enter into such litigation to protect the
4 interest of The Tulalip Tribes and, in addition, the Contractor may request the
5 Washington State Department of Transportation enter into such litigation to protect the
6 interests of the State and, in addition, the Contractor may request the United States to
7 enter into such litigation to protect the interests of the United States.
8

9 **1-07.11(10) Records and Reports**

10 **1-07.11(10)B Required Records and Retention**

11 The first paragraph of Section 1-07.11(10)B is revised to read:
12

13 (*****)

14 All records must be retained by the Contractor for a period of 3 years following acceptance of
15 the Contract Work. All records shall be available at reasonable times and places for inspection
16 by authorized representatives of either The Tulalip Tribes, the Washington State Department
17 of Transportation or the Federal Highway Administration.
18

19 **1-07.13 Contractor's Responsibility for Work**

20 **1-07.13(4) Repair of Damage**

21 Section 1-07.13(4) is revised to read:
22

23 (August 6, 2001)

24 The Contractor shall promptly repair all damage to either temporary or permanent work
25 as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1),
26 1-07.13(2) or 1-07.13(3), payment will be made in accordance with Section 1-04.4.
27 Payment will be limited to repair of damaged work only. No payment will be made for
28 delay or disruption of work.
29

30 **1-07.14 Responsibility for Damage**

31 Section 1-07.14 is revised to read:
32

33 (*****)

34 The Tulalip Tribes, its Board of Directors and all officers and employees along with the State,
35 Governor, Commission, Secretary, and all officers and employees of the State, including but
36 not limited to those of the Department, will not be responsible in any manner: for any loss or
37 damage that may happen to the Work or any part; for any loss of material or damage to any
38 of the materials or other things used or employed in the performance of Work; for injury to or
39 death of any persons, either workers or the public; or for damage to the public for any cause
40 which might have been prevented by the Contractor, or the workers, or anyone employed by
41 the Contractor.
42

43 The Contractor shall be responsible for any liability imposed by law for injuries to, or the death
44 of, any persons or damages to property resulting from any cause whatsoever during the
45 performance of the Work, or before final acceptance.
46

47 Subject to the limitations in this Section, and RCW 4.24.115, the Contractor shall indemnify,
48 defend, and save harmless The Tulalip Tribes, its Board of Directors and all officers and
49 employees along with the State, Governor, Commission, Secretary, and all officers and
50
51

1 employees of the State from all claims, suits, or actions brought for injuries to, or death of,
2 any persons or damages resulting from construction of the Work or in consequence of any
3 negligence or breach of Contract regarding the Work, the use of any improper materials in the
4 Work, caused in whole or in part by any act or omission by the Contractor or the agents or
5 employees of the Contractor during performance or at any time before final acceptance. In
6 addition to any remedy authorized by law, The Tulalip Tribes may retain so much of the money
7 due the Contractor as deemed necessary by The Tulalip Tribes to ensure the defense and
8 indemnification obligations of this Section until disposition has been made of such suits or
9 claims.

10
11 Subject to the limitations in this Section and RCW 4.24.115, the Contractor shall indemnify,
12 defend, and save harmless any county, city, or region, its officers, and employees connected
13 with the Work, within the limits of which county, city, or region the Work is being performed, all
14 in the same manner and to the same extent as provided above for the protection of The Tulalip
15 Tribes, its Directors, officers, and employees and the State, its officers and employees. The
16 Tulalip Tribes may retain so much of the money due the Contractor as deemed necessary by
17 the Tulalip Tribes to ensure the defense and indemnification obligations of this Section
18 pending disposition of suits or claims for damages brought against the county, city, or district.

19
20 Pursuant to RCW 4.24.115, if such claims, suits, or actions result from the concurrent
21 negligence of (a) the indemnitee or the indemnitee's agents or employees and (b) the
22 Contractor or the Contractor's agent or employees, the indemnity provisions provided in
23 the preceding paragraphs of this Section shall be valid and enforceable only to the extent
24 of the Contractor's negligence or the negligence of its agents and employees.

25
26 The Contractor shall bear sole responsibility for damage to completed portions of the project
27 and to property located off the project caused by erosion, siltation, runoff, or other related
28 items during the construction of the project. The Contractor shall also bear sole responsibility
29 for any pollution of rivers, streams, ground water, or other waters that may occur as a result
30 of construction operations.

31
32 The Contractor shall exercise all necessary precautions throughout the life of the Project
33 to prevent pollution, erosion, siltation, and damage to property.

34
35 The Contracting Agency will forward to the Contractor all claims filed against the State
36 according to RCW 4.92.100 that are deemed to have arisen in relation to the Contractor's
37 Work or activities under this Contract, and, in the opinion of the Contracting Agency, are
38 subject to the defense, indemnity, and insurance provisions of these *Standard Specifications*.
39 Claims will be deemed tendered to the Contractor and insurer, who has named The Tulalip
40 Tribes and the State as a named insured or an additional insured under the Contract's
41 insurance provisions, once the claim has been forwarded via certified mail to the Contractor.
42 The Contractor shall be responsible to provide a copy of the claim to the Contractor's
43 designated insurance agent who has obtained/met the Contract's insurance provision
44 requirements.

45
46 Within 60 calendar days following the date a claim is sent by the Contracting Agency to the
47 Contractor, the Contractor shall notify the Claimant, The Tulalip Tribes, and WSDOT (Risk
48 Management Office, PO Box 47418, Olympia, WA 98504-7418) of the following:

- 49
50 a. Whether the claim is allowed or is denied in whole or in part, and, if so, the specific
51 reasons for the denial of the individual claim, and if not denied in full, when payment

- 1 has been or will be made to the claimant(s) for the portion of the claim that is
2 allowed, or
3 b. If resolution negotiations are continuing. In this event, status updates will be reported
4 no longer than every 60 calendar days until the claim is resolved or a lawsuit is filed.
5

6 If the Contractor fails to provide the above notification within 60 calendar days, then the
7 Contractor shall yield to the Contracting Agency sole and exclusive discretion to allow all or
8 part of the claim on behalf of the Contractor, and the **Contractor shall be deemed to have**
9 **WAIVED any and all defenses, objections, or other avoidances to the Contracting**
10 **Agency's allowance of the claim, or the amount allowed by the Contracting Agency,**
11 under common law, constitution, statute, or the Contract and these *Standard Specifications*.
12 If all or part of a claim is allowed, the Contracting Agency will notify the Contractor via certified
13 mail that it has allowed all or part of the claim and make appropriate payments to
14 the claimant(s) with Tribal funds.
15

16 Payments of Tribal funds by the Contracting Agency to claimant(s) under this Section will be
17 made on behalf of the Contractor and at the expense of the Contractor, and the Contractor
18 shall be unconditionally obligated to reimburse the Contracting Agency for the "total
19 reimbursement amount", which is the sum of the amount paid to the claimant(s), plus all costs
20 incurred by the Contracting Agency in evaluating the circumstances surrounding the claim,
21 the allowance of the claim, the amount due to the claimant, and all other direct and indirect
22 costs for the Contracting Agency's administration and payment of the claim on the
23 Contractor's behalf. The Contracting Agency will be authorized to withhold the total
24 reimbursement amount from amounts due the Contractor, or, if no further payments are to be
25 made to the Contractor under the Contract, the Contractor shall directly reimburse the
26 Contracting Agency for the amounts paid within 30 days of the date notice that the claim was
27 allowed was sent to the Contractor. In the event reimbursement from the Contractor is not
28 received by the Contracting Agency within 30 days, interest shall accrue on the total
29 reimbursement amount owing at the rate of 12 percent per annum calculated at a daily rate
30 from the date the Contractor was notified that the claim was allowed. The Contracting
31 Agency's costs to enforce recovery of these amounts are additive to the amounts owing.
32

33 The Contractor specifically assumes all potential liability for actions brought by employees of
34 the Contractor and, solely for the purpose of enforcing the defense and indemnification
35 obligations set forth in Section 1-07.14, the Contractor specifically waives any immunity
36 granted under the State industrial insurance law, Title 51 RCW. This waiver has been mutually
37 negotiated by the parties. The Contractor shall similarly require that each Subcontractor it
38 retains in connection with the project comply with the terms of this paragraph, waive any
39 immunity granted under Title 51 RCW, and assume all liability for actions brought by
40 employees of the Subcontractor.
41

42 **1-07.15 Temporary Water Pollution/Erosion Control**

43 Section 1-07.15 is supplemented with the following:
44

45 (*****)

46 In an effort to prevent, control, and stop water pollution and erosion within the project, thereby
47 protecting the Work, nearby land, streams, and other bodies of water, the Contractor shall
48 perform all Work in strict accordance with all Tribal, Federal, State, and local laws and
49 regulations governing waters of the Tribes and waters of the State, as well as permits acquired
50 for the project.
51

The Contractor shall perform all temporary water pollution/erosion control measures shown in the Plans, specified in the Special Provisions, proposed by the Contractor and approved by the Engineer, or ordered by the Engineer as Work proceeds.

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

Under the heading "SPCC Plan Element Requirements" of Section 1-07.15(1), item 2 of the first paragraph is revised to read:

(*****)

2. **Spill Reporting** – List the names and telephone numbers of the Tribal, Federal, State, and local agencies the Contractor shall notify in the event of a spill.

1-07.16 Protection and Restoration of Property

1-07.16(2) Vegetation Protection and Restoration

Section 1-07.16(2) is supplemented with the following:

(August 2, 2010)

Vegetation and soil protection zones for trees shall extend out from the trunk to a distance of 1-foot radius for each inch of trunk diameter at breast height.

Vegetation and soil protection zones for shrubs shall extend out from the stems at ground level to twice the radius of the shrub.

Vegetation and soil protection zones for herbaceous vegetation shall extend to encompass the diameter of the plant as measured from the outer edge of the plant.

1-07.18 Public Liability and Property Damage Insurance

Section 1-07.18, including its sub-sections, in its entirety is revised to read:

(*****)

The Contractor shall obtain and keep in force the following policies of insurance. The policies shall be with companies or through sources approved by the State Insurance Commissioner pursuant to RCW 48.05. Unless otherwise indicated below, the policies shall be kept in force from the execution date of the Contract until the date of acceptance by The Tulalip Tribes and the Secretary (Section 1-05.12).

1. Owners and Contractors Protective (OCP) Insurance providing bodily injury and property damage liability coverage with limits of \$5,000,000 per occurrence and, per project, in the aggregate for each policy period, written on Insurance Services Office (ISO) form CG0009 1204, together with Washington State Department of Transportation amendatory endorsement CG 2908 1195 specifying the Contracting Agency, the State, the Governor, the Commission, the Secretary, the Department and all officers and employees of the State as named insured.
2. Commercial General Liability (CGL) Insurance written under ISO Form CG0001 or its equivalent, with minimum limits of \$1,000,000 per occurrence and \$2,000,000 annual aggregate per project. CGL shall include coverage for Employers Liability or Washington Stop Gap at \$1,000,000 per accident. Excess liability shall be provided in the amount of

1 \$9,000,000 per occurrence and annual aggregate over the CGL, Stop Gap and auto
2 liability coverage.

3
4 This coverage may be any combination of primary, umbrella, or excess liability coverage
5 affording total liability limits of not less than \$10,000,000 per occurrence and in the
6 aggregate. Products and completed operations coverage shall be provided for a period
7 of 3 years following Substantial Completion of the Work
8

- 9 3. Commercial Automobile Liability Insurance providing bodily injury and property damage
10 liability coverage for all owned and nonowned vehicles assigned to or used in the
11 performance of the Work, with a combined single limit of not less than \$1,000,000 per
12 occurrence. This coverage may be any combination of primary, umbrella, or excess
13 liability coverage affording total liability limits of not less than \$1,000,000 per occurrence,
14 with The Tulalip Tribes and the State named as an additional insured or designated
15 insured in connection with the Contractor's Performance of the Contract. If pollutants are
16 to be transported, MCS 90 and CA 99 48 endorsements are required on the Commercial
17 Automobile Liability insurance policy unless in-transit pollution risk is covered under a
18 Pollution Liability insurance policy.
19

- 20 4. The Contractor shall be Named Insured and the Contracting Agency, The Tulalip Tribes,
21 the State, all their respective officers and employees, and their respective members,
22 directors, officers, employees, agents, and consultants (collectively the "Additional
23 Insureds") shall be included as Additional Insureds for all policies and coverages
24 specified in this Section, with the exception of the OCP policy. Said insurance coverage
25 shall be primary and noncontributory insurance with respect to the insureds and the
26 Additional Insureds. Any insurance or self-insurance beyond that specified in this
27 Contract that is maintained by any Additional Insured shall be in excess of such
28 insurance and shall not contribute with it. All insurance coverage required by this Section
29 shall be written and provided by "occurrence-based" policy forms rather than by "claims
30 made" forms.
31

32 All endorsements adding Additional Insureds to required policies shall be issued on (i)
33 form CG 20 10 11 85 or a form deemed equivalent by the Contracting Agency, providing
34 the Additional Insureds with all policies and coverages set forth in this Section, with the
35 exception of the OCP and Commercial Auto policies or (ii) form CA 20 48 or forms
36 deemed equivalent by Contracting Agency, providing the Additional Insureds with all
37 coverages required under the Commercial Automobile Liability.
38

- 39 5. The coverage limits to be provided by the Contractor for itself and to the Contracting
40 Agency and Additional Insureds pursuant to this Section or any Special Provision, shall
41 be on a "per project" aggregate basis with the minimum limits of liability as set forth
42 herein for both general liability and products/completed operations claims. The additional
43 insured coverage required under this Section for products/completed operations claims
44 shall remain in full force and effect for not less than 3 years following Substantial
45 Completion of the project. If the Contractor maintains, at any time, coverage limits for
46 itself in excess of limits set forth in this Section 1-07.18 or any Special Provision, then
47 those additional coverage limits shall also apply to the Contracting Agency and the
48 Additional Insured. This includes, but is not limited to, any coverage limits provided under
49 any risk financing program of any description, whether such limits are primary, excess,
50 contingent, or otherwise.
51

- 1 6. All insurance policies and coverages required under Sections 1-07.18 and 1-07.10 shall
2 contain a waiver of subrogation against the Contracting Agency, the State, and any
3 Additional Insureds, and their respective departments, agencies, boards, and
4 commissions, and their respective officers, officials, agents, and employees for losses
5 arising from Work performed by or on behalf of the Contractor. This waiver has been
6 mutually negotiated by the parties.
7
- 8 7. Where applicable, the Contractor shall cause each Subcontractor to provide insurance
9 that complies with all applicable requirements of the Contractor-provided insurance as
10 set forth herein, in circumstances where the Subcontractor is not covered by the
11 Contractor-provided insurance. The Contractor shall have sole responsibility for
12 determining the limits of coverage required, if any, to be obtained by Subcontractors,
13 which determination shall be made in accordance with reasonable and prudent business
14 practices. In the event that a Subcontractor is required to add the Contractor as an
15 Additional Insured pursuant to its contract for Work at the Project, then the Contractor
16 shall also cause each Subcontractor to include the Contracting Agency and the
17 Additional Insureds, as Additional Insureds as well, for primary and noncontributory limits
18 of liability under each Subcontractor's Commercial General Liability, Commercial
19 Automobile Liability, and any other coverages that may be required pursuant to a
20 "Special Provision".
21
- 22 8. Unless specifically noted otherwise in the Contract Documents, the parties to this
23 Contract do not intend by any of the provisions of this Contract to cause the public or
24 any member thereof or any other Person to be a third-party beneficiary of the Contract
25 Documents. Nothing in this Contract authorizes anyone not a party to this Contract or a
26 designated third-party beneficiary to this Contract to maintain a suit for personal injuries
27 or property damage pursuant to the terms or provisions of this Contract. It is the further
28 intent of the Contracting Agency and the Contractor in executing the Form of Contract
29 that no individual, firm, corporation, or any combination thereof that supplies materials,
30 labor, services, or equipment to the Contractor for the performance of the Work shall
31 become thereby a third-party beneficiary of this Contract.
32
- 33 The Contract Documents shall not be construed to create a contractual relationship of
34 any kind between the Contracting Agency and a Subcontractor or any other Person
35 except the Contractor.
36
- 37 9. The Owners and Contractors Protective Insurance policy shall not be subject to a
38 deductible or contain provisions for a deductible. The Commercial General Liability
39 policy and the Commercial Automobile Liability Insurance policy may, at the discretion
40 of the Contractor, contain such provisions. If a deductible applies to any claim under
41 these policies, then payment of that deductible will be the responsibility of the Contractor,
42 notwithstanding any claim of liability against the Contracting Agency. However, in no
43 event shall any provision for a deductible provide for a deductible in excess of
44 \$50,000.00.
45
- 46 10. With the exception of the Commercial Automobile liability coverage, no policies of
47 insurance required under this Section shall contain an arbitration or alternative dispute
48 resolution clause applicable to disputes between the insurer and its insureds. Any and
49 all disputes concerning (i) terms and scope of insurance coverage afforded by the
50 policies required hereunder and/or (ii) extra contractual remedies and relief, which may

1 be afforded policy holders in connection with coverage disputes, shall be resolved in
2 Washington Superior Court, applying Washington law.

- 3
- 4 11. Prior to Contract execution, the Contractor shall file with the Department of
5 Transportation, Contract Payment Section, PO Box 47420, Olympia, WA 98504-7420,
6 ACORD Form Certificates of Insurance evidencing the minimum insurance coverages
7 required under these Specifications. Within 30 days of being awarded a Contract, the
8 Contractor shall provide the Department with complete copies, which may be electronic
9 copies, of all insurance policies required under this Section and any Special Provisions.
- 10
- 11 12. Prior to Contract execution, the Contractor shall file with The Tulalip Tribes, ACORD
12 Form Certificates of Insurance evidencing the minimum insurance coverages required
13 under these Specifications. Within 30 days of being awarded a Contract, the Contractor
14 shall provide The Tulalip Tribes with complete copies, which may be electronic copies,
15 of all insurance policies required under this Section and any Special Provisions.
- 16
- 17 13. The Contractor shall provide a 30 day in advance written notice to The Tulalip Tribes of
18 any policy cancellations and provide the Department of Transportation, Contract
19 Payment Section, PO Box 47420, Olympia, WA 98504-7420, by U.S. Mail, notice of any
20 policy cancellation within 2 business days of receipt of cancellation.
- 21
- 22 14. Failure on the part of the Contractor to maintain the insurance as required, or not to
23 provide certification and copies of the insurance prior to the time specified in Subsection
24 11 and 12 above, shall constitute a material breach of Contract upon which the
25 Contracting Agency may, after giving 5-business days' notice to the Contractor to correct
26 the breach, immediately terminate the Contract or, at its discretion, procure or renew
27 such insurance and pay any and all premiums in connection therewith, with any sums
28 so expended to be repaid to the Contracting Agency on demand, or at the sole discretion
29 of the Contracting Agency, offset against funds due the Contractor from the Contracting
30 Agency. All costs for insurance, including any payments of deductible amounts, shall be
31 considered incidental to and included in the unit Contract prices and no additional
32 payment will be made.

33

34 **1-07.19 Gratuities**

35 The first paragraph of Section 1-07.19 is revised to read:

36

37 (*****)

38 The Contractor shall not extend any loan, gratuity, or gift of money in any form whatsoever to
39 any employee or officer of the Contracting Agency or the State; nor will the Contractor rent or
40 purchase any equipment or materials from any employee or officer of the Contracting Agency
41 or the State. Before payment of the final estimate will be made, the Contractor shall execute
42 and furnish the Contracting Agency an affidavit certifying compliance with these provisions of
43 the Contract.

44

45 **1-07.23 Public Convenience and Safety**

46

47 **1-07.23(1) Construction Under Traffic**

48 Section 1-07.23(1) is supplemented with the following:

(January 2, 2012)

Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance From Traveled Way (Feet)
35 mph or less	10 *
40 mph	15
45 to 55 mph	20
60 mph or greater	30

* or 2 feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

(*****)

Shoulder, Lane, Ramp, Roadway and Rolling Slowdown Closures

Shoulder, lane, ramp, roadway and rolling slowdown closures are prohibited at all times except as provided in these Special Provisions:

Temporary shoulder closures will be permitted as follows:

NB I-5

Sunday	8:00 p.m. to 2:00 p.m.	(the following day)
Monday	7:00 p.m. to 2:00 p.m.	(the following day)
Tuesday	7:00 p.m. to 2:00 p.m.	(the following day)

Wednesday	7:00 p.m. to	2:00 p.m.	(the following day)
Thursday	7:00 p.m. to	NOON	(the following day)

SB I-5

Sunday	8:00 p.m. to	5:00 a.m.	(the following day)
Monday	6:00 p.m. to	5:00 a.m.	(the following day)
Tuesday	6:00 p.m. to	5:00 a.m.	(the following day)
Wednesday	6:00 p.m. to	5:00 a.m.	(the following day)
Thursday	6:00 p.m. to	5:00 a.m.	(the following day)

I-5 Lane closures will be permitted as follows, which includes the adjacent shoulders:

NB Single Lane and Median Single lane Closure at Interchange

Sunday	8:00 p.m. to	9:00 a.m.	(the following day)
Monday	8:00 p.m. to	9:00 a.m.	(the following day)
Tuesday	8:00 p.m. to	9:00 a.m.	(the following day)
Wednesday	8:00 p.m. to	9:00 a.m.	(the following day)
Thursday	8:00 p.m. to	9:00 a.m.	(the following day)

NB Double Outside and Median Work Lane Closure

Sunday	11:00 p.m. to	5:30 a.m.	(the following day)
Monday	11:00 p.m. to	5:30 a.m.	(the following day)
Tuesday	11:00 p.m. to	5:30 a.m.	(the following day)
Wednesday	11:00 p.m. to	5:30 a.m.	(the following day)
Thursday	11:00 p.m. to	5:30 a.m.	(the following day)

SB Single Lane and Median Single lane Closure at Interchange

Sunday	9:00 p.m. to	5:00 a.m.	(the following day)
Monday	7:00 p.m. to	5:00 a.m.	(the following day)
Tuesday	7:00 p.m. to	5:00 a.m.	(the following day)
Wednesday	7:00 p.m. to	5:00 a.m.	(the following day)
Thursday	7:00 p.m. to	5:00 a.m.	(the following day)

SB Double Outside and Median Work Lane Closure

Sunday	11:00 p.m. to	4:00 a.m.	(the following day)
Monday	9:30 p.m. to	4:00 a.m.	(the following day)
Tuesday	9:30 p.m. to	4:00 a.m.	(the following day)
Wednesday	9:30 p.m. to	4:00 a.m.	(the following day)
Thursday	9:30 p.m. to	4:00 a.m.	(the following day)

I-5 Ramp total closures will be permitted as follows:

NB I-5 Off-Ramp Closure

Sunday	9:00 p.m. to	6:00 a.m.	(the following day)
Monday	10:00 p.m. to	6:00 a.m.	(the following day)

Tuesday	10:00 p.m. to	6:00 a.m.	(the following day)
Wednesday	10:00 p.m. to	6:00 a.m.	(the following day)
Thursday	10:00 p.m. to	6:00 a.m.	(the following day)

A maximum of seven overnight roadway closures are permitted for the NB I-5 to 116th Street NE Exit Ramp.

NB I-5 On-Ramp Closure

Sunday	9:00 p.m. to	6:00 a.m.	(the following day)
Monday	9:00 p.m. to	6:00 a.m.	(the following day)
Tuesday	9:00 p.m. to	6:00 a.m.	(the following day)
Wednesday	9:00 p.m. to	6:00 a.m.	(the following day)
Thursday	9:00 p.m. to	6:00 a.m.	(the following day)

A maximum of seven overnight ramp closures are permitted for the 116th St. NE Ramp to NB I-5.

SB I-5 Off-Ramp Closure

Sunday	9:00 p.m. to	5:00 a.m.	(the following day)
Monday	8:00 p.m. to	5:00 a.m.	(the following day)
Tuesday	8:00 p.m. to	5:00 a.m.	(the following day)
Wednesday	8:00 p.m. to	5:00 a.m.	(the following day)
Thursday	8:00 p.m. to	5:00 a.m.	(the following day)

A maximum of seven overnight ramp closures are permitted for the SB I-5 to 116th Street NE Exit Ramp.

SB I-5 On-Ramp Closure

Sunday	10:00 p.m. to	4:00 a.m.	(the following day)
Monday	10:00 p.m. to	4:00 a.m.	(the following day)
Tuesday	10:00 p.m. to	4:00 a.m.	(the following day)
Wednesday	10:00 p.m. to	4:00 a.m.	(the following day)
Thursday	10:00 p.m. to	4:00 a.m.	(the following day)

A maximum of seven overnight ramp closures are permitted for the 116th Street NE Ramp to SB I-5.

Full Roadway Closures for testing the underdeck water and sewer lines:

Full I-5 Closure

Sunday	11:59 p.m. to	3:00 a.m.	(the following day)
Monday	11:59 p.m. to	3:00 a.m.	(the following day)
Tuesday	11:59 p.m. to	3:00 a.m.	(the following day)
Wednesday	11:59 p.m. to	3:00 a.m.	(the following day)
Thursday	11:59 p.m. to	3:00 a.m.	(the following day)

A maximum of one I-5 simultaneous closure is permitted for the testing of the water and sewer utility pipes over I-5. This is a full closure to include the roadway and shoulders. 116th ST NE will be closed between the ramp terminals concurrently. The 116th Street NE ramps will remain open for detouring.

The Contractor shall utilize Washington State Patrol officer(s), (minimum of one patrol vehicle in each direction) to assist with and/or provide enforcement of the I-5 roadway closures.

116th Street NE Closure

For testing the underdeck water and sewer lines and installing sign bridges:

Friday	11:30 p.m. to 7:30 a.m.	Saturday
Saturday	11:00 p.m. to 8:00 a.m.	Sunday

A maximum of five overnight roadway closures of 116th Street NE will be allowed for the installation of the signal system and adjacent sign bridges and the testing of the Sewer and water lines.

The Contractor shall utilize Washington State Patrol officer(s) (minimum of one patrol vehicle in each direction) to assist with and/or provide enforcement of the full I-5 roadway closures.

A minimum of two lanes (one lane in each direction) shall be maintained on 116th Street NE, during lane closure hours, except for short duration closure, 20-minute maximum, for staging adjustments to temporary signal heads and temporary roadway channelization. This operation will be permitted as follows:

Sunday	11:59 p.m. to	3:00 a.m.	(the following day)
Monday	11:59 p.m. to	3:00 a.m.	(the following day)
Tuesday	11:59 p.m. to	3:00 a.m.	(the following day)
Wednesday	11:59 p.m. to	3:00 a.m.	(the following day)
Thursday	11:59 p.m. to	3:00 a.m.	(the following day)

116th Street NE Single lane closures (one lane in each direction) shall be allowed for installation of sidewalks, curbing and signal system installation during the following hours:

Sunday	9:00 a.m. to	3:00 p.m.
Monday	9:00 a.m. to	3:00 p.m.
Tuesday	9:00 a.m. to	3:00 p.m.
Wednesday	9:00 a.m. to	3:00 p.m.
Thursday	9:00 a.m. to	3:00 p.m.
Friday	9:00 a.m. to	3:00 p.m.
Saturday	11:59 p.m. to	3:00 a.m. (the following day)

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

Lane, ramps, roadways and rolling slowdown closures are not allowed on any of the following which shall take precedence over the allowable closures listed above:

1. A holiday,
2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After noon on the day prior to a holiday or holiday weekend, and
4. Before noon on the day after the holiday or holiday weekend.
5. The two-hour period prior to and the two-hour period after an event at the Tulalip Amphitheatre when attendance exceeds 1,500
6. The two weeks prior to, including the 4th of July holiday
7. Thanksgiving through New Year's Day
8. Midnight through noon the day following a holiday or holiday weekend.
9. Good Friday (Friday before Easter)
10. Easter Monday (Monday following Easter)
11. Canadian Holidays:
 - a. Queen's Birthday/Victoria Day (closest Monday to May 20th)
 - b. Canada Day/Dominion Day (July 1)
 - c. B.C. Day (first Monday in August)
 - d. Thanksgiving Day (second Monday in October)
12. Marysville Strawberry Festival (typically a one week event in June each year)
13. Arlington Fly-In (typically 3 day event in July each year)
14. Everett Half Marathon (April)
15. Everett XFinity Arena events with an anticipated attendance of 5,000 or higher

The Contractor is responsible to obtain or verify the dates for all events listed

(*****)

Construction vehicles using a closed traffic lane shall travel only in the normal direction of traffic flow unless expressly allowed in an approved traffic control plan. Construction vehicles shall be equipped with flashing or rotating amber lights.

Work over an open lane of traffic will not be allowed, unless a plan for the protection of the traveling public from debris falling onto the traveled way is approved by the Engineer. This protection shall remain in place during construction and meet minimum vertical clearance for the highway.

Controlled Access

No special access or egress will be allowed the Contractor other than normal legal movements or as shown in the Plans. Construction vehicles are prohibited from crossing any of the interchange ramps to travel between construction accesses that are located on both sides of a ramp.

Physical reductions of the width of thru traveling lanes are subject to the following restrictions:

The Contractor shall not reduce the traveled way to a single lane with a clear width of less than 16 feet for a duration that exceeds 4 calendar days without prior approval of the Engineer. The Contractor shall submit a request for a width reduction that exceeds 4 calendar days to the engineer no later than 30 calendar days prior to the start of the proposed width reduction. At a minimum, this request shall include:

1. Schedule showing the planned beginning date and end date of the width reduction.
2. Plans showing the limits and cross-sections showing the clear distance provided during the width reduction.
3. Details of available detour routes.
4. Plan to provide temporary windows of a minimum 16 foot width periodically during the width reduction, when possible.

The Engineer will reply, in writing, to the request within 7 calendar days. The Contractor shall immediately notify the Engineer if there are any changes to the schedule for the width reduction.

(*****)

Traffic Blockage for Mast Arm Erection

During erection of mast arm assemblies, the Contractor may, with the authorization of the Engineer, block all traffic for maximum durations of 20 minutes between the hours of 11:00pm and 3:00am, Monday thru Thursday nights. These 20-minute blockages shall be separated by an interval long enough to allow the delayed vehicles to clear.

(*****)

Signal Turn-On

Signal turn-on for new or rebuilt control equipment will be permitted Monday through Thursday, between 10:00 PM and 11:59 PM (nightly).

(NWR March 7, 2005)

The Contractor shall, at no additional cost to the Contracting Agency, provide Washington State Patrol officer(s), having jurisdiction in the area, to manually control intersections during signal turn-on.

(*****)

Advance Notification

The Contractor shall notify the Engineer in writing 14 calendar days in advance of any roadway closure, ramp closure, or both.

The Contractor shall notify the Engineer in writing five calendar days in advance of any lane closure, shoulder closure, sidewalk closure, or some combination.

The Contractor shall submit a detailed schedule which includes all dates and times for traffic control needs for each roadway, lane, ramp, or shoulder closure associated with authorized Traffic Control Plans to the Engineer for review and acceptance by 12:00 p.m. (noon) of the Monday three weeks prior to implementing the traffic control plan. The schedule shall include dates, times, and identification of critical path Work activities that require traffic control. Due to other work in the area, submittal of detailed traffic control schedule does not ensure acceptance of the dates and time of the proposed traffic control schedule. Within 14 calendar days of the submittal, the Engineer will notify the Contractor of the acceptance of all or portions of the traffic control schedule. Any change to the schedule shall be resubmitted to the Engineer and shall restart the review and acceptance process.

(*****)

Public Notification

The Contractor shall furnish and install information signs that provide advance notification of a ramp closure, road closure, or both, a minimum of 5 working days prior to the closure. The signs shall have a black legend on a white reflective background. Sign locations, messages, letter sizes, and sign sizes are shown in the Plans.

The Contractor shall notify the Washington State Patrol; local fire, police, emergency service, and city engineering departments; Community Transit (Dana Osborn 425-348-7191) when applicable; other transit companies; and the affected school district(s) in writing a minimum of 5 working days prior to each closure. The Contractor shall furnish copies of these notifications to the Engineer.

Section 1-07.23(2) is supplemented with the following:

(NWR March 6, 2000)

Detour routes shall be provided as shown in the Plans.

(NWR March 6, 2000)

No two consecutive on-ramps or exits shall be closed at the same time.

1-07.26 Personal Liability of Public Officers

Section 1-07.26 is revised to read:

(*****)

Neither The Tulalip Tribes, the Governor, the Commission, the Secretary, the Engineer, nor any other officer or employee of the State shall be personally liable for any acts or failure to act in connection with the Contract, it being understood that in such matters, they are acting solely as agents of the State.

1-07.27 No Waiver of State's Legal Rights

Section 1-07.27 including title is revised to read:

(*****)

1-07.27 No Waiver of The Tulalip Tribes and State's Legal Rights

The Tulalip Tribes and the State shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefore from showing the true amount and character of the Work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate, or certificate is untrue or incorrectly made, or that the Work or materials do not conform in fact to the Contract. The Tulalip Tribes and the State shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate, and payment in accordance therewith, from recovering from the Contractor and the Sureties such damages as it may sustain by reason of the Contractor's failure to comply with the terms of the Contract. Neither the acceptance by The Tulalip Tribes or the Secretary, nor any payment for the whole or any part of the Work, nor any extension of time, nor any possession taken by The Tulalip Tribes or the State shall operate as a waiver of any portion of the Contract or of any power herein reserved or any right to damages herein provided, or bar recovery of any money wrongfully or erroneously paid to the

Contractor. A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor and The Tulalip Tribes recognize that the impact of overcharges to The Tulalip Tribes by the Contractor resulting from antitrust law violations by the Contractor's suppliers or Subcontractors adversely affects The Tulalip Tribes rather than the Contractor. Therefore, the Contractor agrees to assign to The Tulalip Tribes any and all claims for such overcharges.

1-08 Prosecution and Progress

Section 1-08 is supplemented with the following:

(*****)

Preconstruction Conference

Prior to the Contractor beginning the Work, a preconstruction conference will be held between the Contractor, the Engineer, the Contracting Agency and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

1-08.1 Subcontracting

Section 1-08.1 is supplemented with the following:

(*****)

Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall submit to the Engineer a certification (WSDOT Form 420-004 EF) that a written agreement between the Contractor and the Subcontractor or between the Subcontractor and any lower tier subcontractor has been executed. This certification shall also guarantee that these subcontract agreements include all the documents required by the Special Provisions.

A subcontractor or lower tier subcontractor will not be permitted to perform any work under the contract until the following documents have been completed and submitted to the Engineer:

1. Request to Sublet Work (Form 421-012 EF), and
2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for Federal-aid Projects (Form 420-004 EF) and
3. An approved Tulalip Tribes TERO Compliance Plan for the Subcontractor.

1 The Contractor's records pertaining to the requirements of this Special Provision shall be open
2 to inspection or audit by representatives of the Contracting Agency during the life of the
3 contract and for a period of not less than 3 years after the date of acceptance of the contract.
4 The Contractor shall retain these records for that period. The Contractor shall also guarantee
5 that these records of all subcontractors and lower tier subcontractors shall be available and
6 open to similar inspection or audit for the same time period.
7

8 **1-08.4 Prosecution of Work**

9 Section 1-08.4 is supplemented with the following:

10
11 (*****)

12 ***Construction Coordination Meetings***

13 The Contracting Agency or its authorized representative will schedule and administer
14 construction coordination meetings on a weekly basis with the Engineer, Contractor,
15 subcontractors and other interested parties. The Contractor shall actively and regularly
16 prepare for, attend and participate in these meetings throughout the duration of the project
17 until Contract Completion. The purpose of these meetings is to coordinate and facilitate
18 communication between the parties to facilitate the performance of their respective
19 responsibilities and the successful completion of the project.
20

21 The Contracting Agency will establish the weekly meeting times, dates and location with
22 agreement from the Engineer and Contractor.
23

24 Project meetings shall be held at a location designated by the Contracting Agency.
25

26 The Contracting Agency will make physical arrangements for meetings, prepare agenda with
27 copies for participants, preside at meetings, record minutes and distribute copies within 5
28 working days to participants and those affected by decisions made at meetings.
29

30 Attendance: Contracting Agency, Engineer, Contractor's Project Manager and Project
31 Superintendent all as appropriate to address agenda topics for each meeting. Major
32 subcontractors and suppliers shall attend when requested by the Contracting Agency,
33 Engineer or Contractor.
34

35 The specific administrative and procedural requirements for project meetings including but not
36 limited to Safety, RFI Status, Contract Submittals, Materials Submittals, RFPs, Field
37 Directives, Change Orders, project schedule and 2 week look ahead, Working Days, Critical
38 path items, Contract compliance, Pay applications, and open discussion.
39

40 ***Safety***

41 All parties agree that they are responsible for compliance with all tribal, local, and federal laws,
42 regulations, and standards that pertain to safety, as those laws, regulations, and standards
43 apply to their employees. All parties recognize that the responsibility for employee safety rests
44 with each employer respectively. Each contractor (prime or sub) shall be responsible for the
45 safety of its own employees. The Contracting Agency accepts no responsibility for, nor will it
46 provide any safety consultation, monitoring, or enforcement to any contractor on the site
47 concerning the safety of contractor's employees. Any safety equipment needed on the job,
48 including but not limited to PPE, shall be furnished by each contractor for its employees.
49

50 The Contracting Agency will regard safety on this project to be of the utmost importance.
51 Under no conditions shall safety requirements be waived for the sake of cost, schedule, or

1 convenience. SAFETY MAY BE USED AS CRITERIA FOR APPROVAL OF PAY
2 APPLICATIONS. Unsafe conditions, lack of proper and or untimely documentation and
3 submittals, and lack of adherence to safety rules and requirements will not be tolerated.
4

5 Each contractor, AS A MINIMUM, shall follow all tribal, local, and federal laws regarding worker
6 safety. This shall include all requirements of OSHA and referenced standards therein included.
7

8 The Contracting Agency may, at various times, request voluntary OSHA inspections. Each
9 contractor shall immediately correct and respond to any violations in writing to the Contracting
10 Agency, and to the appropriate agency.
11

12 Indiscriminate accumulations of debris, waste, or scrap in work areas will not be permitted.
13 (Areas must be designated for storage or disposal.) All materials, tools, and equipment must
14 be stored in an orderly manner in designated areas.
15

16 **Safety Program**

17

18 A. Contractor shall submit, within ten days of Notice to Proceed, a copy of its company
19 safety program including jobsite specific safety plans. This program shall incorporate
20 all lower-tier subcontractor safety information or separate policies shall be submitted
21 for all lower-tier subcontractors used on the project. This safety policy shall conform
22 to all OSHA requirements and shall include as follows:
23

24 B. A Hazard Communications Program, including site specific Materials Safety Data
25 Sheets (MSDS) for all chemicals used by Contractor and its subcontractors.

- 26 1. Provisions for continual training of all on-site employees. This shall be done by
27 holding weekly safety toolbox talks, documented by signed attendance sheets
28 with safety topic submitted to the Contracting Agency at each weekly project
29 meeting.
- 30 2. Weekly jobsite safety inspections shall be completed by each Contractor.
- 31 3. Designation and continual training of competent persons for the project.
- 32 4. Contractor shall provide services of a competent safety person (as defined by
33 OSHA) for the project to inspect the project for safety hazards related to their
34 Work. The safety person should not be one of the superintendents dedicated
35 to this Project; however, the safety person shall be on-site whenever Work is
36 being performed by Contractor. The safety person shall attend the Project
37 coordination meetings.
- 38 5. Contractor, with assistance from all contractors' safety persons, shall perform
39 a monthly total Project safety audit conducted by a company safety officer or
40 independent consultant of the Contractor. Results of the safety audit shall be
41 submitted to the Contracting Agency and distributed to all contractors the same
42 day the audit is conducted by Contractor. If a contractor does not immediately
43 address any observed or noted safety concern, Contractor's company safety
44 officer or independent consultant shall contact the Owner, through the
45 Contracting Agency. Contractor's company safety officer or independent
46 consultant, with assistance from Contractor's competent safety person, shall
47 record all accidents for the Project and report their findings to the Owner,
48 through the Contracting Agency.
- 49 6. Provisions for enforcement of the safety policies by Site Foreman,
50 Superintendent and or Project Manager.

- 1 7. Documentation that each on-site employee has been trained in general safety
2 and has been informed of the location of the Safety Program, Haz-Com
3 Program and Emergency procedures on this project.
4

5 **Submittals**

- 6 A. Company safety programs, as described above, shall be submitted to the
7 Contracting Agency within ten days of Notice to Proceed or Letter of Intent to
8 Award. Additions to the program, such as documentation of training as new
9 employees arrive at the site, shall be forwarded to the Contracting Agency. All
10 contractor Safety Programs, and Haz-Com Programs, with MSDS Sheets, will be
11 kept in one central location within the Contractor's office throughout the duration
12 of the project.
13 B. Contractor is required to conduct and all employees are required to attend a "Tool
14 Box" type safety meeting once a week. These meetings may either be presided over
15 by Contractor's foreman or another competent representative designated by
16 Contractor. The Contracting Agency's personnel are available to participate in these
17 safety meetings.
18 Contractor will be responsible to submit WEEKLY tool box safety meeting minutes
19 to the Contracting Agency while Contractor has employees on-site.
20 C. All weekly inspections will be documented by Contractor and submitted to the
21 Owner, through the Contracting Agency. Contractor shall immediately correct all
22 deficiencies and submit a list of corrective actions within oneworking day, or sooner
23 if required, of safety inspection.
24 D. Subject specific daily and or weekly inspections by Contractor, including temporary
25 electric, crane, or other work activities as required, shall be timely submitted to the
26 Owner, through the Contracting Agency.

27 **Training**

- 28 A. Contractor shall ensure that employee designated as Project Competent Person
29 has been fully trained for this task and has the full authority to take corrective action
30 when required.
31 B. Contractor shall provide continual training to Project Competent Person,
32 Superintendent, and Foreman as required by tribal or OSHA standards.
33 C. The Contracting Agency may recommend General Safety Topics to enable
34 Contractor's supervising personnel to train employees if a Contractor requests such
35 assistance.
36

37 **1-08.5 Time for Completion**

38 The third and fourth paragraphs of Section 1-08.5 are revised to read:
39

40 (*****)

41
42 Each working day shall be charged to the contract as it occurs, until the contract work is
43 physically complete. If substantial completion has been granted and all the authorized working
44 days have been used, charging of working days will cease. Each week the Engineer will
45 provide the Contractor a statement that shows the number of working days: 1) charged to the
46 contract the week before; 2) specified for the Physical Completion of the contract; and 3)
47 remaining for the Physical Completion of the contract. The statement will also show the
48 nonworking days and any partial or whole day the Engineer declares as unworkable. Within
49 ten calendar days after the date of each statement, the Contractor shall file a written protest
50 of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in
51 sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By

1 not filing such detailed protest in that period, the Contractor shall be deemed as having
2 accepted the statement as correct. If the Contractor is approved to work ten hours a day and
3 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked
4 would ordinarily be charged as a working day then the fifth day of that week will be charged
5 as a working day whether or not the Contractor works on that day.
6

7 The sixth paragraph of Section 1-08.5 is revised to read:
8

9 (*****)

10 The Engineer will give the Contractor written notice of the completion date of the contract after
11 all the Contractor's obligations under the contract have been performed by the Contractor.
12 The following events must occur before the Completion Date can be established:
13

- 14 1. The physical work on the project must be complete; and
- 15 2. The Contractor must furnish all documentation required by the contract and required
16 by law, to allow the Contracting Agency to process final acceptance of the contract.
17 The following documents must be received by the Project Engineer prior to
18 establishing a completion date:
 - 19 a. Certified Payrolls (per Section 1-07.9(5)).
 - 20 b. Material Acceptance Certification Documents
 - 21 c. Final Contract Voucher Certification
 - 22 d. Final Contract Voucher Certification
 - 23 e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the
24 Contractor and all Subcontractors
 - 25 f. Property owner releases per Section 1-07.24
 - 26 g. An original signed and notarized Final Waiver and Release of Claim Form
27 from the Contractor.
 - 28 h. Original signed and notarized Final Waiver and Release of Claim Form for
29 all Subcontractors and Material Suppliers regardless of tier.
 - 30 i. Affidavit from the Tulalip Tribes TERO office that the TERO Fee for the
31 Project has been paid.

32 Section 1-08.5 is supplemented with the following:
33

34 (*****)

35 This project shall be physically completed within 200 working days.
36

37 **1-08.9 Liquidated Damages**

38 Section 1-08.9 is supplemented with the following:
39

40 (*****)

41 The closure of I-5 and 116th Street NE mainline lanes and ramps will result in substantial
42 traffic impacts. These closures will cause delays to the traveling public, increase fuel
43 consumption, vehicle operating cost, pollution, and other inconveniences and harm.
44

1
2 Accordingly, the Contractor agrees:
3

- 4 1. To pay \$2,000.00 liquidated damages per 15 minutes per for each 15 minute period
5 prorated to the nearest 5 minutes that all lanes of SB I-5 are not open by the
6 scheduled opening time following a full roadway closure..
7
- 8 2. To pay \$2,000.00 liquidated damages per 15 minutes for each 15 minute period
9 prorated to the nearest 5 minutes that all lanes of NB I-5 are not open by the
10 scheduled opening time following a full roadway closure.
11
- 12 3. To pay \$1,000.00 liquidated damages per 15 minutes for each 15 minute period
13 prorated to the nearest 5 minutes that all lanes of 116th St. NE are not open by the
14 scheduled opening time following a full roadway closure.
15
- 16 4. To pay \$1,000.00 liquidated damages per 15 minutes for each 15 minute period
17 prorated to the nearest 5 minutes that all lanes of SB I-5 are not opened by the
18 scheduled opening time following a single lane closure.
19
- 20 5. To pay \$2,000.00 liquidated damages per 15 minutes for each 15 minute period
21 prorated to the nearest 5 minutes that all lanes of SB I-5 are not opened by the
22 scheduled opening time following a double lane closure.
23
- 24 6. To pay \$1,000.00 liquidated damages per 15 minutes for each 15 minute period
25 prorated to the nearest 5 minutes that all lanes of NB I-5 are not opened by the
26 scheduled opening time following a single lane closure.
27
- 28 7. To pay \$2,000.00 liquidated damages per 15 minutes for each 15 minute period
29 prorated to the nearest 5 minutes that all lanes of NB I-5 are not opened by the
30 scheduled opening time following a double lane closure.
31
- 32 8. To pay \$200.00 liquidated damages per 15 minutes for each 15 minute period
33 prorated to the nearest 5 minutes that all lanes of NE 116th St. are not opened by
34 the scheduled opening time following a single lane closure.
35
- 36 9. To pay \$300.00 liquidated damages per 15 minutes for each 15 minute period
37 prorated to the nearest 5 minutes that a ramp is not opened by the scheduled
38 opening time following a full ramp closure.
39
- 40 10. To authorize the Engineer to deduct these liquidated damages from any money due
41 or coming due to the Contractor.
42

43 Unplanned disruptions to the Intelligent Transportation System (ITS) will result in impacts to
44 the traveling public, increase fuel consumption, vehicle operating costs, pollution, and other
45 inconveniences and harm far in excess of those resulting from delay of most projects.
46

47 Accordingly, the Contractor agrees:
48

- 49 1. To pay \$250.00 liquidated damages per 15 minutes for each 15 minute period that the
50 Contractor fails to restore the proper operation of an existing ITS element following an
51 unplanned disruption as specified in the subsection Existing System Disruption and

1 Restoration of the Special Provision INTELLIGENT TRANSPORTATION SYSTEM
2 (ITS).

- 3
4 2. To authorize the Engineer to deduct these liquidated damages from any money
5 due or coming to the Contractor.
6

7 **1-08.10 Termination of Contract**

8
9 Section 1-08.10 is deleted in its entirety.

10
11 **1-09 Measurement and Payment**

12
13 **1-09.6 Force Account**

14 (October 10, 2008 APWA GSP)

15
16 Supplement this Section with the following:

17
18 The Contracting Agency has estimated and included in the Proposal, dollar amounts for all
19 items to be paid per force account, only to provide a common proposal for Bidders. All such
20 dollar amounts are to become a part of Contractor's total bid. However, the Contracting
21 Agency does not warrant expressly or by implication that the actual amount of work will
22 correspond with those estimates. Payment will be made on the basis of the amount of work
23 actually authorized by Engineer.
24

25 **1-09.8 Payment For Material On Hand**

26 The last paragraph of Section 1-09.8 is revised to read:

27
28 (August 3, 2009)

29 The Contracting Agency will not pay for material on hand when the invoice cost is less than
30 \$2,000. As materials are used in the work, credits equaling the partial payments for them will
31 be taken on future estimates. Each month, no later than the estimate due date, the Contractor
32 shall submit a letter to the Project Engineer that clearly states: 1) the amount originally paid
33 on the invoice (or other record of production cost) for the items on hand, 2) the dollar amount
34 of the material incorporated into each of the various work items for the month, and 3) the
35 amount that should be retained in material on hand items. If work is performed on the items
36 and the Contractor does not submit a letter, all of the previous material on hand payment will
37 be deducted on the estimate. Partial payment for materials on hand shall not constitute
38 acceptance. Any material will be rejected if found to be faulty even if partial payment for it has
39 been made.
40

41 **1-09.9 Payments**

42
43 **1-09.9(1) Retainage**

44 Section 1-09.9(1) is revised to read:

45
46 (*****)

47 The Contracting Agency shall retain from each progress estimate a sum of 5 percent of
48 the monies earned by the Contractor. Monies retained shall be held in a fund by the
49 Contracting Agency.
50

51 Release of the retainage will be made 60 days following the Completion Date, provided

the following conditions are met:

1. On Contracts totaling more than \$35,000, a release has been obtained from the Washington State Department of Revenue.
2. Affidavits of Wages Paid for the Contractor and all Subcontractors are on file with the Contracting Agency (RCW 39.12.040).
3. A certificate of Payment of Contributions Penalties and Interest on Public Works Contract is received from the Washington State Employment Security Department.
4. Washington State Department of Labor and Industries (per Section 1-07.10) shows the Contractor is current with payments of industrial insurance and medical aid premiums.
5. All claims, as provided by law, filed against the retainage have been resolved. In the event claims are filed and provided the conditions of 1, 2, 3, and 4 are met, the Contractor will be paid such retained percentage less an amount sufficient to pay any such claims together with a sum determined by the Contracting Agency sufficient to pay the cost of foreclosing on claims and to cover attorney's fees.

1-09.11 Disputes and Claims

Section 1-09.11 is revised to read:

(*****)

Forum For Equitable Relief

The Tribal Court of the Tulalip Tribes of Washington shall have exclusive jurisdiction over any action or proceeding for any injunction or declaratory judgment concerning any agreement or performance under the Contract Documents or in connection with the Project. Any such action or proceeding arising out of or related in any way to the Contract or performance thereunder shall be brought only in the Tribal Court of the Tulalip Tribes of Washington and the Contractor irrevocably consents to such jurisdiction and venue. The Contract shall be governed by the law of the State of Washington.

Forum For Money Damages

The Tribal Court of the Tulalip Tribes of Washington shall be the exclusive jurisdiction for any action or proceeding for any injunction or declaratory judgment concerning any agreement or performance under the Contract Documents or in connection with the Project. The Tribal Court of the Tulalip Tribes of Washington shall be the exclusive jurisdiction for any action or proceeding by the Contractor or the Contractor's Surety, if applicable, for any money damages concerning any agreement or performance under the Contract Documents or in connection with the Project.

1-09.13 Claims Resolution

Section 1-09.13 is deleted in its entirety.

1-10 Temporary Traffic Control

1-10.2 Traffic Control Management

1-10.2(1) General

Section 1-10.2(1) is supplemented with the following:

(January 3, 2017)

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the

1 State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

2
3 The Northwest Laborers-Employers Training Trust
4 27055 Ohio Ave.
5 Kingston, WA 98346
6 (360) 297-3035
7

8 Evergreen Safety Council
9 12545 135th Ave. NE
10 Kirkland, WA 98034-8709
11 1-800-521-0778
12

13 The American Traffic Safety Services Association
14 15 Riverside Parkway, Suite 100
15 Fredericksburg, Virginia 22406-1022
16 Training Dept. Toll Free (877) 642-4637
17 Phone: (540) 368-1701
18

19 **1-10.3 Traffic Control Labor, Procedures, and Devices**

20 21 **1-10.3(1) Traffic Control Labor**

22 23 **1-10.3(1)B Other Traffic Control Labor**

24 Section 1-10.3(1)B is supplemented with the following:

25
26 (*****)

27 The Contractor shall utilize Washington State Patrol officer(s), having jurisdiction in the
28 area, to provide enforcement of the I-5 roadway closures and 116th Street NE roadway
29 closures.
30

31 **1-10.4 Measurement**

32 33 **1-10.4(1) Lump Sum Bid for Project (No Unit Items)**

34 Section 1-10.4(1) is supplemented with the following:

35
36 (August 2, 2004)

37 The proposal contains the item "Project Temporary Traffic Control", lump sum. The provisions
38 of Section 1-10.4(1) shall apply.
39
40

41 **Division 2** 42 **Earthwork**

43 44 **2-01 Clearing, Grubbing and Roadside Cleanup**

45 46 **2-01.3 Construction Requirements**

47 Section 2-01.3 is supplemented with the following:

48
49 (NWR November 10, 2014)

50 ***Roadside Restoration***

51 The Contractor shall avoid and minimize impacts to all portions of the roadside or adjacent

landscapes to the maximum extent possible according to Section 1-07.16(1). Vegetated areas that are unavoidably damaged due to the performance or installation of the specified Work shall be restored in kind to the original condition or as approved by the Engineer.

All materials utilized shall be in accordance with Sections 9-14 and 9-15 and other applicable sections of the Standard Specifications or Special Provisions, whichever may apply.

All Work shall be performed in accordance with Sections 8-02 and 8-03 and other applicable sections of the Standard Specifications.

The Contractor shall review the Work with the Engineer and receive approval to proceed prior to commencing roadside restoration Work

(NWR August 31, 2015)

The Contractor shall protect the root systems of the existing vegetation designated to be saved during clearing and grubbing activities. The Contractor's operations shall be conducted so vehicles and equipment do not operate, haul, park, or perform other activity within the drip line of vegetation designated to be saved.

2-01.3(1) Clearing

Section 201.3(1) is supplemented with the following:

(NWR November 10, 2014)

Herbicide Applications Prior to Clearing and Grubbing

The living unwanted vegetation as defined below shall be treated with an approved herbicide two times prior to vegetation and soil disturbance within the specified site.

Unwanted Vegetation

In addition to noxious weeds, unwanted vegetation within roadside and mitigation areas throughout the project limits includes:

- Butterfly bush (*Buddleia* spp.)
- Canadian thistle (*Cirsium arvense*)
- Common reed (*Phragmites australis*)
- Evergreen blackberry (*Rubus laciniatus*)
- Giant hogweed (*Heracleum mantegazzianum*)
- Hedge bindweed (*Calystegia sepium*)
- Himalayan blackberry (*Rubus discolor* or *R. procerus*)
- Knotweed (*Polygonum cuspidatum*, *P. bohemicum*, *P. sachalinense*, *P. polystachyum*)
- Purple loosestrife (*Lythrum salicaria*)
- Reed Canarygrass (*Phalaris arundinacea*)
- Scotch broom (*Cytisus scoparius*)

The Contractor shall include the proposed timing of this work in the progress schedule in accordance with Section 1-08.3. The Weed and Pest Control Plan as specified in Section 8-02.3(2) shall be submitted and approved prior to beginning this work.

Herbicide applications shall be made between March 1 and September 30. Two weeks or more after the first herbicide application and prior to clearing and grubbing, the

Contractor shall cut and clear dead vegetation to ground level and dispose of it outside of the project limits.

The second application shall be made after eight weeks or when the vegetation has regrown to a minimum of six inches in height, whichever comes first. The second application shall be performed after vegetation is showing new herbaceous growth and a minimum of two weeks prior to clearing and grubbing at the specified site.

Herbicide applications shall be performed in accordance with the requirements of Section 8-02.3(2) and the approved Weed and Pest Control Plan.

Care shall be taken to prevent herbicide damage to existing vegetation identified to be saved and protected as shown in the Plans.

2-01.5 Payment

Section 2-01.5 is supplemented with the following:

(NWR November 10, 2014)

"Roadside Restoration" is incidental to the contract according to the requirements of Section 1-07.16(1).

2-02 Removal of Structures and Obstructions

2-02.1 Description

Section 2-02.1 is supplemented with the following:

(*****)

The following items shall be removed:

Drainage structures

Drainage pipe

Asphalt concrete pavement

2-02.3 Construction Requirements

Section 2-02.3 is supplemented with the following:

(February 17, 1998)

Removal of Obstructions

***The Contractor shall remove the following as part of the lump sum item "Removal of Structures and Obstructions":

Schedule A	Approx.
Removing Guide Post	15 EA
Removing Chain Link Fence	690 LF
Removing Asphalt Conc Curb	650 LF
Removing Paint Line	6940 LF
Removing Painted Traffic Markings	10 EACH
Removing Plastic Line	1525 LF
Removing Impact Attenuator	1 EA

1	Schedule B	Approx.
2	Removing Guide Post	10 EA
3	Removing Paint Line	512 LF
4	Removing Impact Attenuator	1 EA
5		
6	Schedule C	Approx.
7	Removing Traffic Curb	42 LF
8	Removing Paint Line	192 LF
9		

The quantities are listed only for the convenience of the Contractor in determining the volume of Work involved and are not guaranteed to be accurate. The prospective Bidders shall verify these quantities before submitting a Bid. No adjustments other than for approved changes will be made in the lump sum Contract price for "Removal of Structures and Obstructions" even though the actual quantities required may deviate from those listed.***

2-02.3(2) Removal of Bridges, Box Culverts, and Other Drainage Structures

Section 2-02.3(2) is supplemented with the following:

(*****)

Removal of Drainage Pipe

Where shown in the Plans or at other locations as determined by the Engineer, the Contractor shall remove existing drainage pipes regardless of the size, type, or depth of pipe. Each drainage pipe shall be removed in its entirety.

Voids left by culvert removal shall be backfilled with a granular material and compacted in accordance with Section 2-03.3(14)C.

The operation of the drainage systems shall be maintained until such time as their replacement systems are completed and approved for operation by the Engineer. This could require the construction and removal of temporary conveyance systems, 24 hour pumping, or other methods as determined by the Contractor and approved by the Engineer to ensure continued operation of the drainage system. All costs associated with the maintenance and operation of these drainage systems shall be included in the cost of the associated method of removal.

Removal of Drainage Structures

Where shown in the Plans, or at other locations as determined by the Engineer, the Contractor shall remove catch basins regardless of the size or type. Each catch basin shall be removed in its entirety. Prior to backfilling the resultant void, the Contractor shall plug and abandon the existing pipe(s) with commercial concrete in accordance with Section 7-08.3(4).

Voids left by catch basin removal shall be backfilled and compacted in accordance with Section 2-03.3(14)C.

All materials removed shall become the property of the Contractor and shall be disposed of outside the project limits.

2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters

Section 2-02.3(3) is supplemented with the following:

(September 8, 1997)

The approximate thickness of the *** Asphalt Conc.*** pavement is ***0.48 to 0.66 feet***.

2-02.4 Measurement

Section 2-02.4 is supplemented with the following:

(September 8, 1997)

Pavement removal will be measured by the square yard.

(*****)

Removing drainage pipe will be measured per linear foot along the line and slope of the pipe prior to removal. Any existing pipes removed within the limits of roadway excavation or structure excavation will not be measured and will be included in the pay item for roadway excavation or structure excavation.

(*****)

Removing drainage structures will be measured per each for each drainage structure removed.

(*****)

Removing Concrete Barrier will be measured by the linear foot.

2-02.5 Payment

Section 2-02.5 is supplemented with the following:

(September 30, 1996)

"Removing *** Asphalt Conc.*** Pavement", per square yard.

(*****)

"Removing Drainage Pipe", per linear foot.

The unit contract price per linear foot for "Removing Drainage Pipe" shall be full pay to perform the work as specified, including saw cutting, excavation, trench safety, removal, disposal, backfill and compaction.

(*****)

"Removing Drainage Structure" per each.

The unit contract price per each for "Removing Drainage Structure" shall be full pay to perform the work as specified, including saw cutting, excavation, trench safety, removal, disposal, backfill and compaction.

(*****)

"Removing Conc. Barrier", per linear feet.

2-03 Roadway Excavation and Embankment

2-03.1 Description

Section 2-03.1 is supplemented with the following:

(*****)

Pond Excavation Incl. Haul

This work shall consist of excavating and grading for the construction of stormwater ponds as shown in the Plans, including hauling and disposing of all unwanted excavated material.

2-03.3 Construction Requirements

Section 2-03.3 is supplemented with the following:

(NWR November 10, 2014)

Landscape Grading

The Contractor shall perform additional finish grading as ordered by the Engineer, that is not shown in the Plans or otherwise included in other bid items by moving, placing, and finish grading the surface of existing soil within the project limits. This work may also include contouring the ground surface to establish positive drainage and finish grades for site development in accordance with Section 8-02.3(4) as ordered by the Engineer. Hand work may be necessary to accomplish the work as ordered. All excess material shall become the property of the Contractor and shall be removed from the site.

(*****)

Pond Excavation Incl. Haul

Excavation, haul, and disposal shall be in accordance with Section 2-03.3. The Contractor shall use Method C for compacting earth embankments of the stormwater ponds except where it is located in the structural fill slopes of the roadway.

2-03.4 Measurement

Section 2-03.4 is supplemented with the following:

(*****)

Pond Excavation will be measured by the cubic yard, including haul.

2-03.5 Payment

Section 2-03.5 is supplemented with the following:

(*****)

"Pond Excavation Incl. Haul", per cubic yard.

The unit contract price per cubic yard for "Pond Excavation Incl. Haul" shall be full compensation for all costs incurred for excavating, loading, hauling, placing, and compacting the materials.

**Division 5
Surface Treatments and Pavements**

5-04 Hot Mix Asphalt

5-04.2 Materials

5-04.2(2) Mix Design – Obtaining Project Approval

Section 5-04.2(2) is supplemented with the following:

(January 3, 2011)

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be ***
6.3 *** million.

5-04.3 Construction Requirements

5-04.3(10) HMA Compaction Acceptance

The column in Table 14 of Section 5-04.3(10), titled "Statistical Evaluation of HMA Compaction is Required for", is supplemented with the following:

(April 3, 2017)

- Any HMA for which the specified course thickness is greater than 0.10 feet and the HMA is placed in the shoulder.

5-04.3(14) Planing Bituminous Pavement

Section 5-04.3(14) is supplemented with the following:

(*****)

The Contractor shall perform the planing operations no more than three calendar days ahead of the time the planed area is to be paved with HMA, unless otherwise allowed by the Engineer in writing.

5-04.5 Payment

Section 5-04.5 is supplemented with the following:

(August 5, 2013)

Asphalt Cost Price Adjustment

The Contracting Agency will make an Asphalt Cost Price Adjustment, either a credit or a payment, for qualifying changes in the reference cost of asphalt binder. The adjustment will be applied to partial payments made according to Section 1-09.9 for the following bid items when they are included in the proposal:

"HMA Cl. ____ PG ____"

"HMA for Approach Cl. ____ PG ____"

"HMA for Preleveling Cl. ____ PG ____"

"HMA for Pavement Repair Cl. ____ PG ____"

"Commercial HMA"

The adjustment is not a guarantee of full compensation for changes in the cost of asphalt binder. The Contracting Agency does not guarantee that asphalt binder will be available at the reference cost.

The Contracting Agency will establish the asphalt binder reference cost twice each month and post the information on the Agency website at:

<http://www.wsdot.wa.gov/Business/Construction/EscalationClauses.htm>

The reference cost will be determined using posted prices furnished by Poten & Partners, Inc. If the selected price source ceases to be available for any reason, then the Contracting Agency will select a substitute price source to establish the reference cost.

1 The base cost established for this contract is the reference cost posted on the Agency website
2 for the period immediately preceding the bid opening date.

3
4 Adjustments will be based on the most current reference cost for Western Washington or
5 Eastern Washington as posted on the Agency website, depending on where the work is
6 performed. For work completed after all authorized working days are used, the adjustment
7 will be based on the posted reference cost during which contract time was exhausted. The
8 adjustment will be calculated as follows:

9
10 No adjustment will be made if the reference cost is within 5% of the base cost.

11
12 If the reference cost is greater than or equal to 105% of the base cost, then
13 Adjustment = (Current Reference Cost – (1.05 x Base Cost)) x (Q x 0.056).

14
15 If the reference cost is less than or equal to 95% of the base cost, then
16 Adjustment = (Current Reference Cost – (0.95 x Base Cost)) x (Q x 0.056).

17
18 Where Q = total tons of all classes of HMA paid in the current month's progress payment.

19
20 "Asphalt Cost Price Adjustment", by calculation.

21
22 "Asphalt Cost Price Adjustment" will be calculated and paid for as described in this Section.
23 For the purpose of providing a common proposal for all bidders, the Contracting Agency has
24 entered an amount in the proposal to become a part of the total bid by the Contractor.

25 26 27 **Division 6** 28 **Structures**

29 30 **6-02 Concrete Structures**

31 32 **6-02.1 Description**

33 Section 6-02.1 is supplemented with the following:

34
35 This Work consists of furnishing and placing textured cement concrete pavement class 4000
36 at the locations and depth as shown in the Plans.

37 38 **6-02.2 Materials**

39 Section 6-02.2 is supplemented with the following:

40
41 (April 1, 2013)

42 ***Resin Bonded Anchors***

43 The resin bonded anchor system shall include the nut, washer, and threaded anchor rod which
44 is installed into hardened concrete with a resin bonding material.

45
46 Resin bonding material used in overhead and horizontal application shall be specifically
47 recommended by the resin manufacturer for those applications.

48
49 Resin bonding material used in submerged liquid environment shall be specifically
50 recommended by the resin manufacturer for this application.
51

The resin bonded anchor system shall conform to the following requirements:

1. Threaded Anchor Rod and Nuts

Threaded anchor rods shall conform to ASTM A 193 Grade B7 or ASTM A 449, except as otherwise noted, and be fully threaded. Threaded anchor rods for stainless steel resin bonded anchor systems shall conform to ASTM F 593 and shall be Type 304 unless otherwise specified.

Nuts shall conform to ASTM A 563, Grade DH, except as otherwise noted. Nuts for stainless steel resin bonded anchor systems shall conform to ASTM F 594 and shall be Type 304 unless otherwise specified.

Washers shall conform to ASTM F 436, and shall meet the same requirements as the supplied anchor rod, except as otherwise noted. Washers for stainless steel resin bonded anchor systems shall conform to ASTM A 240 and the geometric requirements of ASME B18.21.1 and shall be Type 304 Stainless Steel unless otherwise specified.

Nuts and threaded anchor rods, except those manufactured of stainless steel, shall be galvanized in accordance with AASHTO M 232. Galvanized threaded anchor rods shall be tested for embrittlement after galvanizing, in accordance with Section 9-29.6(5).

Threaded anchor rods used with resin capsules shall have the tip of the rod chiseled in accordance with the resin capsule manufacturer's recommendations. Galvanized threaded rods shall have the tip chiseled prior to galvanizing.

2. Resin Bonding Material

Resin bonding material shall be a two component epoxy resin conforming to Type IV ASTM C 881 or be one of the following:

- a. Vinyl ester resin.
- b. Polyester resin.
- c. Methacrylate resin.

3. Ultimate Anchor Tensile Capacity

Resin bonded anchors shall be tested in accordance with ASTM E 488 to have the following minimum ultimate tensile load capacity when installed in concrete having a maximum compressive strength of 6000 pounds per square inch (psi) at the embedment specified below:

Anchor Diameter (inch)	Tensile Capacity (lbs.)	Embedment (inch)
3/8	7,800	3-3/8
1/2	12,400	4-1/2
5/8	19,000	5-5/8
3/4	27,200	6-3/4
7/8	32,000	7-7/8

1	41,000	9
1-1/4	70,000	11-1/4

The Contractor shall submit items 1 and 2 below to the Engineer for all resin bonded anchor systems. If the resin bonded anchor system and anchor diameter are not listed in the current WSDOT Qualified Products List, the Contractor shall also submit item 3 below to the Engineer.

For resin bonded anchor systems that are installed in a submerged liquid environment the Contractor shall submit items 1, 2, and 4 below. If the resin bonded anchor system and anchor diameter are not listed in the current WSDOT Qualified Products List, the Contractor shall also submit item 3 below to the Engineer.

- 1 The resin manufacturer's written installation procedure for the anchors.
2. The manufacturer's certificate of compliance for the threaded anchor rod certifying that the anchor rod meets these requirements.
3. Test results by an independent laboratory certifying that the threaded anchor rod system meets the ultimate anchor tensile load capacity specified in the above table. The tests shall be performed in accordance with ASTM E 488.
4. For threaded anchors intended to be installed in submerged liquid environments the Contractor shall submit tests performed by an independent laboratory within the past 24 months which certifies that anchors installed in a submerged environment meet the strength requirements specified in the above table.

(December 2, 2002)

Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels

Epoxy bonding agent for surfaces shall be Type II, as specified in Section 9-26.1. Epoxy bonding agent for steel reinforcing bar dowels shall be either Type I or Type IV, as specified in Section 9-26.1. The grade and class of epoxy bonding agent shall be as recommended by the resin manufacturer and approved by the Engineer.

(August 3, 2015)

Fractured Fin Finish

The fractured fin finish shall be accomplished by the use of either a form liner selected from the approved products listed in the WSDOT Qualified Products List (QPL), latest edition, or a form liner accepted by the Engineer as an equal product. For acceptance of form liners not listed in the current WSDOT QPL, the Contractor shall submit Type 2 Working Drawings of the request, along with catalogue cuts and other descriptive supporting information, as follows:

1. One set to the Project Engineer
2. One set, accompanied by a 2 foot square physical sample of the form liner, to the State Bridge and Structures Architect, addressed as follows:

If sent via US Postal Service:

Washington State Department of Transportation

1 State Bridge and Structures Architect
2 P. O. Box 47340
3 Olympia, WA 98504-7340
4

5 If sent via FedEx:

6
7 Washington State Department of Transportation
8 State Bridge and Structures Architect
9 7345 Linderson Way SW
10 Tumwater, WA 98501-6504
11

12 The height of the form liner shall be equal to or greater than the height of the formed surface.
13 Only elastomeric form liners are allowed to have horizontal splices.
14

15 **(August 3, 2015)**

16 ***Striated Finish***

17 The striated finish shall be accomplished by the use of either a form liner selected from the
18 approved products listed in the WSDOT Qualified Products List (QPL), latest edition, or a form
19 liner accepted by the Engineer as an equal product. For acceptance of form liners not listed
20 in the current WSDOT QPL, the Contractor shall submit Type 2 Working Drawings of the
21 request, along with catalogue cuts and other descriptive supporting information, as follows:
22

- 23 1. One set to the Project Engineer
- 24
- 25 2. One set, accompanied by a 2 foot square physical sample of the form liner, to the
26 State Bridge and Structures Architect, addressed as follows:
27

28 If sent via US Postal Service:

29
30 Washington State Department of Transportation
31 State Bridge and Structures Architect
32 P. O. Box 47340
33 Olympia, WA 98504-7340
34

35 If sent via FedEx:

36
37 Washington State Department of Transportation
38 State Bridge and Structures Architect
39 7345 Linderson Way SW
40 Tumwater, WA 98501-6504
41

42 The height of the form liner shall be equal to or greater than the height of the formed surface.
43 Only elastomeric form liners are allowed to have horizontal splices.
44

45 **(August 3, 2015)**

46 ***Split Face Finish***

47 The split face finish shall be accomplished by the use of either a form liner selected from the
48 approved products listed in the WSDOT Qualified Products List (QPL), latest edition, or a form
49 liner accepted by the Engineer as an equal product. For acceptance of form liners not listed

1 in the current WSDOT QPL, the Contractor shall submit Type 2 Working Drawings of the
2 request, along with catalogue cuts and other descriptive supporting information, as follows:

- 3
4 1. One set to the Project Engineer
5
6 2. One set, accompanied by a 2 foot square physical sample of the form liner, to the
7 State Bridge and Structures Architect, addressed as follows:

8
9 If sent via US Postal Service:

10
11 Washington State Department of Transportation
12 State Bridge and Structures Architect
13 P. O. Box 47340
14 Olympia, WA 98504-7340
15

16 If sent via FedEx:

17
18 Washington State Department of Transportation
19 State Bridge and Structures Architect
20 7345 Linderson Way SW
21 Tumwater, WA 98501-6504
22

23 The height of the form liner shall be equal to or greater than the height of the formed surface.
24 Only elastomeric form liners are allowed to have horizontal splices.
25

26 ***Bridge Supported Utilities***

27
28 (April 30, 2001)

29 Hanger rods, and associated nuts and washers, shall conform to Section 9-06.5(1), and shall
30 be galvanized in accordance with AASHTO M 232.
31

32 Steel bars and plates shall conform to ASTM A 36 and shall be galvanized in accordance with
33 AASHTO M 111.
34

35 (January 3, 2017)

36 Horizontal strut bolts or threaded rods, and associated nuts and washers, shall conform to
37 Section 9-06.5(1), and shall be galvanized in accordance with AASHTO M 232.
38

39 Pre-formed fabric pads shall be composed of multiple layers of duck, impregnated and bound
40 with high quality oil resistant synthetic rubber, compressed into resilient pads. The pre-formed
41 fabric pads shall conform to latest edition of MIL C 882 and the following requirements. The
42 number of plies shall be as required to produce the specified thickness, after compression
43 and vulcanizing.
44

45 Pre-formed fabric pads shall have a shore A hardness of 90 \pm 5 in accordance with ASTM D
46 2240.
47

48 Pre-formed fabric pads for bridge utility supports will be accepted based on the Manufacturer's
49 Certificate of Compliance that the material furnished conforms to these specifications.
50

51 (June 26, 2000)

Pipe rolls or pipe saddles shall be of the type and model specified in the Plans.

(*****)

Core Drilled Bridge Deck

Bridge deck pipe sleeve shall be any smooth wall, non-perforated, PVC pipe of the diameter and minimum wall thickness specified in the Plans.

Epoxy bonding agent shall be Type II conforming to Section 9-26.1. The grade and class of the epoxy bonding agent shall be as recommended by the bonding agent manufacturer and approved by the Engineer.

6-02.3 Construction Requirements

Section 6-02.3 is supplemented with the following:

Reinforcement

Placing and Fastening

Section 6-02.3(24)C is supplemented with the following:

(June 26, 2000)

Drilling Holes for, and Setting, Steel Reinforcing Bar Dowels

Where called for in the Plans, holes shall be drilled into existing concrete to the size and dimension shown in the Plans. The Contractor may use any method for drilling the holes provided the method selected does not damage the concrete and the steel reinforcing bar that is to remain. Core drilling will be required when specifically noted in the Plans.

The Contractor shall exercise care in locating and drilling the holes to avoid damage to existing steel reinforcing bars and concrete. Location of the holes may be shifted slightly with the approval of the Engineer in order to avoid damaging the existing steel reinforcing bars. All damage caused by the Contractor's operations shall be repaired by the Contractor at no cost to the Contracting Agency and the repair shall be as approved by the Engineer.

Steel reinforcing bars shall be set into the holes noted in the Plans with epoxy resin. The holes shall be blown clean with dry compressed air before placing the resin.

The Contractor shall demonstrate, to the satisfaction of the Engineer, that the method used for setting the steel reinforcing bars completely fills the void between the steel reinforcing bar and the concrete with epoxy resin. Dams shall be placed at the front of the holes to confine the epoxy and shall not be removed until the epoxy has cured in the hole.

Bridge Supported Utilities

(June 26, 2000)

The Contractor shall furnish and install the bridge utility supports, and the utility pipe or conduit pipe, as shown in the Plans.

(*****)

1 **Core Drilled Bridge Deck**

2 The Contractor shall core drill holes through the bridge deck in the locations shown in the
3 Plans. The Contractor shall contain, collect and dispose of the concrete cores and debris in
4 accordance with Section 2-02.3.

5
6 The Contractor shall coat the surfaces of the cored holes with epoxy bonding agent, and
7 shall set a bridge deck pipe sleeve in place as shown in the Plans. The Contractor shall
8 ensure that the void between the cored hole surface and the outside of the pipe sleeve is
9 completely filled with epoxy bonding agent. The Contractor shall take appropriate measures
10 to prevent the epoxy bonding agent from escaping from the void and shall secure the pipe
11 sleeve in position until the epoxy bonding agent is cured.

12
13 **Textured Cement Concrete Pavement Class 4000**

14 Textured cement concrete pavement class 4000 pattern shall be one chosen from the 49
15 manufacturers and patterns listed below:

16
17 *** Bromanite –“Running Bond Cobblestone”, Brickform –“Pennsylvania Cobble-Sanded
18 Joint” TM820, Increte Systems, Inc. –“Euro Cobble Running Bond” SECR S001, Matcrete
19 –“Large Cobblestone” P-16, Renew-Crete Systems –“London Cobblestone”, Scofield –
20 “Old Belgium Stone: Running Bond” 4530***

21
22 A mat or stamp shall be used to imprint the pattern into the concrete surface.

23
24 Curing shall be in accordance with Section 6-02.3(11) and be applied to the surface in
25 accordance with the manufacturer's recommendations. If liquid membrane-forming concrete
26 curing compound is used, it shall meet the requirements of ASTM C 309 Type 1-D.

27
28 (*****)

29 **Sealer for Concrete Pavement**

30 Sealer shall be applied to the surface of the textured cement concrete pavement class 4000.
31 All curing agents and form release agents shall be removed. The surface shall be dry, clean
32 and prepared in accordance with the manufacturer's written instructions. The Contractor shall
33 submit four copies of the manufacturer's written instructions.

34
35 The sealer shall be applied in accordance with the manufacturer's written instructions for
36 application.

37
38 **Contractor Mix Design**

39 Section 6-02.3(2)A is supplemented with the following:

40
41 **Aggregate for Textured Cement Concrete Pavement Class 4000**

42 Coarse aggregate for Textured Cement Concrete Pavement Class 4000 shall conform to
43 Section 9-03.1(4), AASHTO grading No. 7. An alternate for combined gradation for
44 Textured Cement Concrete Pavement Class 4000 conforming to Section 9-03.1(5) may
45 be proposed, that has a nominal maximum aggregate size of ½ inch sieve.

46
47 **Placing Concrete**

48 Section 6-02.3(6) is supplemented with the following:

49
50 The Contractor shall clean and remove all sediment under traffic barrier scupper opening
51 before placing concrete. Concrete shall be placed 0.5 to 1 foot deep inside the traffic

1 barrier scupper and shall have a flush finish with the exposed face of traffic barrier.

2
3 **Finishing Concrete Surfaces**

4 Section 6-02.3(14) is supplemented with the following:

5
6 **(June 26, 2000)**

7 **Fractured Fin Finish**

8 Form liners shall be placed with fins and joints normal to grade for barrier applications
9 and vertical (or as shown in the Plans) for other applications. Horizontal joints in the
10 elastomeric form liners are permitted on surfaces greater than 8 feet in height provided
11 that the minimum form liner panel dimension is 8 feet.

12
13 **(April 7, 2008)**

14 **Split Face Finish**

15 Form liners shall be placed with the joints normal to grade for barrier applications and
16 vertical (or as shown in the Plans) for other applications. Horizontal joints in the
17 elastomeric form liners are permitted on surfaces greater than 8 feet in height provided
18 that the minimum form liner panel height and width dimensions are 8 feet by 6 feet,
19 respectively.

20
21 **(August 6, 2007)**

22 **Striated Finish**

23 Form liners shall be placed with fins and joints normal to grade for barrier applications
24 and vertical (or as shown in the Plans) for other applications. Horizontal joints in the
25 elastomeric form liners are permitted on surfaces greater than 8 feet in height provided
26 that the minimum form liner panel dimension is 8 feet.

27
28 **Pigmented Sealer for Concrete Surfaces**

29 Section 6-02.3(14)C is supplemented with the following:

30
31 **(April 6, 2009)**

32 The color of the pigmented sealer shall be Washington Gray.

33
34 **Placing Anchor Bolts**

35 Section 6-02.3(18) is supplemented with the following:

36
37 **(January 3, 2011)**

38 **Resin Bonded Anchors**

39 The embedment depth of the anchors shall be as specified in the Plans. If the
40 embedment depth of the anchor is not specified in the Plans then the embedment depth
41 shall be as specified in the table of minimum and maximum torque below.

42
43 The anchors shall be installed in accordance with the resin manufacturer's written
44 procedure.

45
46 Holes shall be drilled as specified in the Plans. Holes may be drilled with a rotary
47 hammer drill when core drilling is not specified in the Plans. If holes are core drilled, the
48 sides of the holes shall be roughened with a rotary hammer drill after core drilling.

49
50 Holes shall be prepared in accordance with the resin manufacturer's recommendations
51 and shall meet the minimum requirements as specified herein. Holes drilled into

concrete shall be thoroughly cleaned of debris, dust, and laitance prior to installing the threaded rod and resin bonding material. Holes shall not have any standing liquid at the time of installation of the threaded anchor rod.

The anchor nuts shall be tightened to the following torques when the embedment equals or exceeds the minimum embedment specified.

Anchor Diameter (inch)	Minimum Torque (ft-lbs)	Maximum Torque (ft-lbs)	Minimum Embedment (Inch)
3/8	12	18	3-3/8
1/2	22	35	4-1/2
5/8	55	80	5-5/8
3/4	106	140	6-3/4
7/8	165	190	7-7/8
1	195	225	9
1-1/4	370	525	11-1/4

When the anchor embedment depth is less than the minimum values specified, the anchor nuts shall be tightened to the torque values specified in the Plans, or as recommended by the resin bonded anchor system manufacturer and approved by the Engineer.

6-02.4 Measurement

Section 6-02.4 is supplemented with the following:

(*****)

Core drilled bridge deck will be measured per each for each bridge deck core drilled and completed with a PVC pipe sleeve.

(*****)

“Textured Cement Concrete Pavement Class 4000” will be measured by the cubic yard.

6-02.5 Payment

Section 6-02.5 is supplemented with the following:

(June 26, 2000)

Bridge Supported Utilities

All costs in connection with placing *** the 8 Inch water lines and the 8 Inch sanitary sewer line *** through the superstructure of *** 116th St NE Over I-5 Bridge No. 5/656 *** as shown in the Plans, including all *** water pipe, sewer pipe, joints, hanger rods, and associated nuts and washers, steel bars and plates, horizontal strut bolts or threaded rods, and associated nuts and washers, pre-formed fabric pads, and pipe rolls or pipe saddles***, shall be included in the *** unit Contract prices per linear foot unit price for “8 Inch Water Line on Bridge” and “8 Inch Sanitary Sewer Force Main on Bridge. ***

“Core Drilled Bridge Deck”, per each.

(*****)

1 "Textured Cement Concrete Pavement Class 4000" per cubic yard.

2
3 The unit Contract price per cubic yard for "Textured Cement Concrete Pavement Class 4000"
4 shall be full payment for all costs for the specified Work.

5
6 (*****)

7 All costs in connection with *** extending the existing pedestrian bridge barrier to
8 accommodate the conduit flex coupling*** shall be included in the lump sum contract price for
9 "Pedestrian Barrier".

10 11 12 **6-10 Concrete Barrier**

13 14 **6-10.3 Construction Requirements**

15 16 **6-10.3(5) Temporary Concrete Barrier**

17 Section 6-10.3(5) is supplemented with the following:

18
19 (*****)

20 Delineators shall be placed on the traffic face of the barrier 6 inches from the top and
21 spaced a maximum of 40 feet on tangents and 20 feet through curves.

22
23 Reflector color shall be white on the right of traffic and yellow on the left of traffic.

24
25 The Contractor shall maintain, replace, and clean the delineators when ordered by the
26 Engineer.

27 28 **6-10.5 Payment**

29 Section 6-10.5 is supplemented with the following:

30
31 (*****)

32 All costs associated with furnishing, installing, connecting, anchoring, maintaining, temporary
33 storage, and final removal of the temporary concrete barrier and all costs incurred to carry out
34 the requirements of Section 6-10 shall be included in the unit Contract price for "Project
35 Temporary Traffic Control".

36 37 **6-13 Structural Earth Walls**

38 39 **6-13.2 Materials**

40 Section 6-13.2 is supplemented with the following:

41
42 (April 4, 2016)

43 **Precast Concrete Panel Faced Structural Earth Wall Materials**

44 **General Materials**

45 **Concrete Leveling Pad**

46 Leveling pad concrete shall be commercial concrete in accordance with Section 6-
47 02.3(2)B.

48 49 **Proprietary Materials**

50 **ARES Modular Panel Wall System**

Tensar Geogrid Materials

Geogrid reinforcement shall conform to Section 9-33.1, and shall be a product listed in Appendix D of the current WSDOT Qualified Products List (QPL). The values of T_{al} and T_{ult} as listed in the QPL for the products used shall meet or exceed the values required for the wall manufacturer's reinforcement design as specified in the structural earth wall design calculation and working drawing submittal.

The minimum ultimate tensile strength of the geogrid shall be a minimum average roll value (the average test results for any sampled roll in a lot shall meet or exceed the values shown in Appendix D of the current WSDOT QPL). The strength shall be determined in accordance with ASTM D 6637 for multi-rib specimens.

The ultraviolet (UV) radiation stability, in accordance with ASTM D 4355, shall be a minimum of 70 percent strength retained after 500 hours in the weatherometer.

The longitudinal (i.e., in the direction of loading) and transverse (i.e., parallel to the wall or slope face) ribs that make up the geogrid shall be perpendicular to one another. The maximum deviation of the cross-rib from being perpendicular to the longitudinal rib (skew) shall be no more than 1 inch in 5 feet of geogrid width. The maximum deviation of the cross-rib at any point from a line perpendicular to the longitudinal ribs located at the cross-rib (bow) shall be 0.5 inch.

The Engineer will take random samples of the geogrid materials at the job site. Approval of the geogrid materials will be based on testing of samples from each lot. A "lot" shall be defined as all geogrid rolls sent to the project site produced by the same manufacturer during a continuous period of production at the same manufacturing plant having the same product name. The Contracting Agency will require 14 calendar days maximum for testing the samples after their arrival at the WSDOT Materials Laboratory in Tumwater, WA.

The geogrid samples will be tested for conformance to the specified material properties. If the test results indicate that the geogrid lot does not meet the specified properties, the roll or rolls which were samples will be rejected. Two additional rolls for each roll tested which failed from the lot previously tested will then be selected at random by the Engineer for sampling and retesting. If the retesting shows that any of the additional rolls tested do not meet the specified properties, the entire lot will be rejected. If the test results from all the rolls retested meet the specified properties, the entire lot minus the roll(s) which failed will be accepted.

All geogrid materials which have defects, deterioration, or damage, as determined by the Engineer, will be rejected. All rejected geogrid materials shall be replaced at no expense to the Contracting Agency.

Except as otherwise noted, geogrid identification, storage and handling shall conform to the requirements specified in Section 2-12.2. The geogrid materials shall not be exposed to temperatures less than -20F and greater than 122F.

Rubber bearing pads shall be a type and grade as recommended by Tensar Earth Technologies, Inc.

Geosynthetic joint cover for all horizontal and vertical joints shall be a non-woven geosynthetic as recommended by Tensar Earth Technologies, Inc. Adhesive used to attach the geosynthetic to the rear of the precast concrete facing panel shall be as recommended by Tensar Earth Technologies, Inc.

Reinforced Earth Wall

Reinforcing strips shall be shop fabricated from hot rolled steel conforming to ASTM A 572 Grade 65 or approved equal, and shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of Formula A-9-73 paint conforming to Section 9-08.2.

Bolts and nuts shall conform to Section 9-06.5(3), and shall be galvanized in accordance with AASHTO M 232.

Rubber bearing pads shall be a type and grade as recommended by the Reinforced Earth Company.

Vertical joint filler between panels, when specified in the structural earth wall working drawings, shall be 2-inch square, flexible open cell polyether foam strips, Grade UU-34, as recommended by the Reinforced Earth Company.

Filter fabric joint cover for all horizontal and vertical joints, when specified in the structural earth wall working drawings, shall be a pervious woven polypropylene filter fabric as recommended by the Reinforced Earth Company. Adhesive used to attach the fabric material to the rear of the precast concrete facing panel shall be as recommended by the Reinforced Earth Company.

Reinforced Soil Wall

Reinforcing mesh shall be shop fabricated of cold drawn steel wire conforming to AASHTO M 32, and shall be welded into finished mesh fabric conforming to AASHTO M 55. Reinforcing mesh shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of paint conforming to Section 9-08.1(2)B.

MSE Plus Wall

Pins connecting the soil reinforcing mesh to the precast concrete panels shall conform to AASHTO M 32 and shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of paint conforming to Section 9-08.1(2)B.

Bearing pads shall be serrated high-density polyethylene (HDPE) copolymer pads as recommended by SSL, LLC.

Filter fabric joint cover for all horizontal and vertical joints shall be non-woven geosynthetic conforming to AASHTO M 288. Adhesive used to bond the geosynthetic to the rear of the precast concrete facing panel shall be as recommended by SSL, LLC.

6-13.3 Construction Requirements

Section 6-13.3 is supplemented with the following:

(*****)

Project Specific Construction Requirements

1. The wall may be constructed near vertical, without a specified batter.
2. The wall shall be placed on a level foundation in the horizontal direction perpendicular to the wall face.
3. Wall embedment depth shall be a minimum of 2 feet with a level front slope, or H/10 with 3H:1V front slope, where H is the total height of the wall.
4. A minimum 4-foot-wide horizontal bench shall be provided in front of the wall.
5. For all walls, the reinforcing length shall not be less than 100 percent of the wall height, with a minimum reinforcing length of 8 feet. These recommended minimum reinforcing lengths are needed to maintain adequate external stability. Greater reinforcing lengths may be needed to provide adequate internal stability.
6. The uppermost reinforcing layer shall be placed no lower than 2 feet below the top of wall when an SEW traffic barrier is not present and no lower than 6 inches below the bottom of barrier moment slab when a SEW barrier is present.

The Contracting agency has SEW wall panel forms for the panels on Wall 3 that show fish. The Contractor shall use these forms to construct the panels as shown in the Plans for Wall 3. These Contracting Agency provided forms are stored at:

8802 27th Ave NE
Tulalip, WA 98271

The Contractor shall pick up, use, clean, repair (if needed), and return to the contracting agency two (2) forms for the SEW wall panels depicting fish as shown in the Plans. Contact the Tulalip Tribes, Debbie Bray, (360) 716-5024, for these panels.

(August 3, 2015)

Precast Concrete Panel Faced Structural Earth Wall

Precast concrete panel faced structural earth walls shall be constructed of only one of the following wall systems. The Contractor shall make arrangements to purchase the precast concrete panels, soil reinforcement, attachment devices, joint filler, and all necessary incidentals from the source identified with each wall system:

ARES Modular Panel Wall System

ARES Modular Panel Wall System is a registered trademark of Tensar Corporation

Tensar Corporation
2500 Northwinds Parkway Suite 500
Atlanta, GA 30009
(770) 344-2090
FAX (678) 281-8546
www.tensarcorp.com

MSE Plus Wall

MSE Plus Wall is a registered trademark of SSL, LLC

SSL, LLC
4740 Scotts Valley Drive Suite E
Scotts Valley, CA 95066
(831) 430-9300
FAX (831) 430-9340
www.mseplus.com

Reinforced Earth Wall

Reinforced Earth is a registered trademark of the Reinforced Earth Company.

The Reinforced Earth Company
88 Inverness Circle East Suite E-101
Englewood, CO 80112
(303) 790-1481
FAX (303) 790-1461
www.reinforcedearth.com

Reinforced Soil Wall

Reinforced Soil is a registered trademark of Hilfiker Retaining Walls.

Hilfiker Retaining Walls
1902 Hilfiker Lane
Eureka, CA 95503-5711
(707) 443-5093
FAX (707) 443-2891
www.hilfiker.com

6-13.3(2) Submittals

Section 6-13.3(2) is supplemented with the following:

(*****)

The following geotechnical design parameters shall be used for the design of the structural earth wall(s):

Wall Name or No.: W1 to W3

Soil Properties	Wall Backfill	Retained Soil	Foundation Soil
Unit Weight (pcf)	130	125	120
Friction Angle (deg)	38	32	36
Cohesion (psf)	0	0	0

For the Service Limit State, the wall shall be designed to accommodate a differential settlement of 2 inches per 100 feet of wall length.

For the Extreme Event I Limit State, the wall shall be designed for a horizontal seismic acceleration coefficient k_h of 0.18 g and a vertical seismic acceleration coefficient k_v of 0.0 g.

1 **6-13.3(4) Precast Concrete Facing Panel and Concrete Block Fabrication**

2 Section 6-13.3(4) is supplemented with the following:

3
4 (April 3, 2017)

5 **Specific Fabrication Requirements for Precast Concrete Panel Faced Structural**
6 **Earth Walls**

7 **ARES Modular Panel Wall System**

8 The concrete mix for precast concrete facing panels shall be a Contractor mix
9 design in accordance with Section 6-02.3(2)A, producing a minimum compressive
10 strength at 28 days of 4,500 psi. The Contractor mix design for precast concrete
11 facing panels shall not include Type III cement unless otherwise allowed by the
12 Engineer.
13

14
15 **Division 7**

16 **Drainage Structures, Storm Sewers, Sanitary**
17 **Sewers, Water Mains, and Conduits**
18

19
20 **7-05 Manholes, Inlets, Catch Basins, and Drywells**

21
22 **7-05.1 Description**

23 Section 7-05.1 is supplemented with the following:

24
25 (*****)

26 **Temporary Catch Basin Type 1**

27 This work shall include constructing temporary catch basins in locations shown on the Plans
28 or as directed by the Engineer. This work shall also include excavation, trench safety, removal
29 and disposal of natural materials and temporary catch basin structure, backfill and
30 compaction.
31

32 **Catch Basin Type 2 48 In. Diam. With Debris Cage**

33 This work shall consist of constructing Catch Basin Type 2 48 In. Diam. with a debris cage in
34 accordance with the Plans.
35

36 **Rectangular Vaned Grate**

37 This work shall consist of furnishing and installing the rectangular vaned grate for catch
38 basins, and removal and disposal of existing rectangular solid metal cover.
39

40 **7-05.3 Construction Requirements**

41 Section 7-05.3 is supplemented with the following:

42
43 (*****)

44 **Temporary Catch Basin Type 1**

45 Temporary catch basins shall be removed prior to completion of construction.

46
47 All material removed shall become the property of the Contractor and disposal shall be in
48 accordance with Section 2-03.3(7)C.
49

50 **Catch Basin Type 2 48 In. Diam. With Debris Cage**

51 The size and location of the debris cage shall be installed in accordance with the "Catch Basin

Type 2 48 In. Diam. With Debris Cage” detail in the Plans.

Rectangular Vaned Grate

This work shall conform to Section 7-05.3.

Removed grate and appurtenances shall become the property of the Contractor and disposal shall be in accordance with Section 2-03.3(7)C.

The third paragraph of Section 7-05.3 is supplemented with the following:

(NWR June 30, 2007)

Where called for, locking solid metal covers conforming to Standard Plan B-30.20-02 and frames conforming to Standard Plan B-30.10-01 shall be furnished and installed on existing catch basins and inlets.

7-05.4 Measurement

Section 7-05.4 is supplemented with the following:

(*****)

Temporary Catch Basin Type 1 will be measured per each.

Catch Basin Type 2 48 In. Diam. With Debris Cage, will be measured per each.

Install Rectangular Vaned Grate will be measured per each.

(NWR June 30, 2007)

Locking solid metal cover and frame for catch basins will be measured by the unit for each cover and frame assembly installed on an existing catch basin or inlet.

7-05.5 Payment

Section 7-05.5 is supplemented with the following:

(*****)

“Temporary Catch Basin Type 1”, per each.

The unit Contract price per each for “Temporary Catch Basin Type 1” shall include constructing temporary catch basin, excavation, installation, removal and disposal for the temporary catch basin and natural materials, backfill and compaction.

“Catch Basin Type 2 48 In. Diam. With Debris Cage”, per each.

“Install Rectangular Vaned Grate”, per each.

The unit Contract price per each for “Install Rectangular Vaned Grate” shall be full pay to perform the work as specified, including disposal.

(NWR June 30, 2007)

“Locking Solid Metal Cover And Frame For Catch Basin”, per each.

The unit contract price per each for “Locking Solid Metal Cover and Frame for Catch Basin” shall be full pay for removing and disposing of the existing frame and grate, and installing the frame and cover.

7-09 Water Mains

7-09.1 Description

Section 7-09.1 is supplemented with the following:

(*****)

8 Inch Water Line On Bridge

This Work consists of furnishing, installing and field testing an insulated and aluminum clad 8-inch ductile iron water pipe across the full length of the bridge with termination points at the blind flange pipe ends at the existing bridge abutments. The work includes all materials and equipment necessary to complete in place in accordance with approved methods, the Plans, the Special Provisions, and these Specifications:

1. 8 Inch ductile iron water pipe including cement mortar lining interior pipe, insulation with aluminum insulation protection, utility hangers, and appurtenances in locations shown in the Plans.

7-09.2 Materials

Section 7-09.2 is supplemented with the following

(*****)

8 Inch Water Line on Bridge

Utility support assemblies shall conform to Section 6-02.2 as supplemented in these Special Provisions.

Ductile Iron Pipe and Fittings: The Contractor shall provide ductile iron pipe conforming to ANSI A21.50/AWWA C150 and ANSI A21.51/AWWA C151, latest standards. All pipe shall have restrained joints and shall be Class 52 ductile iron minimum. Flange fittings shall be Class 53 ductile iron minimum.

Restrained joint ductile iron pipe and fittings shall be U.S. Pipe "TR FLEX" restrained joint, McWane Ductile "TR FLEX" restrained joint, American "Flex-Ring" restrained joint, or accepted equal. Flange connector locations are shown in the Plans. Hex bolts for flange connectors shall be stainless steel in accordance with ASTM F593, Alloy Group 1. Nuts shall be stainless steel in accordance with ASTM F594, Alloy Group 1.

Ductile Iron Pipe Insulation: The Contractor shall use pre-molded fiberglass specifically manufactured for pipe insulation. Use non-combustible materials that resist the growth of mildew. Thickness shall match the dimensions shown in the Plans.

Insulation Finish: The Contractor shall finish the insulated ductile iron pipe as follows:

1. Apply an aluminum weather proof jacket directly over the insulation. Jacket shall be manufactured from aluminum alloy 5005 or 2002 half hard, not less than 26 gage or 0.016 inches thick, fabricated with 3/16 inch corrugations running lengthwise along the pipeline. The aluminum shall be factory attached to a moisture barrier of wax coated kraft paper for this service.
2. Use joints that are rain or drip proof. Locate longitudinal joints on the side of the pipe with the open edge of that lap turned down to shed water. Use circumferential joins on the pipes that do not have enough slope to provide a good shingle effect to keep water out of joints and have the inside end of the lap beaded or sealed with a permanent

- 1 elastic mastic type sealant designed for this service.
2 3. Secure the aluminum jacket by aluminum straps 1/2 inch wide by 24 gage or 0.02-
3 inches thick, spaced at 12 inch centers maximum. Use a strap at the midpoint of the
4 lap for each circumferential joint.
5

6 Coating Requirements: Cement mortar lining and seal coating for pipe and fittings shall be in
7 accordance with ANSI/AWWA C104 /A21.4. Asphaltic coating shall be in accordance with
8 ANSI/AWWA C151/A21.51 for pipe and ANSI/AWWA C110/A21.10 or ANSI/AWWA
9 C153/A21.53 for fittings.
10

11 **7-09.3 Construction Requirements**

12 Section 7-09.3 is supplemented with the following:
13

14 (*****)

15 The Contractor shall construct the 8 Inch Water Line on Bridge as shown in the Plans.
16 Construction requirements include the following:
17

18 The Contractor shall verify the location of the existing utility flanged ends, concrete inserts,
19 and utility blockouts in the existing bridge structure before construction and immediately notify
20 the Engineer of discrepancies found in the Plans.
21

22 The Contractor shall submit Type 2 Working Drawings of the complete utility hanger assembly
23 before fabrication. The Contractor shall fabricate, erect, and install utility support hangers as
24 provided in the Plans.
25

26 The Contractor shall submit Type 2 Working Drawings of the pipe layout that identifies the
27 pipe joint locations and spacing distance to utility hangers before purchasing pipes.
28

29 The Contractor shall install the 8 Inch ductile iron water main as shown in the Plans.
30

31 The Pipe shall be fully restrained and each joint shall be extended in accordance with
32 manufacturer's recommendations to remove any slack from the joint. The joint can be
33 extended by pulling out on the pipe after the restrained joint assembly is made. Each length
34 of pipe must be supported in a manner to restrict both vertical and horizontal movement.
35

36 The Contractor shall hydrostatic pressure test in accordance with Section 7-09.3(23). The
37 Contractor shall use a mechanical restrained joint test plug that has capacity to handle
38 pressures up to 350 psi.
39

40 The Contractor shall disinfect the Water Mains in accordance with Section 7-09.3(24).
41

42 **7-09.4 Measurement**

43 Section 7-09.4 is supplemented with the following:
44

45 (*****)

46 The 8 Inch Water Line will be by the linear foot of pipe installed and tested and shall be
47 measured along the pipe through fittings, valves, and couplings.
48

49 **7-09.5 Payment**

50 Section 7-09.5 is supplemented with the following:
51

(*****)

"8 Inch Water Line on Bridge", per linear foot.

The unit Contract price per linear foot shall also be full pay for all Work to complete the installation of the water main on the existing bridge, including but not limited to, furnishing and installing hanger utility support system from the bridge, pipe and fittings, with insulation as shown in the Plans, testing, disinfecting the pipeline, flushing, dechlorination of water used for flushing, and cleanup.

7-12 Valves for Water Mains

7-12.1 Description

Section 7-12.1 is supplemented with the following:

(*****)

1 Inch Combination Air Release Valve

This Work consists of furnishing and installing all materials and equipment necessary to complete in place in accordance with accepted methods, the Plans, the Special Provisions, and these Specifications:

1. 1 Inch combination air release valve, valve cover box, ball valve, galvanized iron pipe, insulation, corporation stop, tapping saddle, and appurtenances in locations shown in the Plans.

2 Inch Combination Air Release Valve

This Work consists of furnishing and installing all materials and equipment necessary to complete in place in accordance with accepted methods, the Plans, the Special Provisions, and these Specifications:

1. 2 Inch combination air release valve for wastewater, valve cover box, ball valve, galvanized iron pipe, insulation, corporation stop, tapping saddle, and appurtenances in locations shown in the Plans.

7-12.2 Materials

Section 7-12.2 is supplemented with the following:

(*****)

Service Connections

1 Inch Combination Air Release Valve shall be A.R.I Model D-040, Val-Matic Model 201C.2, APCO Model 143C, or accepted equal.

2 Inch Combination Air Release Valve shall be A.R.I Model D-025, Val-Matic Model 802A, APCO Model 445, or accepted equal.

Valve and Galvanized Iron Pipe Insulation: Use pre-molded fiberglass specifically manufactured for pipe insulation. Use non-combustible materials that resist the growth of mildew. Thickness shall match the dimensions shown in the Plans.

Insulation Finish: Finish the insulated valves and galvanized iron pipe as follows:

1. Apply an aluminum weather proof jacket directly over the insulation. Jacket shall be

manufactured from aluminum alloy 5005 or 2002 half hard, not less than 26 gage or 0.016 inches thick, fabricated with 3/16 inch corrugations running lengthwise along the pipeline. The aluminum shall be factory attached to a moisture barrier of wax coated kraft paper for this service.

2. Use joints that are rain or drip proof. Locate longitudinal joints on the side of the pipe with the open edge of that lap turned down to shed water. Use circumferential joints on the pipes that do not have enough slope to provide a good shingle effect to keep water out of joints and have the inside end of the lap beaded or sealed with a permanent elastic mastic type sealant designed for this service.
3. Secure the aluminum jacket by aluminum straps 1/2 inch wide by 24 gage or 0.02-inches thick, spaced at 12 inch centers maximum. Use a strap at the midpoint of the lap for each circumferential joint.

7-12.3 Construction Requirements

Section 7-12.3 is supplemented with the following:

(*****)

Construction for 1 Inch Combination Air Release Valve and 2 Inch Combination Air Release Valve shall be as shown in the Plans. Construction requirements include the following:

Galvanized iron pipe shall be cut using a tool or tools specifically designed to leave a smooth, even, and squared end on the piping material to be cut. Cut ends shall be reamed to the full inside diameter of the pipe. Pipe ends to be connected using couplings which seal to the outside surface of the pipe shall be cleaned to a sound, smooth finish before the couplings are installed.

Install the tapping saddle, corporation stop, galvanized iron pipe, ball valve, combination air release valve, insulation and valve cover box as shown in the Plans.

The valve cover box shall be installed on the bridge deck before the traffic island is constructed, as shown in the Plans.

7-12.4 Measurement

Section 7-12.4 is supplemented with the following:

(*****)

Measurement of air release valves shall be per each for each type and size actually installed.

7-12.5 Payment

Section 7-12.5 is supplemented with the following:

(*****)

"1 Inch Combination Air Release Valve", per each.

The unit Contract price per each shall be full pay for all Work to furnish and install the valve complete in place on the water main, including furnishing and installing jointing the tapping saddle, corporation stop, galvanized iron pipe, insulation, ball valve, combination air release valve, the valve cover box on the bridge deck, and hydrostatic testing.

"2 Inch Combination Air Release Valve", per each.

The unit Contract price per each for the valve specified shall be full pay for all Work to furnish and install the valve complete in place on the sanitary sewer force main, including furnishing,

installing, and jointing the tapping saddle, corporation stop, galvanized iron pipe, insulation, ball valve, combination air release valve, the valve cover box on the bridge deck, and hydrostatic testing.

7-17 Sanitary Sewers

7-17.1 Description

Section 7-17.1 is supplemented with the following:

(*****)

8 Inch Sanitary Sewer Force Main On Bridge

This Work consists of furnishing, installing and field testing an 8-inch ductile iron sanitary sewer force main with insulation across the full length of the bridge including connections to the existing flange at each end of the bridge. The work includes all materials and equipment necessary to complete in place in accordance with approved methods, the Plans, the Special Provisions, and these Specifications:

1. 8-inch ductile iron pipe for sanitary sewer force main including ceramic epoxy lining, pipe insulation with aluminum insulation protection, utility hangers, and appurtenances in locations shown in the Plans.

7-17.2 Materials

Section 7-17.2 is supplemented with the following:

(*****)

8 Inch Sanitary Sewer Force Main On Bridge

Utility support assemblies shall conform to Section 6-02.2 as supplemented in these Special Provisions

Sanitary sewer force main shall be ceramic epoxy lined, ductile iron pipe, Class 52, Protecto 401, or accepted equal. Ductile iron pipe shall conform to ANSI A21.50/AWWA C150 and ANSI A21.51/AWWA C151, latest standards. All pipe shall have restrained joints and shall be Class 52 ductile iron minimum. Flange fittings shall be Class 53 ductile iron minimum.

Restrained joint ductile iron pipe and fittings shall be U.S. Pipe "TR FLEX" restrained joint, McWane Ductile "TR FLEX" restrained joint, American "Flex-Ring" restrained joint, or accepted equal.

Flange connector locations are shown in the Plans. Hex bolts for flange connectors shall be stainless steel in accordance with ASTM F593, Alloy Group 1. Nuts shall be stainless steel in accordance with ASTM F594, Alloy Group 1.

Ductile Iron Pipe Insulation: The Contractor shall use pre-molded fiberglass specifically manufactured for pipe insulation. Use non-combustible materials that resist the growth of mildew. Thickness shall match the dimensions shown in the Plans.

Insulation Finish: The Contractor shall finish the insulated ductile iron pipe as follows:

1. Apply an aluminum weather proof jacket directly over the insulation. Jacket shall be manufactured from aluminum alloy 5005 or 2002 half hard, not less than 26 gage or 0.016 inches thick, fabricated with 3/16 inch corrugations running lengthwise along

the pipeline. The aluminum shall be factory attached to a moisture barrier of wax coated kraft paper for this service.

2. Use joints that are rain or drip proof. Locate longitudinal joints on the side of the pipe with the open edge of that lap turned down to shed water. Use circumferential joints on the pipes that do not have enough slope to provide a good shingle effect to keep water out of joints and have the inside end of the lap beaded or sealed with a permanent elastic mastic type sealant designed for this service.
3. Secure the aluminum jacket by aluminum straps 1/2 inch wide by 24 gage or 0.02-inches thick, spaced at 12 inch centers maximum. Use a strap at the midpoint of the lap for each circumferential joint.

Coating Requirements: Ductile iron pipe shall be Protecto 401 or accepted equal.

7-17.3 Construction Requirements

Section 7-17.3 is supplemented with the following:

(*****)

The Contractor shall construct the 8 Inch Sanitary Sewer Force Main on Bridge as shown in the Plans. Construction requirements include the following:

The Contractor shall verify the location of the existing utility flanged ends, concrete inserts, and utility blockouts in the existing bridge structure before construction and immediately notify the Engineer of discrepancies found in the Plans.

The Contractor shall submit Type 2 Working Drawings of the complete utility hanger assembly before fabrication. The Contractor shall fabricate, erect, and install utility support hangers as provided in the Plans.

The Contractor shall submit Type 2 Working Drawings of the pipe layout that identifies the pipe joint locations and spacing distance to utility hangers before purchasing pipes.

The Contractor shall install the 8-inch ductile iron sanitary sewer force main and joints as shown in the Plans.

The Pipe shall be fully restrained and each joint shall be extended in accordance with manufacturer's recommendations to remove any slack from the joint. The joint can be extended by pulling out on the pipe after the restrained joint assembly is made. Each length of pipe must be supported in a manner to restrict both vertical and horizontal movement.

The Contractor shall hydrostatic pressure test in accordance with Section 7-09.3(23). The Contractor shall use a mechanical restrained joint test plug that has capacity to handle pressures up to 350 psi.

7-17.4 Measurement

Section 7-17.4 is supplemented with the following:

(*****)

The 8 Inch sanitary sewer force main will be by the linear foot of pipe installed and tested and shall be measured along the pipe through fittings, valves, and couplings.

7-17.5 Payment

Section 7-17.5 is supplemented with the following:

(*****)

“8 Inch Sanitary Sewer Force Main on Bridge”, per linear foot.

The unit Contract price per linear foot shall also be full pay for all Work to complete the installation of the sanitary sewer force main on the existing bridge, including but not limited to, furnishing and installing the hanger utility support system from the bridge, furnishing, installing and jointing pipe and fittings with insulation, and pressure testing the sanitary sewer force main.

Division 8 Miscellaneous Construction

8-01 Erosion Control and Water Pollution Control

8-01.1 Description

Section 8-01.1 is supplemented with the following:

(*****)

Compacted Till

This Work shall consist of furnishing and placing compacted till as shown in the Plans or as designated by the Engineer.

Erosion/Water Pollution Control

This Work shall consist of furnishing, installing, maintaining, removing and disposing of temporary stormwater treatment tanks, portable water pumps, and hosing for pump connection to tank and tank discharge to temporary outfall locations. This work also consists of treatment of pH for concrete work. Locations of tanks, pumps and hoses as well as pump sizes to be shown on the Plans as well or as designated by the Engineer.

8-01.2 Materials

Section 8-01.2 is supplemented with the following:

(*****)

Compacted Till as shown on the Plans shall meet the following requirements:

Silt and clay 20% min.

Sand 60% max.

Silt 60% max.

Sand and gravel content shall be nominal.

Compacted Till soil shall not contain recycled materials such as glass, shredded tires, Portland cement concrete rubble, or asphaltic concrete rubble. Soils outside this specified range area acceptable only if accepted by the Engineer.

Erosion/Water Pollution Control shall include the below items

Temporary Stormwater Treatment Tanks, Portable Sump Pumps, Hoses and Appurtenances, Treatment of pH for Concrete Work

8-01.3 Construction Requirements

Section 8-01.3 is supplemented with the following:

(*****)

Compacted Till

Compacted till shall be taken from outside the project limits or be manufactured and shall meet the requirements of Section 8-01.2.

The Contractor shall submit a sample of the compacted till for testing at the WSDOT State Materials Laboratory. Cost of sampling, testing, and processing will be borne by the source owner.

The compacted till shall be evenly spread over the specified areas to the depth shown in the Plans or as otherwise ordered by the Engineer. The Contractor shall place the compacted till on stable subgrade in horizontal layers no more than 6 inches thick. Each layer of the compacted till shall be compacted to 95 percent of the maximum density as determined by the Standard Proctor Maximum Density, ASTM Procedure D698. Placement moisture content shall lie within 1% dry to 3% wet of the optimum moisture content.

Erosion/Water Pollution Control

Temporary stormwater treatment tanks, portable water pumps, and hoses shall be placed in locations shown in the Plans or as otherwise ordered by the Engineer. Tanks, pumps and hoses shall be reused or relocated for each stage of construction.

Treatment of pH for Concrete Work

Stormwater or dewatering water that has come in contact with concrete rubble, shall be maintained between pH 6.5 and pH 8.5 before it is allowed to enter surface waters and discharges shall not cause a receiving water pH change of more than 0.2 pH units.

The Contractor shall test runoff during each rain event causing runoff to leave the project site during concrete pouring, rubblizing activities, and during the first three storms following those activities. If discharging directly to surface waters or to a storm sewer system, the Contractor shall test the pH of the water, as a first order of work, at the point of discharge, once the pour or rubblizing has begun for each shift, and periodically, as requested by the Engineer, thereafter. If a test indicates the pH is above 8.5, the Contractor shall immediately discontinue work and initiate treatment according to the plan to lower the pH.

Unless specific measures are identified in the Special Provisions, the pH of water may be reduced by infiltration, dispersion in vegetation or compost, or by pumping to a sanitary sewer system. If water is pumped to the sanitary sewer, the Contractor shall provide, at no cost to the Contracting Agency, a copy of permits and requirements for placing the material into a sanitary sewer system prior to beginning the work.

Work may resume, with treatment, once the pH of the treated material is between 6.5 and 8.5 or it can be demonstrated that the runoff will not reach surface waters.

8-01.3(2) Seeding, Fertilizing, and Mulching

(NWR November 10, 2014)

8-01.3(2)A Preparation for Application

Section 8-01.3(2)A is supplemented with the following:

Weeds in any area to be seeded shall be controlled in accordance with Section 8-02.3(3) prior to seeding.

Disturbed areas requiring seeding, including but not limited to staging areas and access roads, shall be loosened and cultivated to a minimum depth of 10 inches prior to seeding operations.

No cultivation shall occur in areas within the drip line of existing vegetation scheduled to remain.

The Contractor shall seed the prepared areas within two calendar weeks of completion of preparation. Temporary erosion control measures may be required to allow seeding and preparation activities to be performed in accordance with the requirements of Section 8-01.3(2)F.

8-01.3(2)B Seeding and Fertilizing

Section 8-01.3(2)B is supplemented with the following:

(*****)

Erosion Control Seed

Seed of the following mix, rate, and analysis shall be applied at the rates shown below on all areas requiring Erosion Control seeding within the project:

Seed by Common Name and <u>(Botanical name)</u>	Pounds Pure Live Seed <u>(PLS) Per Acre</u>
Creeping Red Fescue (<i>Festuca rubra</i> ssp. <i>Rubra</i>)	6.10
Rough Bentgrass (<i>Agrostis scabra</i>)	0.40
Meadow Barley (<i>Hordeum brachyantherum</i>)	30.00
Blue Wildrye (<i>Elymus glaucus</i>)	7.00
Tufted Hairgrass (<i>Deschampsia cespitosa</i>)	0.50
White Dutch Clover (<i>Trifolium repens</i>)	1.80
Yarrow (<i>Achillea millefolium</i>)	0.50
Seashore Lupine (<i>Lupinus littoralis</i>), Prairie Lupine (<i>L. lepidus</i>) or Riverbank Lupine (<i>L. rivularis</i>) **	3.70
Total pounds PLS per Acre	50.00

** Any combination of the three lupine species is acceptable at the pounds of pure live seed listed.

The seed shall be certified in accordance with WAC 16-302 and meet the following requirements:

Prohibited Weed	0% max.
Noxious Weed	0% max.
Other Weed	0.20% max.
Other Crop	0.40% max.

(NWR January 3, 2011)

Fertilizer for Seeding, Fertilizing, and Mulching

Fertilizer for seeding, fertilizing, and mulching shall consist of processed granulated organic substances. Organic substances for primary plant nutrients may be comprised of fungal and/or bacterial biomass, vegetatively derived nutrients, or composted animal byproducts. No animal or human waste product-based materials will be accepted.

Fertilizer shall contain the following:

Organic substances	50%
Total carbon / nitrogen ratio	≥4:1
Total Nitrogen	≥12%
Water soluble nitrogen	≤0.10%
Available phosphorus as P ₂ O ₅	4%
Soluble Potash as K ₂ O	8%
Calcium	2%

Fertilizer shall be applied at the manufacturer's recommended rate for seeded areas.

The fertilizer formulation and application rate shall be approved by the Engineer based on the manufacturer's guaranteed statement of analysis and recommended application rates before use.

9-14.3 Fertilizer

Section 9-14.3 is supplemented with the following:

(*****)

Fertilizer for Seeding, Fertilizing, and Mulching

Fertilizer shall be organic and applied at the manufacturer's maximum recommended application rate or as specified in the Plans. The fertilizer formulation shall be approved by the Engineer before use.

Section 9-14.3, paragraph 1, is revised to read:

Fertilizer shall be registered with Washington State Department of Agriculture (WSDA) Organic Program. Fertilizer shall not contain raw manure and shall be inoculated with mycorrhizal fungi in a pelleted or granular form. Mycorrhizal fungi can be added by the manufacturer or it can be added separately to the fertilizer blend at the rate specified by the manufacturer. The Mycorrhizae shall be MycoApply Certified (<http://www.mycoapplycertified.com/>) and OMRI certified. Fertilizer shall have the following Guaranteed Chemical Analysis (N-P-K) (%):

N: 4 to 8
P: 1 to 4
K: 1 to 4

Water insoluble N shall be a minimum of 50% of the total available Nitrogen.

Fertilizer shall be furnished in a standard unopened container with weight, name of plant nutrients, and manufacturer's guaranteed statement of analysis clearly marked.

8-01.3(2)D Mulching

Section 8-01.3(2)D is supplemented with the following:

(January 5, 2015)

*** Moderate Term Mulch *** shall be applied at a rate of *** 2700*** pounds per acre with no more than *** 1400*** pounds per acre applied in a single lift.

9-14.4(2)B Moderate-Term Mulch

Section 9-14.4(2)B is replaced with the following:

(*****)

Table 3 Moderate-Term Mulch Test Requirements

Properties	Test Method	Requirements
Performance in Protecting Slopes from Rainfall-Induced Erosion	ASTM D 6459.	C Factor = 0.010 maximum using Revised Universal Soil Loss Equation (RUSLE)

8-01.4 Measurement

Section 8-01.4 is supplemented with the following:

(*****)

Compacted till will be measured by the cubic yard. The quantity for Compacted Till to be paid for on this project shall be the quantity shown in the proposal, unless changes are made in accordance with Section 1-04.4 which affect this qty. The quantity shown in the proposal will be adjusted by the amount of the change and will be paid for as specified in section 1-04-4.

8-01.5 Payment

Section 8-01.5 is supplemented with the following:

(*****)

"Compacted Till", per cubic yard.

The unit contract price per cubic yard for "Compacted Till" shall be full compensation for all costs incurred for furnishing, portioning, loading, hauling, and placing the materials.

Compaction work for "Compacted Till" will be paid for per cubic yard under bid item "Embankment Compaction".

8-02 Roadside Restoration

8-02.1 Description

Section 8-02.1 is supplemented with the following:

Soil Decompaction

(*****)

This work shall also consist of decompacting soil for the purpose of plant establishment.

8-02.2 Materials

Section 8-02.2 is supplemented with the following:

9-14.1 Topsoil

9-14.1(1) Topsoil Type A

Section 9-14.1(1) is supplemented with the following:

(*****)

Topsoil Type A shall meet the following requirements:

Cation exchange capacity (CEC) of Topsoil Type A shall be a minimum of 5 milliequivalents CEC/100 g dry soil (U.S. EPA Method 9081).

Organic content greater than 8-percent but less than 15-percent as measured on a dry weight basis using AASHTO T 267 Determination of Organic Content in Soils by Loss on Ignition.

Topsoil Type A shall be 60-percent to 70-percent Sandy Loam and 40-percent to 30-percent Fine Compost by volume. Sandy Loam shall be as defined by the US Department of Agriculture Soil Classification System.

The Contractor shall submit a Particle Size Analysis as a Type 1 Working Drawing from an independent accredited soils testing laboratory indicating the Material source and compliance with all Topsoil Type A specifications. The laboratory analysis shall be with a sample size of no less than 2 pounds.

The Fine Compost shall conform to the requirements of Section 9- 14.4(8).

9-14.6 Plant Materials

9-14.6(6) Substitution of Plants

Section 9-14.6(6) is supplemented with the following:

(NWR January 3, 2011)

The Contractor is advised that a growing contract may be necessary to secure the required quantities, the specified size, variety, and grade of plant material.

(*****)

1 **Water Bags**

2 Slow-release water bags specified for trees shall meet the following criteria:

- 3
- 4 1. 15 gallon capacity minimum and approximately 35 inches in diameter and 6 inches
- 5 high when filled with water;
- 6 2. UV stabilized polyethylene plastic with nylon webbing;
- 7 3. Two water release points for even watering.

8

9 Product labels shall clearly show the manufacturer or supplier name, product name and

10 number and shall include a compliance statement certifying that all ingredients and

11 inspection standards for this product have been met.

12

13 Each slow-release water bag shall be protected from damage due to shipment,

14 water, sunlight and contaminants. Protection shall be maintained during periods of

15 shipment and storage.

16

17 Water bags shall be installed after all danger of frost and on or before June 1st. Water

18 bags shall be maintained in a functioning condition for the 1st year of plant

19 establishment and left in place beyond 1st year.

20

21 **Filling of Water Bag**

22 During the 1st year of plant establishment, the Contractor shall refill each water

23 bag weekly from June 1 to September 30.

24 Water bags shall be left in place at conclusion of Contract.

25 **8-02.3 Construction Requirements**

26

27 **8-02.3(1) Responsibility During Construction**

28 Section 8-02.3(1) is supplemented with the following:

29

30 (NWR November 10, 2014)

31 For all planting areas, the Contractor shall perform work in a manner that minimizes

32 displacement and destruction of the pre-existing soil structure. Work will be stopped if,

33 in the opinion of the Engineer, construction method, soil moisture content or other

34 condition will result in displacement of the existing soil horizon (such as ruts over 3

35 inches deep), or soil structure degradation. The Contractor will not be allowed to resume

36 work until conditions improve or an alternate method of construction is approved by the

37 Engineer.

38

39 **8-02.3(2) Work Plans**

40 Section 8-02.3(2) is supplemented with the following:

41

42 (NWR November 10, 2014)

43 **Plant Establishment Plan**

44 The Plant Establishment Plan shall show the scheduling, frequency, dates, materials

45 and equipment utilized, whichever may apply, for all plant establishment activities

46 including, but not limited to, the following:

47

48 A. Plant Establishment Activities

49

1 1. Weed Control for Target Weeds within Planting Areas

- 2 a. Chemical Applications (post and pre-emergent)
3 b. Hand weeding and removal
4

5 2. Fertilizing
6

7 3. Watering
8

9 4. Litter and Debris Removal
10

11 5. Pruning
12

13 6. Insect and Disease Control
14

15 7. Erosion Control Methods and Procedures
16

17 8. Plant Replacement

18 **8-02.3(3) Weed and Pest Control**

19 Section 8-02.3(3) is supplemented with the following:

20 (NWR January 3, 2011)

21 If Japanese knotweed is encountered within the project limits, it shall be chemically
22 treated with an approved herbicide. Chemical treatment shall be applied in late summer
23 or early fall, unless the entire project construction working days fall outside of this time
24 period.
25

26 The preferred method of herbicide application is by stem injection. Should the Contractor
27 choose the foliar application method, a second application will be required after the
28 residual weeds have regrown to a height of 12 inches to achieve complete results. The
29 second foliar application shall be at no additional cost to the Contracting Agency.
30

31 After the Japanese knotweed is dead, the Contractor shall cut the dead stems to the
32 ground, bag the debris, and dispose of the debris at a landfill or transfer station in
33 accordance with local noxious weed requirements.
34

35 (NWR March 22, 2010)

36 In areas where soil amendment is not indicated, the existing erosion control grasses
37 shall not be removed except for spot-treatment as indicated in Section 8-02.3(3)A.
38

39 In areas where the Contractor's activities have compromised the erosion control
40 functions of the existing grasses, the Contractor shall overseed at no additional cost to
41 the Contracting Agency.
42

43 (NWR November 10, 2014)

44 The Contractor shall control weeds outside of planting areas and within the project limits
45 that are not otherwise covered by the requirements of Section 8-02.3(3), Planting Area
46 Weed Control as directed by the Engineer.
47

48 The Contractor shall remove weed debris from within the project limits.
49

1 This work shall commence from the beginning of the project and continue through the
2 first year of plant establishment, as ordered by the Engineer. All work to accomplish the
3 requirements of this Section shall comply with the Weed and Pest Control Plan in
4 accordance with Section 8-02.3(2).

5
6 (NWR January 3, 2011)

7 All work to control weeds or pests shall be performed according to the Weed and Pest
8 Control Plan as required in Section 8-02.3(2) throughout the life of the project. If the
9 need arises for methods of weed or pest control that are not covered by the approved
10 Weed and Pest Control Plan, the Contractor shall submit an amended plan for approval
11 by the Engineer prior to performing the work.

12 13 **8-02.3(3)A Planting Area Weed Control**

14 Section 8-02.3(3)A is supplemented with the following:

15
16 (NWR January 3, 2011)

17 After chemical treatment and prior to planting, the Contractor shall remove the
18 dead woody vegetation at the ground level.

19
20 (NWR January 3, 2011)

21 The Contractor shall control reed canary grass using a minimum of two
22 applications of herbicide in the areas shown in the Plans. Herbicide applications
23 shall be made between the months of April and September. Prior to the first
24 application, reed canary grass shall be cut to the ground and the debris shall be
25 removed from the project limits for disposal. After the reed canary grass has re-
26 grown to a height of 6 to 12 inches, the Contractor shall make the first application
27 of herbicide. A second application of herbicide shall be made after a minimum of 6
28 weeks, or when the remaining grass has regrown to a height of 6 to 12 inches,
29 whichever is earlier.

30
31 (*****)

32 A 2.5 feet radius area around each plant, excluding emergent plants, where
33 applicable, shall be kept free of all other vegetation.

34
35 The seeded areas between plants shall be kept free of all undesirable vegetation
36 as described in Section 8-02.3(3).

37 38 **8-02.3(4) Topsoil**

39 Section 8-02.3(4) is supplemented with the following:

40
41 (NWR January 3, 2011)

42 The Contractor shall notify the Engineer a minimum of 10 working days prior to topsoil
43 placement.

44 45 **Approval and Acceptance**

46 The Contractor shall submit a sample of the topsoil and the proposed method of
47 incorporation to the Engineer for approval 10 working days prior to beginning placement.
48 Acceptance samples shall be obtained at the point of delivery.

49
50 The Contractor shall place topsoil to a reasonable even grade without localized low
51 areas which will hold water.

(NWR June 5, 2000)

The Contractor shall submit to the Engineer a manufacturer's certification that the topsoil contains all materials and soil amendments of the type and quantities specified. The Engineer will have 10 working days to respond to submittals. Placement shall not begin until approval has been received in writing.

8-02.3(4)A Topsoil Type A

Section 8-02.3(4)A is supplemented with the following:

(NWR January 17, 2006)

Topsoil Type A shall be placed in two non-compacted lifts.

The first 4-inch lift of topsoil shall be placed over the existing soil and incorporated to a 10-inch depth.

The second lift of topsoil shall then be placed over the existing incorporated soil to the finished grades shown in the Plans.

8-02.3(5) Planting Area Preparation

Section 8-02.3(5) is supplemented with the following

No cultivation shall occur in areas within the drip line of existing vegetation scheduled to remain.

(*****)

Soil Decomaction

For the locations designated in the Plans, the Contractor shall uniformly decompact the soil to a depth of 18 inches such that a soil penetrometer can be inserted to a minimum depth of 12 inches with no more than 200 PSI of pressure using a ½ inch tip. Soil decompaction operations shall be scheduled between April 1 and September 30.

The Contractor shall notify the Engineer a minimum of five working days prior to the start of soil decompaction work.

The Contractor shall select a soil decompaction method that has the ability to fracture and shatter compacted soil to the specified depth with uniformity and without negative consequences to the soil structure in three or fewer passes.

The soil decompaction will be accepted by the Engineer based on a field inspection of soil penetration measurements within the designated soil decompaction area. The Engineer will select random locations to measure soil decompaction using a Dickey-JOHN soil penetrometer or approved equivalent. Acceptance is based upon at least 75% of the soil decompaction readings meeting the PSI requirements.

Following soil decompaction operations, the area shall be graded smooth. Topsoil placement shall not proceed until the Engineer accepted the soil decompaction. No cultivation shall occur in areas within the drip line of existing vegetation scheduled to remain.

8-02.3(6) Soil Amendments

Section 8-02.3(6) is supplemented with the following:

(NWR November 10, 2014)

The Contractor shall notify the Engineer a minimum of 5 working days prior to the start of soil amendment work. Soil amendment application and incorporation methods shall be approved by the Engineer prior to installation.

Order of work:

1. Initial planting area weed control
2. Grading and/or excavation
3. Soil placement
4. Soil amendment placement and incorporation
5. Irrigation installation

Soil amendment shall not be placed when a condition exists that may be detrimental to successful application, incorporation, or soil structure, such as frozen or water saturated soil.

8-02.3(7) Layout of Planting

Section 8-02.3(7) is supplemented with the following:

(NWR January 17, 2006)

Soil moisture conditions may require adjustment of location or timing of planting for individual plants or plant mixes. The Contractor may make recommendations for adjustments to plant locations or timing of planting within planting zones to ensure the success of all plants. Layout and timing of planting shall be approved by the Engineer prior to planting.

The Contractor shall locate plants to ensure that only low-growing species are placed in front of signs. If tall growing species are placed within sight lines in front of signs, the Contractor shall, upon request by the Engineer and at no cost to the Contracting Agency, move the tall species to non-blocking locations. The Contractor shall replant the voids with low-growing species if included in the plant mix for the area, or re-seed the area if no low-growing species are called for in the vicinity of the planting area.

8-02.3(8) Planting

Section 8-02.3(8) is supplemented with the following:

(*****)

The Contractor shall exercise care when installing plant material next to existing vegetation scheduled to remain to prevent damage to the root systems of the existing vegetation.

8-02.3(10) Fertilizers

Section 8-02.3(10) is supplemented with the following:

(*****)

Plant Fertilizer

The Contractor shall provide and apply plant fertilizer for plants and bioengineering installations between the months of March and June during the first year of plant

establishment or as directed by the Engineer. Plant fertilizer shall be placed and spread uniformly according to the following schedule:

<u>Plant Type</u>	<u>Cups</u>	<u>Spread</u>
Trees—No. 2 container or larger	1/3	3 ft. diam.
Trees—No. 1 container	1/4	2 ft. diam.
Shrubs	1/4	2 ft. diam.

Note:

1. Plant fertilizer shall not be placed within a 3 vertical foot elevation above the existing high water mark of creeks, streams, rivers, lakes, ponds or other water bodies.
2. Plant fertilizer shall not be placed in locations where, in the opinion of the Engineer, the fertilizer could be washed into creeks, streams, rivers, lakes, ponds or any waters of the State.
3. Plant fertilizer shall be hand applied. No mechanical dispersal methods will be allowed.

(*****)

No fertilizers shall be used in stormwater treatment facilities such as infiltration ponds, compost-amended biofiltration swales (CABS) or in compost-amended vegetated filter strips (CAVFS).

8-02.3(11) Bark or Wood Chip Mulch

Section 8-02.3(11) is supplemented with the following:

(*****)

For trees within grass or infill planting areas, bark mulch or wood chip mulch shall be placed to a 3-inch compacted depth covering the area as described in the Plans around each tree. Bark or wood chip mulch shall not be placed in areas of standing water.

8-02.3(13) Plant Establishment

Section 8-02.3(13) is supplemented with the following:

(*****)

Failure to comply with the requirements of Section 8-02.3(13) Plant Establishment or to revise the Plant Establishment Plan as needed, or to comply with corrective steps outlined by the Engineer will result in a suspension of time for first year plant establishment period. Such failure shall increase the duration of the first year of plant establishment for the duration of time required to address the corrective steps.

Any such suspension of time will not be lifted until all unsatisfactory conditions have been corrected to the satisfaction of the Engineer.

1 **8-02.4 Measurement**

2 Section 8-02.4 is supplemented with the following:

3
4 (*****)

5 Topsoil, Bark or wood chip mulch and Soil amendments will be measured per cubic yard in
6 the haul conveyance at the point of delivery.

7
8 Water bags shall be measure per each, installed.

9
10 Soil Decompaction will be measured per acre along the ground slope line of surface area
11 loosened and accepted.

12
13 **8-02.5 Payment**

14 Section 8-02.5 is supplemented with the following:

15
16 (*****)

17 "Topsoil Type A", per cubic yard.

18
19 "Fine Compost", per cubic yard.

20
21 "Water Bags", per each

22 The unit contract price per each for "Water Bags" shall include all costs for water bag, water
23 for bags and installation.

24
25 "Soil Decompaction", per acre.

26 The unit contract price for "Soil Decompaction", per acre shall be full pay for performing the
27 work as specified.

28
29 The third bid item under Section 8-02.5 is supplemented with the following:

30
31 (NWR June 5, 2000)

32 The unit Contract price per each for "PSIPE" shall include all costs for plant fertilizer,
33 insecticide, and fungicide applications.

34
35 (*****)

36 The bid items "Plant Selection____", per each, "PSIPE____", per each and the third paragraph
37 under Section 8-02.5 are replaced with the following:

38
39 " Plant Selection ____" , per each.

40 The unit Contract price for " Plant Selection ____" , per each shall be full pay for all Work to
41 perform the work as specified within the planting area prior to planting for weed control,
42 planting area preparation and installation of plants with initial watering.

43
44 " PSIPE ____" , per each.

45 The unit Contract price for "PSIPE ____" , per each, shall be full pay for all Work to perform
46 the work as specified within the planting area for weed control and planting area preparation,
47 planting, cleanup, and water necessary to complete planting operations as specified to the
48 end of first year plant establishment.

49
50 (NWR June 5, 2000)

The following paragraph is added immediately after the item "Soil Amendment" in Section 8-02.5:

The unit Contract price per cubic yard for "Soil Amendment" shall include all costs for ripping the existing soil.

8-04 Curbs, Gutters, and Spillways

8-04.5 Payment

Section 8-04.5 is supplemented with the following:

(*****)

All cost associated with furnishing and installing cement concrete pedestrian curb and all costs incurred to carry out the requirement of Section 8-04 shall be included in the unit Contract price for the various "Cement Conc. Curb Ramp Type ____" bid items.

8-10 Guide Posts

8-10.1 Description

Section 8-10.1 is supplemented with the following:

(April 1, 2002)

This Work shall consist of furnishing and installing barrier delineators on concrete barrier when barrier runs concurrent with guide post locations.

8-10.2 Materials

Section 8-10.2 is supplemented with the following:

(April 1, 2002)

Barrier delineators shall consist of a flat plastic reflector lens or reflective sheeting attached to a housing or bracket to facilitate the mounting of the delineator on concrete traffic barrier. The reflective surface shall be rectangular or trapezoidal shape with a minimum area of 9 square inches for reflectors and 12 square inches for reflective sheeting. The housing or bracket can be flexible or rigid, molded from a durable plastic or other durable material approved by the Engineer. Barrier delineators shall be one sided for single direction or two sided for bi-directional.

Reflectors shall be acrylic or polycarbonate and shall conform to AASHTO M 290. Reflectors shall equal or exceed the following minimum values of specific intensity:

Observation Angle (Degrees)	Entrance Angle (Degrees)	Specific Intensity cd/ft-c	
		White	Yellow
0.1	0	126	75
0.1	20	50	30

Reflective sheeting for barrier delineators shall be type III, IV, V or VII and selected from approved materials listed in the Qualified Products List.

8-10.3 Construction Requirements

Section 8-10.3 is supplemented with the following:

(April 1, 2002)

Barrier delineators shall be placed on the traffic face of the barrier 6 inches down from the top. Spacing shall be as shown in the Plans. Delineator color shall be white on the right of traffic and yellow on the left of traffic. The surface of the barrier where the delineator is applied shall be free of dirt, curing compound, moisture, paint, or any other material that would adversely affect the bond of the adhesive. Install delineators with an adhesive recommended by the manufacturer.

8-10.4 Measurement

Section 8-10.4 is supplemented with the following:

(April 1, 2002)

Barrier delineators will be measured by the unit for each delineator furnished and installed.

8-10.5 Payment

Section 8-10.5 is supplemented with the following:

(April 1, 2002)

"Barrier Delineator", per each

8-12 Chain Link Fence and Wire Fence

8-12.2 Materials

Section 8-12.2 is supplemented with the following:

(August 3, 2009)

Coated Chain Link Fence

Chain link fence fabric shall be hot-dip galvanized with a minimum of 0.8 ounce per square foot of surface area.

Fencing materials shall be coated with an ultraviolet-insensitive plastic or other inert material at least 2 mils in thickness. Any pretreatment or coating shall be applied in accordance with the manufacturer's written instructions. The Contractor shall provide the Engineer with the manufacturer's written specifications detailing the product and method of fabrication. The color shall match Federal Standard 595 color number *** 27038 ***, or be as approved by the Engineer.

Samples of the coated fencing materials shall be approved by the Engineer prior to installation on the project.

The Contractor shall supply the Engineer with 10 aerosol spray cans containing a minimum of 14 ounces each of paint of the color specified above. The touch-up paint shall be compatible with the coating system used.

(April 4, 2017)

Cable Fence

Steel pipe shall conform to ASTM A 53, Grade B, Type E or S.

1 Steel bars, plates, and shapes shall conform to ASTM A 36.

2
3 Steel components shall be galvanized after fabrication in accordance with AASHTO M 111.

4
5 Resin bonded anchors shall conform to Section 6-02.2 as supplemented in these Special
6 Provisions.

7
8 Spelter sockets and turnbuckles shall conform to the size and breaking strength requirements
9 specific in the Plans, shall be compatible with the wire rope selected by the Contractor, and
10 shall be galvanized after fabrication in accordance with AASHTO M 232.

11
12 Wire rope shall conform to one of the following:

- 13
14 1. ASTM A 603 with Class A weight zinc-coated wires throughout.
- 15
16 2. ASTM A 1023 with drawn galvanized wires throughout in accordance with ASTM A
17 1007. Acceptance of ASTM A 1023 wire rope is contingent upon the Contractor
18 furnishing a Type 1 Working Drawing certifying that the lot of supplied wire rope has
19 a minimum modulus of elasticity of 15,000 ksi when tested in accordance with
20 ASTM A 931 Section 3.2.17.
- 21
22 3. Phillystran HPTG 27000 I as manufactured by:

23
24 Phillystran, Inc.
25 151 Commerce Drive
26 Montgomeryville, PA 18936-9628
27 (215) 368-6611
28 www.phillystran.com
29

30 **8-12.3 Construction Requirements**

31 Section 8-12.3 is supplemented with the following:

32
33 (April 6, 2015)

34 The Contractor shall field measure the slope of the top of the existing retaining wall at each
35 location of cable fence end post and intermediate brace. The Contractor shall submit Type 1
36 Working Drawings consisting of the tabulated field measured slope data.

37
38 (April 6, 2015)

39 The Contractor shall submit shop drawings of the cable fence in accordance with Section 6-
40 03.3(7). The shop drawings shall include, at a minimum, the following:

- 41
42 1. Plan, elevation, and section views of the cable fence and all components, with
43 dimensions and tolerances.
- 44
45 2. Material designations for all components.
- 46
47 3. Socketing procedure for the spelter sockets.
- 48
49 4. Erection plan for installing the posts, installing and connecting the cable to the posts,
50 and tensioning the cable.
51

1 The Contractor shall install resin bonded anchors in accordance with Section 6-02.3(18) as
2 supplemented in these Special Provisions.

3
4 The cable shall be tensioned to 400 pounds with six inches minimum of take up still available
5 in the turnbuckle.

6
7 (April 6, 2015)

8 After erecting the cable fence posts, but prior to installing the cable, the Contractor shall clean,
9 prepare, and paint all exposed galvanized surfaces in accordance with Section 6-07.3(11)A.
10 The color of the finish coat, when dry, shall match Federal Standard 595 Color No. 20045.

11 12 **8-12.4 Measurement**

13 Section 8-12.4 is supplemented with the following:

14
15 (April 6, 2015)

16 Cable fence will be measured by the linear foot along the line and slope at the base of the
17 completed fence.

18 19 **8-12.5 Payment**

20 Section 8-12.5 is supplemented with the following:

21
22 (April 1, 2002)

23 "Coated Chain Link Fence Type ____", per linear foot.

24 Payment for clearing of fence line for "Coated Chain Link Fence Type ____" shall be in
25 accordance with Section 2-01.5.

26 "Coated End, Gate, Corner, Pull Post for Chain Link Fence", per each.

27 "Double 20 Ft. Coated Chain Link Gate", per each.

28
29 (April 6, 2015)

30 "Cable Fence", per linear foot.

31 32 33 **8-14 Cement Concrete Sidewalks**

34 35 **8-14.1 Description**

36 Section 8-14.1 is revised to read:

37
38 (April 3, 2017)

39 This Work consists of constructing cement concrete sidewalks, curb ramps, bus stop shelter
40 foundations, masonry sidewalks, and ramp grinding in accordance with details shown in the
41 Plans, Standard Plans, these Specifications, and in conformity to the lines and grades shown
42 in the Plans, Standard Plans, and as established by the Engineer.

43 44 **8-14.3 Construction Requirements**

45 Section 8-14.3 is supplemented with the following:

46
47 (April 3, 2017)

48 The Contractor shall request a pre-construction meeting with the Engineer to be held two to
49 five working days before any work can start on cement concrete sidewalks, curb ramps or
50 other pedestrian access routes to discuss construction requirements. Those attending shall

1 include:

- 2
- 3 1. The Contractor and Subcontractor in charge of constructing forms, and placing, and
- 4 finishing the cement concrete.
- 5
- 6 2. Project Engineer (or representative) and Project Inspectors for the cement concrete
- 7 sidewalk, curb ramp or pedestrian access route Work.
- 8

9 Items to be discussed in this meeting shall include, at a minimum, the following:

- 10
- 11 1. Slopes shown on the Plans.
- 12
- 13 2. Inspection
- 14
- 15 3. Traffic control
- 16
- 17 4. Pedestrian control, access routes and delineation
- 18
- 19 5. Accommodating utilities
- 20
- 21 6. Form work
- 22
- 23 7. Installation of detectable warning surfaces
- 24
- 25 8. Contractor ADA survey and ADA Feature as-built requirements
- 26
- 27 9. Cold Weather Protection
- 28

29 (April 3, 2017)

30 ***Timing Restrictions***

31 Within an intersection, the crossing of one leg of the intersection shall be constructed at a

32 time and shall be completed and open to traffic within five calendar days before construction

33 can begin on another of the intersection unless otherwise allowed by the Engineer.

34

35 Unless otherwise allowed by the Engineer, the five calendar day time restriction begins when

36 an existing curb ramp for the quadrant or traffic island/median is closed to pedestrian use

37 and ends when the quadrant or traffic island/median is fully functional and open for pedestrian

38 access.

39

40 (April 3, 2017)

41 ***Layout and Conformance to Grades***

42 The Contractor shall meet the requirements depicted in the Contract documents. Using the

43 information provided in the Contract documents, the Contractor shall lay out, grade, and form

44 each new curb ramp, sidewalk, and curb and gutter.

45

46 **8-20 Illumination, Traffic Signal Systems, and Electrical**

47

48 **8-20.1 Description**

49 Section 8-20.1 is supplemented with the following:

50

51 (*****)

Work shall include the following:

1. Furnishing and installing all equipment necessary to provide complete and functional permanent traffic signal system and modify existing ITS and illumination systems.
2. Relocating existing luminaire poles and reconnecting to existing circuit wires.
3. Salvaging existing traffic signal and illumination equipment as noted on the Plans.
4. Removing and disposing of all other existing traffic signal and illumination equipment superseded by the Project improvements.

Item 3 is supplemented with the following subitems:

- 3a. Traffic Data Accumulation System
- 3b. Communication Cables and Interfaces

(*****)

Traffic Data Accumulation System

This work shall consist of furnishing, installing, and testing all materials and equipment necessary to protect, modify and restore the existing Traffic Data Accumulation system.

(NWR ITS February 11, 2002)

Communication Cables and Interfaces

This work shall consist of furnishing, installing and testing all materials and equipment necessary to complete in place the communication cable and interface system and, when specified, the modification of such an existing system.

8-20.2 Materials

Section 8-20.2 is supplemented with the following:

(*****)

Contracting Agency-Supplied Materials

The Contracting Agency will supply the following materials for the illumination and signal systems:

<u>Description</u>	<u>Quantity</u>
Steel Light Standard, H1=50', with 12' Type 1 mast arms (Per Standard Plan J-28.10-01)	3
Steel Light Standard, H1=50', with 16' Type 1 mast arms (Per Standard Plan J-28.10-01)	8
Anchor Bolt Assembly for Light Standard, 1" Diam. (Per Standard Plan J-28.30-03)	8
Anchor/Slip Plate Assembly for Light Standard Slip Base (Per Standard Plan J-28.42-01)	5
Signal Standard, Type PS with Slip Base (Per Standard Plans and J-21.10-04)	3

Signal Standard, Type I with Slip Base (Per Standard Plans J-21.15-01 and J-21.10-04)	2
Anchor/Slip Plate Assembly for Type PS, I and FB Signal Standards (Per Standard Plan J-21.10-04)	9
Anchor Bolt Assembly for Type PS, I and FB Signal Standards with Slip Base (Per Standard Plan J-21.10-04)	3
Materials for Anchor Bolt Assembly (unassembled) for Type PS, I and FB Signal Standards (Per Standard Plan J-21.10-04)	1

Except as specifically indicated for anchor bolt assemblies as shown in the referenced Standard Plans, the above materials provided by the Contracting Agency will *not* include any nuts, bolts, screws, rods, washers, keeper plates or other hardware, including but not limited to hardware for handhole covers, slip bases and davit arm attachments.

When Contracting Agency-supplied materials require foundations, the Contractor may request release of Contracting Agency-supplied materials, except for anchor bolts, only after foundations for the equipment described above have cured.

The Contractor shall notify the Engineer three working days in advance of the date Contracting Agency-supplied materials are required.

Contracting Agency-supplied materials will be available for pick up, dimensional verification or bolt pattern verification during normal working hours from the lay-down yard located at:

Tulalip Adult Training and Education Services Building
11200 34th Avenue NE.
Tulalip, WA 98271
Attention: Debbie Bray
Telephone: (360) 716-5024

9-29.1 Conduit, Innerduct, and Outerduct

Section 9-29.1 is supplemented with the following:

(NWR August 10, 2009)

Conduit Sealing

Mechanical plugs for cabinet conduit sealing shall be one of the following:

1. Tyco Electronics – TDUX
2. Jackmoon – Triplex Duct Plugs
3. O-Z Gedney – Conduit Sealing Bushings

The mechanical plug shall withstand a minimum of 5 psi of pressure.

9-29.1(2) Rigid Metal Conduit Fittings and Appurtenances

Section 9-29.1(2) is supplemented with the following:

(August 10, 2009)

1 **Conduit Coatings**

2 Electroplated couplings are not allowed.

3
4 (NWR March 4, 2009)

5 **Surface Mounting Conduit Attachment Components**

6 Channel supports and all fastening hardware components shall be Type 304
7 stainless steel. Conduit clamps shall be one piece, two bolt units with lock washers.

8
9 **9-29.2 Junction Boxes, Cable Vaults and Pull Boxes**

10
11 **9-29.2(1)A Standard Duty Junction Boxes**

12 Section 9-29.2(1)A is supplemented with the following:

13
14 (NWR January 7, 2013)

15 **Concrete Junction Boxes**

16 Both the non-slip lid and non-slip frame shall be treated with Mebac1 (their most
17 aggressive surface) as manufactured by IKG industries, or SlipNOT Grade 3-coarse
18 as manufactured by W.S. Molnar Co. The non-slip lid shall be identified with permanent
19 marking on the underside indicating the type of surface treatment ("M1" for Mebac 1;
20 or "S3" for SlipNot3) and the year of manufacturer. The permanent marking shall be
21 1/8-inch line thickness formed by engraving, stamping or with a stainless steel weld
22 bead.

23
24 **9-29.2(2)A Standard Duty Cable Vaults and Pull Boxes**

25 Section 9-29.2(2)A is supplemented with the following:

26
27 (NWR January 7, 2013)

28 **Cable Vaults and Pull Boxes Non Slip Lids**

29 Both the non-slip lid and non-slip frame shall be treated with Mebac1 (their most
30 aggressive surface) as manufactured by IKG industries, or SlipNOT Grade 3-coarse
31 as manufactured by W.S. Molnar Co. The non-slip lid shall be identified with permanent
32 marking on the underside indicating the type of surface treatment ("M1" for Mebac 1;
33 or "S3" for SlipNot3) and the year of manufacturer. The permanent marking shall be
34 1/8-inch line thickness formed by engraving, stamping or with a stainless steel weld
35 bead.

36
37 **9-29.2(4) Cover Markings**

38 Section 9-29.2(4) is supplemented with the following:

39
40 (NWR February 11, 2013)

41 **Junction Box Identification**

42 Junction boxes shall be marked "WSDOT" when the junction boxes are to be installed
43 as part of a future raceway system in a bridge structure, vehicle barrier, pedestrian
44 barrier, or roadway crossing and the future raceway system is not connected to an
45 illumination, signal, interconnect, or ITS raceway system.

46
47 Junction boxes, pull boxes and cable vaults containing only Traffic Signal Interconnect
48 (fiber optics) cable shall be marked or embossed with the legend "COMM".

49
50 **9-29.3 Fiber Optic Cable, Electrical Conductors, and Cable**

51 Section 9-29.3 is supplemented with the following:

(*****)

Outdoor Rated Category 6 Cable

A Category 6 outside plant rated cable shall be provided for connecting Ethernet devices that are in separate cabinets. The cable shall contain four twisted pairs of #23 or 24AWG solid bare copper wire. Each pair shall be uniquely color coded with a Thermoplastic polyolefin jacket.

The cable outer jacket shall be Polyolefin with a minimum wall thickness of 0.040". The cable shall consist of water blocking material in the cable interstices for moisture protection.

The cable shall have a voltage rating of 300V.

The cable shall be UL listed. It shall support up to IEEE 802.3 1000Base-T Ethernet and IEEE 802.3af for power over Ethernet.

The cable shall be terminated on each end with an RJ45 connector.

9-29.3(2) Electrical Conductors and Cable

Multi-Conductor Cable

Section 9-29.3(2)B is supplemented with the following:

(NWR August 19, 2013)

Two-conductor through ten-conductor unshielded control cable shall be size 16 AWG.

Detector Loop Wire

Section 9-29.3(2)F is revised to read:

(NWR October 5, 2009)

Detector loop wire shall use 14 AWG stranded copper conductors, and shall conform to IMSA Specification 51-7, with cross-linked polyethylene (XLPE) insulation encased in a polyethylene outer jacket (PE tube).

9-29.6 Light and Signal Standards

Section 9-29.6 is supplemented with the following:

(April 1, 2013)

Light Standards with Type 1 Luminaire Arms

Lighting standards shall be fabricated in conformance with the methods and materials specified on the pre-approved Plans listed below, provided the following requirements have been satisfied:

- (a) Light source to pole base distance (H1) shall be as noted in the Plans. Verification of H1 distances by the Engineer, prior to fabrication, is not required. Fabrication tolerance shall be 6 inches.
- (b) All other requirements of the Special Provisions have been satisfied.

<u>Pre-Approved Plan</u>	<u>Fabricator</u>	<u>Mounting Hgt.</u>
Drawing No. DB00654 Rev. G Sheets 1, 2, 3 & 4	Valmont Ind. Inc.	30', 35', 40' & 50'
Drawing No. W3721-1 Rev. I &W3721-2 Rev. D	Ameron Pole Prod. Div.	20',25',30',35',40',45' & 50'
Drawing No. NWS 3510 Rev.2 or NWS 3510BRev. 2	Northwest Signal Supply, Inc.	25', 30', 35',40', 45' & 50'
Drawing WS-SL-01 Revision 7 Sheets 1 & 2 of 2	American Pole Structures, Inc.	25', 30', 35',40', 45', 50'
Drawing 71035-B39 Rev. R10.1 Sheets 1 & 2 of 2	Union Metal Corp	40'
Drawing 71035-B50 Rev. R2.1 Sheets 1, 2 & 3 and B100-B335 Rev. R1	Union Metal Corp.	50'
Drawing 71035-B47 Rev. R3 Sheet 1 of 1 Elbow Mounting Detail	Union Metal Corp	40', 50'
Drawing No. WSDOT-LP-01 Rev. 4, Sheets 1 and 2 or WSDOT - LP-01-BE Rev 3 Sheets 1 and 2 or WSDOT - LP- 01-C8B Rev 2	West Coast Engineering Group	25', 30', 35', 40', 45', and 50'
Drawing No. 10-31-RWP-1 Rev. 4 Sheets 1, 2 & 3	KW Industries	25, 30, 35, 40, 45, 50
Drawing No. 10-31-RWP-3 Rev. 2 (Bridge Mount Details)	KW Industries	

(April 1, 2013)

Traffic Signal Standards

Traffic signal standards shall be furnished and installed in accordance with the methods and materials noted in the applicable Standard Plans, pre-approved Plans, or special design Plans.

All welds shall comply with the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. Welding inspection shall comply with Section 6-03.3(25)A Welding Inspection.

Hardened washers shall be used with all signal arm connecting bolts instead of lockwashers. All signal arm ASTM A 325 connecting bolts tightening shall comply with Section 6-03-3(33).

Traffic signal standard types and applicable characteristics are as follows:

Type PPB Pedestrian push button posts shall conform to Standard Plan J-20.10 or to one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3540 Rev. 2 and NWS 3540B Rev. 2
Valmont Ind. Inc.	DB00655 Rev. J Sheets 1, 2 and 3
Ameron Pole Prod. Div.	WA10TR-1 & WAPBPBA
Union Metal Corp.	TA-10035 Rev. R6
West Coast Engineering Group	WSDOT-PP-01 Rev. 1
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

Type PS Pedestrian signal standards shall conform to Standard Plan J-20.16 or to one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3540 Rev. 2 and NWS 3540B Rev. 2
Valmont Ind. Inc.	DB00655 Rev. J Sheets 1 2 & 3
Ameron Pole Prod. Div.	WA10TR-1 & WA10TR-2
Union Metal Corp.	TA-10025, Rev. R17 Sheets 1 & 2
West Coast Engineering Group	WSDOT-PP-02 Rev. 1
American Pole Structures, Inc.	WS-PP-03 Rev. 1D
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

1 Type I Type I vehicle signal standards shall conform to Standard Plan J-
2 21.15 or to one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3540 Rev. 2 and NWS 3540B Rev. 2
Valmont Ind. Inc.	DB00655 Rev. J Sheets 1 2 & 3
Ameron Pole Prod. Div.	WA10TR-1 & WA10TR-2
Union Metal Corp.	TA-10025 Rev. R17 Sheets 1 & 2
West Coast Engineering Group	WSDOT-PP-02 Rev. 1
American Pole Structures, Inc.	WS-PP-03 Rev. 1D
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

3 Type FB Type FB flashing beacon standard shall conform to Standard Plan J-
4 21.16 or the following pre-approved plan:

<u>Fabricator</u>	<u>Drawing No.</u>
Valmont Ind. Inc.	DB00655 Rev. J Sht. 1 2 & 3
Union Metal Corp.	50200-B58 Rev. R6 Sht 1 & 2
Ameron Pole Prod. Div.	WA10TR-1 & WA10TR-2
Northwest Signal Supply Inc.	NWS 3540 Rev. 2 and NWS 3540B Rev. 2
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

5 Type RM Type RM ramp meter standard shall conform to Standard Plan J-22.15
6 or the following pre-approved plan:

<u>Fabricator</u>	<u>Drawing No.</u>
Valmont Ind. Inc.	DB00655 Rev. J Sheets 1 2 & 3
Union Metal Corp.	50200-B58 Rev. R6 Sheets 1 & 2
Ameron Pole Prod. Div.	WA10TR-1 & WA10TR-2
Northwest Signal Supply Inc.	NWS 3540 Rev. 2 and NWS 3540B Rev. 2
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

7

Type CCTV Type CCTV camera pole standards shall conform to one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Valmont Industries, Inc.	DB 00759 Rev. J
Ameron Pole Product Div.	W6CCTV1 Rev. F & W6CCTV2 Rev A
West Coast Engineering Group	AP-WSDOT-CP-01 Rev. 3
American Pole Structures, LLC	WS-CP-01 Rev. 1C Sheets 1 & 2
Union Metal Corporation	Drawing No. P33-B318, R11.1, Sheets 1, 2 of 2
Union Metal Corporation	Drawing No. P33-B323, Rev. 3 Sheets 1, 2 of 2
KW Industries	Drawing No. 10-200-CAM-1 Rev. 6, Sheets 1 and 2
Northwest Signal Supply, Inc.	Drawing No. NWS 3545 (For Type CCTV) Rev. 1

Type II Characteristics:

Luminaire mounting height	N.A.
Luminaire arms	N.A.
Luminaire arm length	N.A.
Signal arms	One Only

Type II standards shall conform to one of the following pre-approved Plans, provided all other requirements noted herein have been satisfied. Maximum (x) (y) (z) signal arm loadings in cubic feet are noted after fabricator.

<u>Signal Arm Length (max)</u>	<u>Fabricator-(x) (y) (z)</u>	<u>Drawing No.</u>
65 ft.	Valmont Ind. Inc.-(2894)	DB00625-Rev.R Sheets 1, 2, 3& 4
65 ft.	Union Metal Corp. (2900)	71026-B86 Rev. R10.1 Sheets 1, 2 & 3 of 3
65 ft.	Ameron Pole-(2900)	W3724-1 Rev.J & W3724-2 Rev. G
65 ft.	Northwest Signal-(2802) Supply Inc.	NWS 3505 Rev. 4 or NWS 3505B Rev. 4
45 ft.	American Pole (1875) Structures, Inc.	WS-T2-L Rev.8 Sheet 1 & 2 of 2
65 ft.	American Pole (2913) Structures, Inc.	WS-T2-H Rev. 8 Sheet 1 & 2 of 2

<u>Signal Arm Length (max)</u>	<u>Fabricator-(x) (y) (z)</u>	<u>Drawing No.</u>
65 ft.	KW Industries	10-200-TSP-4 Rev. 5, Sheets 1, 2, and 3
65 ft	West Coast Engineering Group	WSDOT-TS-01 Rev. 3 Sheets 1, 2, and 3
65 ft.	Maico Industries (2894)	WSDOTMA Rev. 3 Sheets 1, 2 and 3

Type III

Characteristics:

Luminaire mounting height	30 ft., 35 ft., 40 ft., or 50 ft.
Luminaire arms	One Only
Luminaire arm type	Type 2
Luminaire arm length (max.)	16 ft.
Signal arms	One Only

Type III standards shall conform to one of the following pre-approved Plans, provided all other requirements noted herein have been satisfied. Maximum (x) (y) (z) signal arm loadings in cubic feet are noted after fabricator.

<u>Signal Arm Length (max)</u>	<u>Fabricator-(x) (y) (z)</u>	<u>Drawing No.</u>
45 ft.	American Pole Structures, Inc. (1875)	WS-T3J-L, Rev. 11 Sheets 1 & 2 of 2
65 ft.	Valmont Ind. Inc.-(2947)	DB00625-Rev. R, Shts. 1, 2, 3 & 4 and "T" luminaire arm
65 ft.	Northwest Signal-Supply Inc. (2802)	NWS 3505 Rev. 4 or NWS 3505B Rev. 4
65 ft.	Ameron Pole-Div. (2900) Prod.	W3724-1 Rev. J & W3724-2 Rev. G and "T" luminaire arm
65 ft	West Coast Engineering Group	WSDOT-TS-01 Rev. 3 Sheets 1, 2 & 3
65 ft.	Maico Industries (2947)	WSDOTMA Rev. 3 Sheets 1, 2 and 3 and "T" luminaire arm
65 ft.	KW Industries	10-200-TSP-3 Rev. 5, Sheets 1, 2, and 3
65ft	Union Metal Corp.	71026-B87 R11 Sheets 1, 2, and 3
65 ft.	American Pole Structures, Inc. (2913)	WS-T3J-H, Rev. 10 Sheets 1 & 2 of 2

Type IV Type IV strain pole standards shall be consistent with details in the Plans and Standard Plan J-7c or one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3525 Rev. 2 or NWS 3525B Rev. 2
Valmont Industries, Inc.	DB006885, Rev. A Sheets 1 and 2
Ameron Pole Prod. Div.	M3650 Rev. G
Union Metal Corp.	EA-10224, Rev. R13 Sheet 1 of 1
American Pole Structures, Inc.	9000-12-037 Rev. A
Maico Industries	WA-SP-4 Rev. 2, Sheets 1 and 2 of 2

Type V Type V combination strain pole and lighting standards shall be consistent with details in the Plans and Standard Plan J-7c or one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Ameron Pole Prod. Div.	M3650 Rev.G
Northwest Signal Supply Inc.	NWS 3525 Rev. 2 or NWS 3525B Rev. 2
Maico Industries	WA-SP-5 Rev. 2, Sheets 1, 2 & 3 and "T" luminaire arm
Valmont Industries, Inc.	DB006885, Rev. A Sheets 1 and 2

The luminaire arm shall be Type 2, 16 foot maximum and the luminaire mounting height shall be 40 feet or 50 feet as noted in the Plans.

Type SD Type SD standards require special design. All special design shall be based on the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and pre-approved Plans and as follows:

1. A 90 mph wind loading shall be used.

- [illegible]

7
8
9
0
1

3
4
5
6
7
8
9

21
22

24

26
27
28
29
30
31
32
33
34
35
36

38

39

41

42

43

45

46

48

49

51

be selected from the models listed below. House side shields may be specified at some locations in the Contract. Shields are not included in the order codes listed below – order codes shall be modified to the minimum extent necessary to allow for the inclusion of house side shields when required.

Voltages refer to the supply voltages to the luminaires present in the field. Only one brand of LED conventional roadway luminaire may be used on a Contract. Other brands of LED high-mast, underdeck, or wall-mount luminaires may be used when any of those types are allowed by the Contract.

LED Conventional Roadway Luminaires approved for use:

250W HPS Equivalents:

Eaton (Cooper) Streetworks Navion (NVN):

480V: NVN-AF-03-D-8-T3R-10K-800-4N7-K-AP-OA/RA1013

310W HPS Equivalents:

Eaton (Cooper) Streetworks Navion (NVN):

480V: NVN-AF-04-D-8-T3R-10K-800-4N7-K-AP-OA/RA1013

9-29.12 Electrical Splice Materials

9-29.12(2) Traffic Signal Splice Material

Section 9-29.12(2) is supplemented with the following:

(NWR March 1, 2011)

Induction loop splices shall be either the heat shrink type or the re-enterable type with end cap seals.

9-29.13 Controller Cabinet Assemblies

9-29.13(3) Traffic Signal Controller

Section 9-29.13(3) is supplemented with the following:

(*****)

Signal Controller

The traffic signal controller shall be a type 2070 controller conforming to the 2002 TEES (Transportation Electrical Equipment Specification) and shall include the following items:

2070-1B CPU Module

2070-2A Field I/O

2070-3B Front Panel

2070-4A Power Supply

Nextphase Software

2070 Unit Chassis

(NWR July 22, 1999)

Controllers

The local signal control unit shall be a fully actuated, eight-phase controller. Pedestrian functions on a minimum of four phases shall be provided.

The following functions shall also be provided in the local signal control unit:

1. Guaranteed Yellow: The Yellow interval for all phases shall be 3.5 seconds unless the operator sets a higher value for it.
2. Simultaneous Gap Out: Two concurrently timing phases shall simultaneously reach a rest state prior to their termination by gap out and prior to advancing across the barrier. A phase in dual ring operation may re-time its gap from a rest state upon vehicle actuation.

9-29.13(6) Emergency Preemption

Section 9-29.13(6) is supplemented with the following:

(*****)

Preemption:

Pre-emption equipment shall be Opticom from the following Manufacturer:

Global Traffic Technologies, LLC
7800 Third Street North
St. Paul, Minnesota 55128-5441
1-800-258-4610
651-789-7333
www.gtt.com

The Contractor shall furnish and install the following:

1. Pre-emption detectors shall be Opticom Model 711.
2. Multimode Phase Selector shall be four-channel model 764 units. One is required at each controller.

In addition, where auxiliary Opticom pre-emption is used, the Contractor shall furnish and install the following:

3. A 757 auxiliary optical detector wiring harness where more than one detector is called for per channel.
4. A twelve position terminal block of the barrier type rated for 20A at 600 volts RMS minimum and meeting the requirements of Chapter 11 of the Type 170 Hardware Specification, FHWA IP-78-16 as currently amended.

9-29.13(10) NEMA, Type 170E, 2070 Controllers and Cabinets

1 **9-29.13(10)B Auxiliary Equipment for Type 170E, 2070 Assemblies**

2 Section 9-29.13(10)B is supplemented with the following:

3
4 (*****)

5 **Controller Auxiliary Equipment**

6 Traffic signal control equipment shall be provided with:

- 7
8 1. Conflict Monitor
9 For 2070 series controllers, the conflict monitor shall be an Eberle Design Inc.
10 Model 2010 ECL unit.
11 2. Loop Detectors
12 Sixteen two-channel loop detectors are required at each cabinet. Detectors shall
13 be Reno A & E Type "C1103-SS".
14

15 **9-29.13(10)D Cabinets for Type 170E and 2070 Controllers**

16 Section 9-29.13(10)D is supplemented with the following:

17
18 (NWR February 11, 2013)

19 **Cabinet Construction**

20 Construction shall be of 0.125-inch sheet aluminum (5052 alloy), with mill finish.

21
22 (NWR August 19, 2013)

23 **Generator Transfer Switch**

24 A Generator Transfer Switch capable of switching power from a utility power source to an
25 external generator power source shall be installed on the same side of the cabinet as the
26 Police Panel and parallel with the Police Panel.
27

28 (NWR October 16, 2010)

29 **332D Controller Cabinet**

30 The 332D Controller Cabinet shall be in full compliance with the Caltran Standard Plan for
31 the Type 332D four door controller cabinet, and the following:

32
33 The 332D Controller cabinet shall have the appearance of two Type 332 controller
34 cabinets joined at opposing sides. The outside Dimensions of the cabinet shall be
35 67 inches high by 48 1/2 inches wide by 30 1/4 inches deep.
36

37 The right side of the cabinet, as viewed from the front, shall be considered the
38 Signal Control side. The left side of the cabinet, when viewed from the front, shall
39 be considered the ITS/COMM side.
40

41 One police access panel shall be installed on the right side of the cabinet, as
42 viewed from the front.
43

44 Four shatterproof fluorescent interior cabinet lights with self-starting ballast shall
45 be furnished.
46

47 All fixtures shall be ceiling mounted. The fixtures shall be installed (one each) over
48 the front and back of the racks on the Signal Control and ITS/COMM sides of the
49 cabinet. Door switches shall be installed so that either the front doors or back
50 doors of either side will automatically turn on the light fixture associated with each
51 door.

The Traffic Control side of the cabinet shall contain the Traffic Signal Controller assembly and shall be furnished with equipment as described in the Contract specifications. The Traffic Control side of the cabinet shall also meet all the additional equipment requirements of the Type 332 Signal Controller cabinet as indicated in the Contract Specifications.

The ITS/COMM side of the cabinet shall contain ITS and Communication equipment and shall be furnished with the following:

- A. One controller shelf unit, mounted 36 inches from the bottom of the cabinet opening to the front of the cabinet and attaching to the front rails of the EIA rack, shall be provided. The shelf shall be fabricated from aluminum and shall contain a rollout flip-top drawer for storage of wiring diagrams and manuals.
- B. One aluminum sheet metal panel, 1/8 inch by 15 inches by 54 inches, shall be installed to the rear of the cabinet on the right hand (when facing the front) side railing.
- C. Additional ITS and Communication equipment as described in the Contract Plans and the ITS section of these Special Provisions.

9-29.16 Vehicular Signal Heads, Displays and Housing

Section 9-29.16 is supplemented with the following:

(NWR February 11, 2013)

Back Plate

Back plates shall be constructed of louvered anodized aluminum.

Conventional Traffic Signal Heads

Optical Units

Section 9-29.16(2)A is supplemented with the following:

(NWR March 8, 2004)

LED Signal Displays

All traffic signal displays shall be the Light Emitting Diode (LED) type and shall be from one of the following manufacturers:

Dialight Corporation
1913 Atlantic Avenue
Manasquan, NJ 08736
Telephone: (732) 223-9400
Fax: (732) 223-8788

GELcore, LLC
6810 Halle Drive
Valley View, OH 44125
Telephone: (216) 606-6555
Fax: (216) 606-6556

Precision Solar Controls, Inc.
2960 Market Street
Garland, TX 75041
Telephone: (972) 278-0553

Each LED signal module shall be designed to be installed in the door frame of a standard traffic signal housing. The lamp socket, reflector holder and lens used with an incandescent lamp shall not be used in a signal section in which a LED signal module is installed. The installation of an LED signal module shall not require any modification to the housing. The LED signal module shall be a single, self-contained device, not requiring onsite assembly for installation into an existing traffic signal housing.

All red and yellow LED signal modules shall be manufactured with a matrix of AlInGaP LED light sources and green LED signal modules shall be manufactured with a matrix of InGaP LED light sources. The LED traffic signal module shall be operationally compatible with controllers and conflict monitors on this project. The LED lamp unit shall contain a disconnect that will show an open switch to the conflict monitor when less than 60 percent of the LEDs in the unit are operational.

Each LED module shall conform to the current standards in Institute of Transportation Engineers (ITE) VTC SH Part 2 and a Certificate of Compliance with these standards shall be submitted by the manufacturer for each type of signal head. The certificate shall state that the lot of signal heads meets the current ITE specification. A label shall be placed on each LED signal module certifying conformance to this specification. The manufacturer's name, trademark, serial number and other necessary identification shall be permanently marked on the backside of the LED signal module. LED signal modules used on this project shall be from the same manufacturer. A label shall be provided on the LED housing and the Contractor shall mark the label with a permanent marker to note the installation date.

The manufacturer shall provide a written warranty against defects in materials and workmanship for the LED signal modules for a period of 60 months after the installation of the modules. All warranty documentation shall be given to the Engineer prior to installation.

9-29.16(4) Traffic Signal Cover

Section 9-29.16(4) is supplemented with the following:

(*****)

Covering Material

Traffic signal covers shall be manufactured from a durable fabric material with a mesh front. Plastic bags, plastic sheeting, burlap, or similar makeshift covers are not allowed. The cover shall have an attachment method that will hold the cover securely to the signal display in heavy wind, such as straps, buckles, or elastic drawstrings – no adhesives may be used. The cover shall include a drain to prevent water accumulation.

One cover shall cover an entire signal display – separate covers for each lens are not allowed. For vehicle displays, if the cover is not designed to go over the backplate, the backplate must be removed until the display is placed into service.

At any intersection where there is a combination of operational and covered signal heads, signal head covers shall be yellow or orange in color. At an intersection where there are no existing operational signal displays, the covers shall be black in color. The text "Not in Service", "Out of Service", or similar may be included on the cover, but it is not required.

9-29.18 Vehicle Detector

1 Section 9-29.18 is supplemented with the following:

2
3 (NWR August 10, 2009)

4 **Loop Amplifier**

5 Loop detector amplifiers shall be as follows:

6
Model: C-1103-SS

Manufacturer: Reno A&E
4655 Aircenette Circle
Reno, NV 89502
Ph: (775) 826-2020
www.renoe.com

7
8 (NWR February 11, 2013)

9 **Loop Sealant**

10 Loop sealant for use in HMA pavement shall be one of the following:

- 11
12 1. RAI Pro-Seal 6006EX
13 2. QCM EAS-14
14 3. 3M Black 5000
15 4. Craftco Inc. Part #34271

16
17 Loop sealant for use on concrete bridge decks and PCC pavement shall be one of the
18 following:

- 19
20 1. 3M Black 5000
21 2. Gold Label Flex 1P
22 3. QCM EAS-14

23
24 (NWR August 10, 2009)

25 **Video detection**

26 All components needed to provide a complete video detection system shall be supplied
27 and installed per manufacturer's recommendation.

28
29 The video detection equipment shall include, but not be limited to, Cameras, Camera
30 Housings, Camera Lens, Camera Mounting Hardware, Video Image Processors, Input File
31 Adapters, lens Adjustment Modules, Keypad and Monitor.

32
33 The video detection system shall be capable of supplying video detection to the signal
34 controller phases as indicated in the Plans.

35
36 The video detection system shall be one of the following:

- 37
38 1. Iteris Vantage Edge
39 Iteris
40 1515 S. Manchester Avenue
41 Anaheim, CA. 92802-2907
42
43 2. Traficon VIP3
44 Traficon NV

Bissegemsestraat 45
B-8501 Heule
Belgium, Europe

9-29.19 Pedestrian Push Buttons

Section 9-29.19 is supplemented with the following:

(NWR November 4, 2013)

APS Pushbutton Station

Pedestrian pushbutton station equipment shall be from one of the following manufacturers:

Polara Navigator EN4 (4-wire system)
Polara Manufacturing
9153 Stellar Court
Corona, CA 92883
888-340-4872
<http://www.polara.com/navigator.html>

Distributed by:
Advanced Traffic Products
909 SE Everett Mall Wy
Suite B280
Everett, WA 98208
425-347-6208

Novax SoundSafe APS
Novax Industries Corporation
202-1525 Cliveden Ave
Delta, BC V3M 6L2
604-525-5644
<http://www.novax.com/#!/products/vstc1=soundsafe>
Distributed by:
Northwest Signal Supply
12965 SW Herman Rd
Tualatin, OR 97062
503-635-4351

Campbell Company Advisor Guide APS
Campbell Company
450 W McGregor Dr
Boise, ID 83705
208-345-7459
<http://www.pedsafety.com/advisor-guide-aps/>

No WA distributor listed.

The pushbutton stations and adapters shall be forest green in color. The sign shall be 9 inches by 12 inches, option B (MUTCD R10-3b), when used in conjunction with a non-countdown type pedestrian signal display or 9 inches by 15 inches, option G (MUTCD R10-3e), when used in conjunction with a countdown type pedestrian signal display. The sign shall include a frame adapter plate.

1 A pole adaptor, from the pushbutton station manufacturer, shall be utilized when a pole
2 adaptor is required.

3
4 Each pedestrian signal pushbutton station shall include one pedestrian signal head control
5 unit, mountable in the associated pedestrian signal display enclosure.

6
7 All manufacturer recommended setup equipment, required to program, adjust and make
8 operational the pedestrian pushbutton stations, shall be furnished with each complete
9 pushbutton system.

10
11 All pedestrian pushbutton station equipment shall be the same make or model from one
12 manufacturer.

13
14 (August 3, 2015)

15 **Uninterruptible Power Supply (UPS)**

16 The UPS system shall provide traffic signal system battery backup power in the event of
17 loss or failure of normal utility power. The UPS system shall be constructed for full on line
18 configuration (line interactive type), providing automatic voltage regulation and power
19 conditioning when under normal utility power. The transfer from utility power to battery
20 power and vice versa shall not interfere with the normal operation of the connected traffic
21 signal controller including conflict monitor and any other peripheral devices within the
22 traffic controller assembly.

23
24 The UPS system shall include the following equipment:

25
26 **UPS System Equipment**

27 UPS system cabinet assemblies shall include all necessary equipment and auxiliary
28 equipment for controlling the operation of traffic signals and similar systems as
29 required for the specific application. UPS system cabinets shall meet the
30 requirements of the NEMA TS1 and TS2 specification or the California Department
31 of Transportation "Transportation Electrical Equipment Specifications" (TEES)
32 dated March 12, 2009 and the following requirements:

- 33
34 1. Cabinet shall be Model 334L, housing 1B, and mounting cage 1 per TEES.
35
36 2. Construction shall be of 0.125-inch sheet aluminum (5052 alloy), with mill
37 finish. The aluminum shall not be anodized and the exterior shall not be
38 painted.
39
40 3. The cabinet door(s) shall each have a three point latch system. Locks shall
41 be spring loaded construction locks capable of accepting a Best 6 pin core.
42 Green construction cores shall be installed for each cabinet core lock. One
43 core removal key and two standard keys shall be included with each
44 cabinet and delivered to the Engineer.
45
46 4. Cabinet lighting shall be LED light strips with power supply. LED rope lights
47 are not permitted. Color temperature shall be 4000°K plus or minus 400°K.
48 LED light strips shall be approximately 12-14 inches long, and have a
49 minimum output of 400 lumens. There shall be two light strips for each rack
50 assembly within the cabinet. Lighting shall be ceiling mounted and oriented
51 parallel to the door face – rack mounted lighting is not permitted. Lighting

1 shall be positioned near the inside faces of the cabinet so that the lighting
2 shines onto the faces of the associated rack mounted equipment, as well
3 as into the interior of the rack. Lighting shall not interfere with the proper
4 operation of any other ceiling mounted equipment and shall not block tool
5 access to lifting eye attachment nuts. All lighting fixtures above a rack shall
6 energize whenever either door to that respective rack is opened. Each
7 door switch shall be labeled "Light".
8

- 9 5. One controller unit shelf with drawer, which attaches to the front and back
10 rails of the EIA rack, shall be provided in lieu of the two steel controller
11 supporting angles specified in TEES 6.3.4.
12
- 13 6. The cabinet shall be provided with a breaker panel with two 15 amp, 120
14 volt, single pole breakers, one each for the fan and the lights.
15
- 16 7. Each cabinet shall be provided with at least 20 empty neutral connections
17 to accommodate field wiring. The neutral bus bars shall be of the style in
18 which a lug is not needed to be applied to the neutral field wire(s). All of
19 the neutral bars shall be secured in accordance with the TEES. All neutral
20 bars shall be at the same electrical potential.
21
- 22 8. The electric fan shall have ball or roller bearings and capacity of at least
23 100 cubic feet per minute and shall be installed at the top of the cabinet.
24 The fan shall be thermostatically controlled by a manually adjusted
25 thermostat with a range of 32°F and 140°F.
26
- 27 9. Three battery shelves shall be furnished. Each shelf shall be capable of
28 supporting three AlphaCell (220 GOLD-HP) batteries without visibly
29 flexing. A minimum of two and one half inches of side clearance and six
30 inches of overhead clearance is required for each battery.
31
- 32 10. A minimum of 12 inches of clearance shall be maintained between the
33 bottom rack and the bottom of the cabinet.
34
- 35 11. The cabinet shall include a Generator Transfer Switch and enclosure in
36 accordance with Section 9-29.13(8). The Transfer Switch enclosure shall
37 be installed at the same location normally occupied by the police panel
38 enclosure on the right side of the cabinet, as viewed from the front. The
39 lock shall have an aluminum rain shield cover, attached to the door with a
40 rivet.
41

42 **UPS System Internal Components**

43 The following equipment shall be furnished and mounted to the EIA rack.
44

- 45 1. Alpha – Controller Power Module - FXM 2000 w/SNMP module; part
46 number 017-232-31. FXM 2000 shall face the front of the cabinet and be
47 installed at the top of the EIA rack.
48
- 49 2. Alpha FXM 2000 support – shelf kit 19" EIA rack UPS Inverter SS with
50 hardware; part number 3610030085.
51

3. Alpha - Automatic Transfer Switch (UATS). Automatic Transfer Switch shall face the back of the cabinet and be installed at the top of the EIA rack; part number 020-168-25.
4. Alpha - Rack mount brackets 2 each and attachment screws; part number 740-697-21.
5. Pull out drawer; part number 3610035000. Pull out drawer shall face the front of the cabinet.

The following equipment shall be installed on the battery shelves:

1. Alpha - part number 181-233-10, which is the AlphaCell 220 GOLD-HP GXL Battery (Four batteries shall be provided).
2. Alpha - part number 012-306-21 Alpha Guard Battery Management System.
3. Alpha - part number 740-628-27 Battery Cable kit 48V 10 ft. ¼-20 termination.
4. Alpha - part number 189-236-10 Battery Heater Mats 14.25 inch 120V. One battery heater mat for each battery.

The Alpha components of the UPS system shall be manufactured by the following:

Alpha Technologies, Inc.
3767 Alpha Way
Bellingham, WA 98226
Phone: 360 647 2360
Email: alpha@alpha.com
<http://www.alpha.com>

Maintenance and Operations Manuals

The Contractor shall supply three Maintenance and Operations Manuals for each UPS system (each cabinet). Two Maintenance and Operations Manuals shall be in a paper format and one Maintenance and Operations Manual shall be in an electronic PDF format.

UPS System Laboratory Testing

Each UPS system shall be tested at the Washington State Department of Transportation Materials Laboratory located in Tumwater, Washington, prior to installation. The UPS system testing shall simulate the operations as installed in the field. The tests shall check the operation of each individual component as well as the overall operation of the system.

The State Materials Laboratory testing of the UPS system will consist of the following four separate stages:

1. Delivery and Assembly

2. Documentation
3. Demonstration
4. Performance Test

Testing will follow in the listed order with no time gaps between stages unless mutually agreed upon by the Contractor and State Materials Laboratory.

The Contractor shall designate a qualified representative for these tests. All communications and actions regarding testing of all equipment submitted to the State Materials Laboratory shall be made through this representative. These communications and actions shall include, but not be limited to, all notifications of failure or rejection, demonstration of the equipment, and the return of rejected equipment.

Contractor Quality Control Testing

Prior to delivery of the UPS system to the State Materials Laboratory, all components and equipment, including the batteries shall be fully installed in the cabinet and the UPS system operations shall be successfully tested by the Contractor's representative.

After the UPS system has been successfully tested, the batteries shall be removed from the cabinet and the cabinet and batteries shall be delivered, independently, to the State Materials Laboratory.

Stage 1: Delivery and Assembly

The Contractor shall provide all Work necessary to assemble the UPS system and make ready for demonstration at the State Materials Laboratory. Upon delivery, the batteries shall be reinstalled in the cabinet and the UPS system shall be made fully operational. All components for the complete UPS system, including the necessary test equipment, shall be ready for testing within 14 calendar days of delivery to the State Materials Laboratory.

Stage 2: Documentation

All documentation shall be furnished with the UPS system equipment prior to the start of testing. The documents to be supplied shall consist of the following:

1. Serial numbers when applicable.
2. Wiring diagrams for all equipment furnished. One set per cabinet.
3. Complete operations and maintenance manuals. Two sets per cabinet.
4. A description of the functions and the capabilities of individual components and of the overall UPS system.

Stage 3: Demonstration

The Contractor shall provide the following:

1. A presentation on how to operate the system.

2. A complete and thorough demonstration to show that all components of the UPS system are in good condition and operating properly.

The demonstration shall be performed by the Contractor's representative in the presence of State Materials personnel.

Stage 4: Performance Test

The performance test will be conducted by State Personnel to determine if the UPS system performs correctly. The performance test shall include the testing of the following specifications:

1. Battery Discharge Rate
2. Battery Recharge Rate
3. Power Transfer Rate

Test results shall be within the manufacturers recommended values in order for the tests to be considered successful.

Equipment Failure or Rejection

All component or system failures shall be documented. This documentation shall provide the following information:

1. A detailed description of the failure.
2. The steps undertaken to correct the failure.
3. A list of parts that were replaced, if any.

All failed or rejected equipment shall be removed from the Materials Laboratory within three calendar days following notification; otherwise, the failed or rejected equipment will be returned, freight collect, to the Contractor.

Following final approval by the State Materials Laboratory, all equipment shall be removed from the State Materials Laboratory, by the Contractor and delivered to sites as designated elsewhere in this Contract.

UPS System Field Testing

After installation, the Contractor shall field test the UPS system to ensure the system operates in accordance with Plans, Specifications and manufacturer's instructions. The test shall ensure that all components are operational within manufacturer's tolerances. The Contractor shall provide a testing procedure to the Engineer for approval. The testing procedure shall provide for operational testing of the following:

1. UPS Power Module
2. Surge Suppressor

1 3. Automatic Transfer Switch

2
3 4. Generator Power Transfer Switch

4
5 The field test shall demonstrate the loss of utility power and the switch over to
6 battery power without interference with the normal operation of the connected traffic
7 signal controller including conflict monitor and any other peripheral devices within
8 the traffic controller assembly.
9

10 **8-20.2(1) Equipment List and Drawings**

11 Section 8-20.2(1) is supplemented with the following:

12
13 (NWR November 13, 1996)

14 Manufacturer's data for materials proposed for use in the Contract which require approval
15 shall be submitted in one complete package.
16

17 (NWR April 19, 1995)

18 Pole base to light source distances (H1) for lighting standards with pre-approved Plans shall
19 be as noted in the Plans.
20

21 **8-20.3 Construction Requirements**

22 Section 8-20.3 is supplemented with the following:

23
24 (NWR April 11, 2001)

25 **Wire Removal**

26 Remove all wires from salvaged light and signal standards.
27

28 (NWR September 20, 1995)

29 **Controller Cabinet Removal**

30 Controller cabinets shall not be removed until all associated electronic equipment is removed
31 by Contracting Agency signals personnel. All other equipment shall be removed by the
32 Contractor and delivered within 24 hours following removal to the Contracting Agency.
33

34 (NWR November 16, 1995)

35 **Span Wire Removal**

36 Span wire shall not be lowered or disconnected from strain poles until all associated signal
37 heads and signs have been removed from the span.
38

39 (NWR August 5, 1996)

40 **Pole Shaft and Mast Arm Identification**

41 All removed mast arms and pole shafts shall be identified by paper identification tags
42 recording pole number, intersection location (such as SR XXX, Jct XXX), and mast arm length.
43

44 Four inch by 6 inch (minimum) tags shall be taped to corresponding pole shafts and mast
45 arms. Information on the mast arm tag shall match the information on the corresponding pole
46 shaft tag. Each tag shall be entirely covered with clear acetate tape. The tape shall be
47 wrapped one full circle around the shaft or arm with a 1/2 inch minimum overlap at the ends
48 and sides.
49

50 The Contractor shall bundle the complete signal standard assembly together. The assembly
51 consists of pole shaft, mast arm, and connecting bolts. Connecting bolts shall be attached to

1 the original mast arm base plate.

2
3 (NWR April 11, 2001)

4 **Contractor Owned Removals**

5 All removals associated with an electrical system, which are not designated to remain the
6 property of the Contracting Agency, shall become the property of the Contractor and shall be
7 removed from the project.

8
9 The Contractor shall:

10
11 Remove all wires for discontinued circuits from the conduit system.

12
13 Remove elbow sections of abandoned conduit entering junction boxes.

14
15 Abandoned conduit encountered during excavation shall be removed to the nearest
16 outlets or as directed by the Engineer.

17
18 Remove foundations entirely, unless the Plans state otherwise.

19
20 Backfill voids created by removal of foundations and junction boxes. Backfilling and
21 compaction shall be performed in accordance with Section 2-09.3(1)E.

22
23 **Communication Cables and Interfaces**

24
25 (NWR ITS February 11, 2002)

26 *Submittals*

27 Within a minimum of 30 calendar days prior to anticipated construction, the Contractor shall
28 provide all documentation pertaining to the materials and method of execution proposed to
29 satisfy the requirements of this Section. The Engineer's approval is required prior to the
30 committing of any materials or the commencement of any work.

31
32 The Engineer will either approve or disapprove each submitted item within 30 calendar days of
33 submittal subject to the completeness of the Contractor's submittal. Actual elapsed time for the
34 Engineer's review is dependent upon the completeness and appropriateness of the
35 documentation being submitted. Any deficiencies in the Contractor's submittals shall require
36 additional time for approval. Any delays caused by such deficiencies shall not be grounds for
37 extension of project consideration dates. The Contractor shall anticipate review intervals and
38 schedule submittals accordingly to ensure project progress in accordance with Section 1-08.3.

39
40 The Engineer's approval of any submitted documentation shall in no way relieve the
41 Contractor from compliance with the safety and performance requirements as specified
42 herein.

43
44 Submittals required by this item shall include, but not be limited to, the following:

- 45
46 1. A material staging plan, should the Contractor propose State owned property as a
47 staging area.
48 2. Manufacturer's complete specifications for all communication system cables and,
49 associated electronics and hardware components.
50 3. Manufacturer's complete specifications for twisted-pair cable splice enclosures.
51 4. A detailed fiber optic and twisted-pair cable installation procedure including the

following:

- a. Fiber optic cable cutting lengths reflecting the cable order and reel allocations.
- b. Cable pulling plan which shall state the exact operational procedures to be utilized and which identifies the physical locations for equipment placement, proposed equipment setup at each location, pulling tension on all cables for each pull, staffing, and the pulling methodology for each type of cable.
- c. Exact splice points as provided for herein.
- d. Workforce proposed for all equipment, safety, and manual assist operations

5. Factory test data sheets for each reel of cable delivered.

(NWR ITS February 11, 2002)

Cable Installation - General

The Contractor shall determine a suitable cable installation method to ensure that all cable installation requirements shall be met in all conduit sections. All work shall be carried out in accordance and consistent with the highest standards of quality and craftsmanship in the communication industry with regard to the electrical and mechanical integrity of the connections; the finished appearance of the installation; as well as the accuracy and completeness of the documentation.

The Contractor shall make a physical survey of the project site for the purpose of establishing the exact cable routing and cutting lengths prior to the commencement of any fiber optic work or committing any fiber optic materials. Splicing is only allowed for the programmed connection of reels and as shown in the Plans to connect a lateral fiber optic cable to the mainline distribution fiber optic cable. The Contractor shall submit a cable routing plan that shows the locations of all splices. All splice locations other than those shown in the Plans must be approved by the Engineer.

All work areas shall be clean and orderly at the completion of work and at times required by the Engineer during the progress of work.

(NWR ITS April 12, 2004)

Video, Voice, & Data Distribution And Transmission Systems

The Contractor shall provide and install the following:

- *** 1. Data Cables ***

Documentation

Documentation for each system element shall consist of the manufacturer's name and model number, serial number when available, materials and operating specifications, wiring schematic and parts list, owners manuals, factory service manuals, and procedures for factory testing and system acceptance testing specified elsewhere herein. The Contractor shall submit three copies of the documentation specified above prior to the installation of the cable or components described in the submittal. In addition, the Contractor shall submit three copies of an overall system wiring schematic and termination chart for the installed TMS elements (operation and maintenance manuals). All documentation for each individual element shall be neatly bound in such a way that the information is secured together and is totally legible without removing the information from the binding. This documentation shall be in addition to any other data, shop drawings, etc. required to be submitted as specified in these Special Provisions.

1
2 **8-20.3(1) General**

3 Section 8-20.3(1) is supplemented with the following:
4

5 (*****)

6 ***Electrical Order of Work***

7 Existing signal and illumination facilities shall not be removed until the new permanent facilities
8 are in place, tested, and fully functional.
9

10 Modifications to the existing systems, if deemed necessary by the Contractor to accommodate
11 the Contractor's proposed means and methods of construction, shall be provided by the
12 Contractor with prior approval by the Engineer. The Contractor shall propose in writing to the
13 Engineer any and all requested modifications to the designs shown in the Plans.
14

15 (NWR May 15, 2000)

16 ***Energized Equipment***

17 Work shall be coordinated so that electrical equipment, with the exception of the service
18 cabinet, is energized within 72 hours of installation.
19

20 (NWR June 20, 1995)

21 ***Pole Removal***

22 Poles designated for removal shall not be removed prior to approval of the Engineer.
23

24 (NWR January 11, 2005)

25 ***Signal Display Installation***

26 Signal displays shall be installed no more than 30 days prior to scheduled signal turn on or
27 changeover.
28

29 (NWR ITS October 10, 2005)

30 ***Existing System Disruption and Restoration***

31 The Contractor shall use every precaution to ensure that no contract work causes disruptions
32 to the existing systems, except those disruptions that are planned and approved in advance,
33 as defined herein.
34

35 Existing systems include, but are not limited to, the following:
36

- 37 A. All ITS field devices, such as ramp meter, data collection, and CCTV systems, within
38 the project construction limits.
39
40 B. Fiber optic and TWP data and video communication systems on *** I-5 and 116th
41 Street NE ***.
42

43 ***Planned Disruptions***

44 Contract work may require disruptions to existing systems, circuits, and equipment. The
45 Contractor shall schedule the work and predetermine the affected system(s), extent, start
46 time, and duration of planned disruptions. Planned disruptions shall be scheduled between
47 the hours of 8 P.M. and 4 A.M. If traffic control is required for this work, the Contractor shall
48 also adhere to the allowable closure hours listed in the Special Provisions. Failure of the
49 Contractor to restore disrupted systems and equipment prior to 4 A.M will constitute an
50 unplanned disruption, and the "Restoration Procedure" below will apply.

1 **Requirements**

2 Twenty-one calendar days prior to planned disruptions of any existing system, circuit, or
3 equipment, the Contractor shall submit to the Engineer for approval a written Disruption
4 Request. Each Disruption Request shall include the system(s) to be affected, the
5 disruption start date and time, and the estimated duration required. The Contractor shall
6 submit a separate, numbered Disruption Request for each planned disruption. Disruption
7 Request approval or rejection will be returned to the Contractor in writing by the Engineer
8 at least 7 calendar days prior to the proposed start of the disruption. The Engineer may
9 reject a requested time or duration and verbally recommend an alternate time or duration
10 agreeable to both the Contractor and the Contracting Agency.

11 **Restoration Procedure**

12 Any unplanned disruptions determined by the Engineer to be caused by the actions of the
13 Contractor or the Contractor's representative(s) shall be corrected by the Contractor at no
14 additional cost to the Contracting Agency.

15 Upon the occurrence of an unplanned disruption and subsequent notification by the
16 Engineer, the Contractor shall immediately stop all other ITS work in progress, in
17 accordance with Section 1-08.6, and shall expend all efforts to restore the disrupted
18 system(s) or correct the problem causing the disruption. The Contractor will not be granted
19 an extension of time for delays caused by the repair of disrupted systems. Unplanned
20 disruptions shall result in the assessment of liquidated damages in accordance with the
21 subsection Liquidated Damages of the Special Provision PROSECUTION AND
22 PROGRESS.

23 (NWR ITS October 4, 2004)

24 **ITS System Order of Work**

25 The Contractor shall submit for review and approval a proposal for accomplishing the ITS
26 work to the Engineer along with a copy to:

27 Freeway Systems Engineer
28 15700 Dayton Avenue North
29 P.O. Box 330310 MS-120
30 Seattle, WA 98133-9710
31 (206) 440-4462
32

33 The proposal shall be approved before any ITS fieldwork begins. The proposal shall include
34 a critical path for ITS construction which shows dates of disconnection, reconnection, and
35 installation of the following ITS components as applicable to this Contract:

- 36
- 37 1. Traffic Data Accumulation And Ramp Metering System
 - 38 2. Closed Circuit Television System
 - 39 3. Highway Advisory Radio System
 - 40 4. Communication Conduit System
 - 41 5. Communication Cable and Interfaces
 - 42 6. Variable Message Sign
 - 43 7. Video, Voice & Data Distribution and Transmission System
 - 44 8. Environmental Sensor Station
 - 45 9. Permanent Traffic Recorder Station
- 46

47 The critical path shall also indicate all roadway lane shifts or closures that will be in effect

1 during ITS construction.

2
3 (*****)

4 The function and reliability of the existing ITS system(s) shall be maintained at all times during
5 construction, except as specifically allowed during cutovers (disconnection and reconnection)
6 as approved by the Engineer. Cutovers are prohibited for the various ITS systems during the
7 following time periods:

8
9 System

Cutovers Prohibited:

10 1. Signal Interconnect Cables

5:00 AM – 9:00 AM & 3:00 PM – 7:00 PM

11
12 The existing fiber optic interconnect cables for the ramp signals (SIG-286 and SIG-288) shall
13 be maintained via the existing aerial crossing of I-5 and protected during construction until
14 such time as the new permanent traffic signal (SIG-SPUI) and Ethernet signal interconnect
15 system is accepted and operational. Variations to this and the configurations and sequencing
16 of implementation of other permanent ITS systems shown in the Plans, if deemed necessary
17 by the Contractor to accommodate the Contractor's proposed means and methods of
18 construction, will be considered by the Engineer. The Contractor shall propose in writing to
19 the Engineer any and all requested modifications to the designs shown in the Plans. Approval
20 of such modifications is not guaranteed.

21
22 (NWR October 31, 2005)

23 **Construction Core Installation**

24 The Contractor shall coordinate installation of construction cores with Contracting Agency
25 maintenance staff through the Engineer. The Contractor shall provide written notice to the
26 Engineer, a minimum of 7 working days in advance of proposed installation. The Contractor
27 shall advise the Engineer in writing when construction cores are ready to be removed.

28
29 (NWR May 15, 2000)

30 **Electrical Equipment Removals**

31 Removals associated with the electrical system shall not be stockpiled within the job site
32 without the Engineer's approval.

33
34 (*****)

35 **WSDOT Owned Equipment**

36 A portion of the temporary or existing electrical equipment to be removed shall remain the
37 property of WSDOT.

38
39 The following shall be disconnected, dismantled, and delivered to WSDOT:

40
41 Controllers and controller cabinets
42 Video detection cameras
43 Luminaires
44 Vehicle and pedestrian signal heads
45 Pedestrian pushbutton assemblies
46 Emergency vehicle detectors
47 Steel signal poles
48 Steel lighting poles
49 Wood pole luminaire arms

50
51 Removed electrical equipment which remains the property of WSDOT shall be delivered to:

WSDOT Signal Shop
3700 9th Ave. So.
Seattle WA 98134
Phone: (206) 442-2110

Five days written advance notice shall be delivered to both the Engineer and the Electronic Parts Specialist at the address listed above. Delivery shall occur during the hours of 8:00 a.m. to 2:00 p.m. Monday through Friday. Material will not be accepted without the required advance notice.

Equipment damaged during removal or delivery shall be repaired or replaced to the Engineer's satisfaction at no cost to WSDOT or the Contracting Agency.

The Contractor shall be responsible for unloading the equipment where directed by the Engineer at the delivery site.

(NWR April 11, 2001)

Wire Removal

Remove all wires from salvaged light and signal standards.

(*****)

Controller Cabinet Removal

Controller cabinets shall not be removed until all associated electronic equipment is removed by WSDOT signals personnel. All other equipment shall be removed by the Contractor and delivered within 24 hours following removal to WSDOT.

(NWR November 16, 1995)

Span Wire Removal

Span wire shall not be lowered or disconnected from strain poles until all associated signal heads and signs have been removed from the span.

(NWR August 5, 1996)

Pole Shaft and Mast Arm Identification

All removed mast arms and pole shafts shall be identified by paper identification tags recording pole number, intersection location (such as SR XXX, Jct XXX), and mast arm length.

Four-inch by 6-inch (minimum) tags shall be taped to corresponding pole shafts and mast arms. Information on the mast arm tag shall match the information on the corresponding pole shaft tag. Each tag shall be entirely covered with clear acetate tape. The tape shall be wrapped one full circle around the shaft or arm with a 1/2 inch minimum overlap at the ends and sides.

The Contractor shall bundle the complete signal standard assembly together. The assembly consists of pole shaft, mast arm, and connecting bolts. Connecting bolts shall be attached to the original mast arm base plate.

(*****)

Contractor Owned Removals

All removals associated with an electrical system, which are not designated to remain the property of the WSDOT, shall become the property of the Contractor and shall be removed from the project.

1
2 The Contractor shall:

- 3
4 1. Remove all wires for discontinued circuits from the conduit system.
5 2. Remove elbow sections of abandoned conduit entering junction boxes.
6 3. Abandoned conduit encountered during excavation shall be removed to the nearest
7 outlets or as directed by the Engineer.
8 4. Remove foundations entirely, unless the Plans state otherwise.
9 5. Backfill voids created by removal of foundations and junction boxes. Backfilling and
10 compaction shall be performed in accordance with Section 2-09.3(1)E.

11
12 (*****)

13 ***Relocation and Removal of Existing Illumination and Signal Equipment***

14 The Contractor shall relocate existing illumination and signal equipment if necessary for
15 staged construction. When the permanent facilities are activated or as directed by the
16 Engineer, the Contractor shall remove all existing signal poles, messenger wire, signal heads,
17 mountings, pushbuttons, light poles, luminaires, mounting hardware, messenger cables,
18 circuit wires and other equipment associated with the ramp intersection signals, illumination
19 and ramp and ramp illumination systems that are not indicated in the Plans to remain.
20 Equipment shall be salvaged as noted under "Delivery of Removed Items". Voids created by
21 the removal shall be backfilled as specified for foundation removal.

22
23 (NWR May 15, 2000)

24 ***Surface Mounted Appurtenances***

25 Electrical appurtenances to be surface mounted on structures shall be mounted so that a
26 minimum 1/4-inch space is maintained between the appurtenance and structure.

27
28 **8-20.3(5) Conduit**

29 Section 8-20.3(5) is supplemented with the following:

30
31 (NWR August 10, 2009)

32 ***Conduit Seal, Detectable Tape and Location Wire***

33 Upon installation of wiring, all conduits entering pad mounted cabinets, all conduit entering
34 ITS hubs, and all ITS conduit 2 inches in diameter or larger shall be sealed with an approved
35 mechanical plug at both ends of the conduit run. Installation of mechanical plugs shall conform
36 to the manufacturer's recommendations. Upon installation of wiring at other locations, conduit
37 shall be sealed with duct seal. Upon installation of the pull string, spare conduit shall be
38 plugged.

39
40 A pull string rated for 200 lbs. or greater shall be installed in all spare conduits.

41 Detectable underground warning tape shall be placed 12-inches above all innerduct installed
42 in trenches.

43
44 Location 14 AWG single stranded orange USE insulated wire shall be placed in conjunction
45 with all innerduct installed in trenches. The location wire shall be placed directly above the
46 conduit containing innerduct in single conduit installations or between the conduits containing
47 innerduct in multiple conduit installations.

48
49 Location wire routed into pull boxes or cable vaults shall be attached to the "C" channel or the
50 cover hinge bracket with stainless steel bolts and straps. A 1-foot loop of locate wire shall be
51 provided above the channel as shown in the Plans.

1
2 **Method of Conduit Installation**

3 Section 8-20.3(5)E is supplemented with the following:

4
5 (*****)

6 Conduit placed under paved portions existing ramps that are designated for permanent
7 removal by the project may be installed by open trenching per Section 8-20.3(5)E1.
8

9 **8-20.3(6) Junction Boxes, Cable Vaults, and Pull Boxes**

10 Section 8-20.3(6) is supplemented with the following:

11
12 Unless otherwise noted in the Plans or approved by the Engineer, junction boxes, cable
13 vaults and pull boxes shall not be placed within the traveled way or paved shoulders.
14 All junction boxes, cable vaults, and pull boxes placed within the traveled way or paved
15 shoulders shall be heavy-duty.
16 Junction boxes, pull boxes and cable vaults shall not be installed within the clear working
17 space in front of the doors of any cabinet. The clear working space is defined as the
18 width of the cabinet doors and 36 inches deep.
19

20 **Install a concrete collar around each new Type 1 and Type 2 junction box installed**
21 **in soil. Install a concrete collar around each existing Type 1 and Type 2 locking lid**
22 **junction box, installed in soil, and scheduled to be relocated or adjusted.**
23 **The concrete collar shall be one foot wide and one foot deep, rectangular in shape,**
24 **and installed around the entire perimeter of the junction box. The exposed**
25 **portions of the collar shall be formed to have a neat appearance. The top outer**
26 **edges of the collar shall have a 3/4 inch chamfer. The concrete mix design shall**
27 **be commercial concrete per standard specification 6-02.3(2)B.**
28

29 Wiring shall not be pulled into any conduit until all associated junction boxes have been
30 adjusted to, or installed in, their final grade and location, unless installation is necessary
31 to maintain system operation. If wire is installed for this reason, sufficient slack shall be
32 left to allow for future adjustment.
33

34 Prior to installing new cables or reinstalling existing cables into new or existing cable
35 vaults, pull boxes or junction boxes, the cable vault, pull box or junction box shall be
36 cleaned of all dirt and debris.
37

38 When junction boxes, cable vaults and pull boxes are installed or adjusted prior to
39 construction of finished grade, pre-molded joint filler for expansion joints may be placed
40 around the junction boxes, cable vaults and pull boxes. The joint filler shall be removed
41 prior to adjustment to finished grade.
42

43 When junction boxes, cable vaults or pull boxes are adjusted to finished grade, the six-
44 inch gravel pad requirements shall be maintained. When existing junction boxes pull
45 boxes or cable vaults do not have this gravel pad, or the gravel pad does not meet these
46 specifications, a gravel pad, meeting these specifications, shall be installed as part of
47 the adjustment to finished grade.
48

49 Heavy-duty junction boxes, cable vaults and pull boxes shall be installed in accordance
50 with the following:
51

1. Excavation shall be sufficient to leave one foot in the clear between their outer surface and the earth bank.
2. The base layer of crushed surfacing top course shall be compacted in accordance with Section 2-09.3(1)E.
3. After installation, the lid/cover shall be kept bolted down during periods when work is not actively in progress at the junction box, cable vault or pull box.
4. Before closing the lid/cover, the lid/cover and the frame/ring shall be thoroughly brushed and cleaned of all debris. There shall be absolutely no visible dirt, sand or other foreign matter between the bearing surfaces.
5. When the lid/cover is closed for the final time, a liberal coating of anti-seize compound shall be applied to the bolts and nuts and the lid shall be securely tightened.
6. Hinges shall be located on the side of the box, which is nearest to the adjacent shoulder. Hinges shall allow the lid to open 180 degrees.

8-20.3(8) Wiring

Section 8-20.3(8) is supplemented with the following:

(NWR April 14, 2003)

Wire Labels

At each junction box, all illumination wires, power supply wires, and communication cable shall be labeled with a PVC marking sleeve. For illumination and power supply circuits the sleeve shall bear the circuit number. For communication cable the sleeve shall be marked "Comm."

(NWR March 13, 1995)

Wire Splices

All splices shall be made in the presence of the Engineer.

(NWR May 1, 2006)

Illumination Circuit Splices

Temporary splices shall be the heat shrink type.

(March 13, 1995)

Field Wiring Chart

501	AC+ Input	516-520	Railroad Pre-empt
502	AC- Input	5A1-5D5	Emergency Pre-empt
503-510	Control-Display	541-580	Coordination
511-515	Sign Lights	581-599	Spare

Movement

Number	1	2	3	4	5	6	7	8	9
Vehicle Head									
Red	611	621	631	641	651	661	671	681	691
Yellow	612	622	632	642	652	662	672	682	692
Green	613	623	633	643	653	663	673	683	693
Spare	614	624	634	644	654	664	674	684	694
Spare	615	625	635	645	655	665	675	685	695

AC-	616	626	636	646	656	666	676	686	696
Red Auxiliary	617	627	637	647	657	667	677	687	697
Yellow Auxiliary	618	628	638	648	658	668	678	688	698
Green Auxiliary	619	629	639	649	659	669	679	689	699
Pedestrian Heads & Dets.									
Hand	711	721	731	741	751	761	771	781	791
Man	712	722	732	742	752	762	772	782	792
AC-	713	723	733	743	753	763	773	783	793
Detection	714	724	734	744	754	764	774	784	794
Common-	715	725	735	745	755	765	775	785	795
Detection									
Spare	716	726	736	746	756	766	776	786	796
Spare	717	727	737	747	757	767	777	787	797
Spare	718	728	738	748	758	768	778	788	798
Spare	719	729	739	749	759	769	779	789	799
Detection									
AC+	811	821	831	841	851	861	871	881	891
AC-	812	822	832	842	852	862	872	882	892
Common-	813	823	833	843	853	863	873	883	893
Detection									
Detection A	814	824	834	844	854	864	874	884	894
Detection B	815	825	835	845	855	865	875	885	895
Loop 1 Out	816	826	836	846	856	866	876	886	896
Loop 1 In	817	827	837	847	857	867	877	887	897
Loop 2 Out	818	828	838	848	858	868	878	888	898
Loop 2 In	819	829	839	849	859	869	879	889	899
Supplemental Detection									
Loop 3 Out	911	921	931	941	951	961	971	981	991
Loop 3 In	912	922	932	942	952	962	972	982	992
Loop 4 Out	913	923	933	943	953	963	973	983	993
Loop 4 In	914	924	934	944	954	964	974	984	994
Loop 5 Out	915	925	935	945	955	965	975	985	995
Loop 5 In	916	926	936	946	956	966	976	986	996
Loop 6 Out	917	927	937	947	957	967	977	987	997
Loop 6 In	918	928	938	948	958	968	978	988	998
Spare	919	929	939	949	959	969	979	989	999

8-20.3(9) Bonding, Grounding

Section 8-20.3(9) is supplemented with the following:

(NWR August 21, 2006)

Junction Box Grounding

Where shown in the Plans or where designated by the Engineer, the metal frame and lid of existing junction boxes shall be grounded to the existing equipment grounding system. The existing equipment grounding system shall be derived from the service serving the raceway system of which the existing junction box is a part.

(*****)

Where existing ITS conduits are utilized, an equipment-grounding conductor shall be installed except for conduits with innerduct.

In addition to the conductors called for in the contract, all ITS conduits without innerduct shall be installed with an equipment-grounding conductor and bonding jumpers sized per NEC 250-122, with the exception that the minimum size shall be 8 AWG.

1
2 All new and existing junction boxes, cable vaults, and pull boxes that an equipment-grounding
3 conductor is pulled to shall be bonded in accordance with Section 8-20.3(9).
4

5 Location wires shall not be connected to the equipment-grounding system.
6

7 Supplemental grounding shall be provided at signal standards for ramp meters and steel sign
8 posts for advance warning signs. Foundations for these standards shall be installed with a
9 bare 4 AWG copper wire, which is connected to the reinforcing cage with an approved acorn
10 clamp or exothermic weld and routed to connect to the pole at the grounding lug.
11

12 **8-20.3(10) Services, Transformer, Intelligent Transportation System Cabinet**

13 Section 8-20.3(10) is supplemented with the following:
14

15 (NWR March 4, 2009)

16 ***Cabinet Construction Core***

17 A green construction core shall be installed for each cabinet core lock. Upon contract
18 completion, two master keys for each cabinet shall be delivered to the Engineer.
19

20 **8-20.3(11) Testing**

21 Section 8-20.3(11) is supplemented with the following:
22

23 (NWR August 5, 1996)

24 ***Communication Cable Acceptance Testing***

25 Communications cable acceptance testing shall be performed for each pair of conductors.
26 Acceptance testing shall commence only after all communication cable is installed, and all
27 splices have been completed, with the exception of the splices connecting the new cable to
28 existing cable. If any test fails, repairs shall be made by the Contractor and the entire test
29 series shall be repeated.
30

31 Three tests shall be performed on each cable installation. All tests shall be conducted in the
32 presence of the Engineer. The Contractor shall provide the necessary test equipment, perform
33 the tests, and document the results. When the tests are completed, whether successful or not,
34 the test result documentation shall be provided to the Engineer. All tests shall be conducted
35 on all pairs in the communication cable to each cable drop point. Seven calendar days' notice
36 shall be given by the Contractor prior to performing any of the tests.
37

38 For each arterial all testing shall be conducted from the same cable drop point.
39

40 ***Continuity Test***

41 The continuity test shall be made on each conductor as well as the cable shield. Each
42 conductor and/or shield shall show a resistance of not more than 20 ohms per 1,000 feet of
43 conductor. The resistance of each conductor shall be recorded.
44

45 ***Insulation Test***

46 The insulation test shall be measured on each insulated conductor with all other conductors
47 in the cable (including cable shield) grounded. The measurement shall be made with a DC
48 potential of not less than 60 percent and not more than 90 percent of the insulation rating for
49 1 minute. Insulation resistance shall exceed 5,000 megohm-miles. The insulation resistance
50 of each conductor shall be recorded.
51

1 **Frequency Response and Noise Test**

2 The frequency response and noise tests shall be performed on each pair of conductors. All
3 tests shall be made using transmission test instruments designed especially for use on data
4 circuits. Two such instruments are required; one for use at the designated testing location and
5 the other for use at each cable drop location.
6

7 The test sets shall be subject to approval by the Engineer prior to the start of the tests.
8

9 The first test shall measure frequency response from the test location to each cable drop. A
10 tone of 0 dBm shall be applied to the transmitting end and the signal level shall be measured
11 at the receiving end. The cable pair being tested shall be isolated from ground and terminated
12 in 600 ohms at both test locations. A 10,000 ohm resistor shall terminate the same pair at all
13 other cable drop locations. The test shall be performed at frequencies of 300, 500, 700, 1,004,
14 1,500, 2,300, and 3,000 Hz. The received tone shall be:
15

16 Greater than minus 16 dBm at 1,004 Hz.
17

18 2 dB gain to 8 dB loss with respect to the level at 1,004 Hz over the frequency range of 500
19 to 2,500 Hz.
20

21 2 dB gain to 12 dB loss with respect to the level at 1,004 Hz over the frequency ranges of 300
22 to 500 Hz and 2,500 to 3,000 Hz.
23

24 The second test shall measure circuit or background noise. The cable pair being tested shall
25 be terminated the same as in the previous test. A C-message filter in the test set shall restrict
26 the spectrum to the range normally used for voice-grade data circuits. The noise level shall
27 be at least 13 dB below the lowest signal level measured in the first test.
28

29 All test data shall be recorded in an approved format. Cables which fail the tests shall be
30 repaired or replaced as directed by the Engineer.
31

32 (*****)

33 **Traffic Signal Turn-on**

34 Prior to a Traffic Signal Turn-on event, the Contractor shall conduct a Pre Turn-on coordination
35 meeting with the following WSDOT and Contracting Agency personnel included as invited
36 attendees:
37

38 Project Engineer
39 Project Chief Inspector
40 Electrical Inspector
41 Signal Operations Engineer
42 Signal Maintenance Technician
43

44 The Contractor shall provide the Engineer a minimum of 5 days written notice of the proposed
45 Pre Turn-on coordination meeting date and time.
46

47 Prior to the Pre Turn-on coordination meeting, the Contractor shall complete the items of work
48 detailed in the Traffic Signal Turn-on Checklist and submit the completed checklist to the
49 Engineer. The Traffic Signal Turn-on Checklist form will be furnished to the Contractor by the
50 Engineer.
51

1 Prior to scheduling a turn-on date, the Contractor shall provide verification to the Engineer
2 that tests 1, 2, and 3 as specified in this section have been completed.
3

4 **8-20.3(14) Signal Systems**

5 Section 8-20.3(14) is supplemented with the following:
6

7 (NWR August 10, 2009)

8 **Temporary Video Detection System**

9 Temporary video detection systems shall be completely installed and made operational prior
10 to any associated induction loop being disabled. (NWR August 10, 2009)
11

12 **Video Detection Equipment Training**

13 The Contractor shall provide a minimum of 8 hours of video detection equipment training for
14 Contracting Agency personnel. The Contractor shall provide for the video equipment
15 manufacturer or their duly authorized representative to conduct the training. The Contractor
16 shall notify the Project Engineer 7 days in advance of the training session. All pertinent
17 documentation including, but not limited to maintenance and operation manuals and wiring
18 diagrams shall be made available for use in this training session.
19

20 **Signal Controllers**

21 Section 8-20.3(14)A is supplemented with the following:
22

23 (August 2, 2010)

24 **Testing**

25 All signal control equipment shall be tested at the Washington State Department of
26 Transportation Materials Laboratory located in Tumwater, Washington, prior to final
27 delivery. The tests shall check the operation of each individual component as well as the
28 overall operation of the system.
29

30 The Contractor shall designate a qualified representative for these tests. Notification of
31 this representative shall be submitted for approval, in writing, to the State Materials
32 Laboratory, 14 calendar days prior to any equipment deliveries. The Engineer shall also
33 receive a copy of this notification, which includes the representative's name, address, and
34 telephone number. All communications and actions regarding testing of all equipment
35 submitted to the State Materials Laboratory shall be made through this representative.
36 These communications and actions shall include, but not be limited to, the following:
37

38 All notifications of failure or rejection, demonstration of the equipment, and the return of
39 rejected equipment.
40

41 The State Materials Laboratory testing process will consist of the following four separate
42 stages:
43

- 44 a. Delivery and Assembly
 - 45 b. Demonstration and Documentation
 - 46 c. Performance Test
 - 47 d. Operational Test
- 48

49 Testing will follow in the correct order with no time gaps between stages unless mutually
50 agreed upon by the Contractor and State Materials Laboratory.
51

1 **Stage 1 Delivery Assembly**

2 All components for the complete traffic control systems, including the necessary test
3 equipment, shall be assembled and ready for demonstration within 10 working days of
4 delivery to the Materials Laboratory. The systems shall simulate the operations as installed
5 in the field.
6

7 Equipment and prerequisites necessary to complete this stage shall include:

- 8
- 9 a. Detection Simulator: The detection simulator shall provide at least one detector
10 per phase and variable traffic volumes. One simulator shall be required for every
11 two controllers tested.
- 12
- 13 b. Communications Network: Locations, specified for coordinating communications
14 equipment and cable, shall be completely wired to provide an operational
15 communications system between all local and master controllers.
16

17 The Contractor shall provide labor, equipment, and materials necessary to assemble all
18 control equipment complete and ready for demonstration. Materials and equipment used
19 for this stage that are not required for field installation shall remain the property of the
20 Contractor. Failure to complete this stage within 10 working days will result in rejection of
21 the entire system.

22 **Stage 2 Demonstration and Documentation**

23 This stage shall be completed within 7 working days following the completion of Stage 1.
24 Failure to do so shall result in rejection of the entire shipment.
25

26 All documentation shall be furnished with the control equipment prior to the start of testing.
27 If corrections to any document are deemed necessary by the State, the Contractor shall
28 submit this updated version prior to the final approval by the State Materials Laboratory.
29 The documents to be supplied shall consist of or provide the following:

- 30 a. A Complete accounting of all the control and test equipment required.
- 31 b. A complete set of documents which shall include:
- 32 1. Serial numbers when applicable.
- 33 2. Written certification that equipment of the same make and model has been
34 tested according to NEMA Environmental Standards and Test Procedures, and
35 has met or exceeded these standards. The certificate shall include equipment
36 model number and where, when, and by whom the tests were conducted. This
37 certificate shall accompany each shipment of controllers.
- 38 3. Reproducible Mylar wiring diagrams and two blue-tone prints for each controller
39 and cabinet supplied. The sheet size shall be 24 inches by 36 inches.
- 40 4. Wiring diagrams for all auxiliary equipment furnished. One set per cabinet.
- 41 5. Complete operations and maintenance manuals including complete and
42 correct software listing and flow charts. One set of operations and maintenance
43 manuals per cabinet; at least four but no more than ten. Five sets of software
44 listings and flow charts.
- 45 6. Complete operations and maintenance manuals for all auxiliary equipment.
46 One set per cabinet.
- 47 c. A description of the functions and the capabilities of individual components and of

the overall control system.

- d. A presentation on how to operate the system.
- e. A complete and thorough demonstration to show that all components of the control system are in good condition and operating properly, and proof that the controller and cabinet are functioning correctly.
- f. Detailed instructions for installing and operating the controller(s), including explanations on the use of all features of the controller(s).
- g. The operational and maintenance manuals for each traffic signal controller supplied including as a minimum, but not to be limited to the following:

- 1. Detailed instructions for maintaining all hardware components, controller, and auxiliary equipment.
- 2. A complete parts list detailing all manufacturer's identification codes.
- 3. Detailed wiring diagrams and schematics indicating voltage levels and pictorial description, part name, and location for all hardware components, controller, and auxiliary equipment.

The demonstration shall include the following:

- a. Phasing per Plans and all phase timing.
- b. Detection including any special detector functions.
- c. Conflict Monitor and Load Switches.
- d. Special Coordination including communication equipment.

This demonstration shall be performed by the Contractor in the presence of State Materials personnel. The Contractor shall supply any item not accounted for within 5 working days of the accounting. Controllers and cabinets that remain incomplete 5 working days after notification shall be rejected and returned freight collect to the Contractor.

Stage 3 Unit Performance Test

A minimum of 10 working days shall be allowed for one or two cabinet assemblies and 5 working days for each additional assembly.

The unit performance test will be conducted by State Personnel to determine if each and every controller cabinet assembly complies with NEMA Environmental Standards as stated in NEMA publication No. TS 1-1976, Part 2.

Any unit submitted, whose failure has been corrected, shall be retested from the beginning of this stage.

Stage 4 Operational Test

All control and auxiliary equipment shall operate without failure for a minimum of 10 consecutive days. If an isolated controller is specified, it shall operate as an isolated controller. If a coordinated system is specified, it shall operate as a total coordinated system with the master and all local controllers operating in all coordinated modes.

If any failure occurs during this stage, all equipment for this stage shall be restarted following completion of repairs.

Equipment Failure Or Rejection

Equipment failures shall be defined as set forth in NEMA Publication No. TS 1-1976.

1 Failure of load switches, detector amplifiers, and conflict monitors shall not result in
2 rejection of the controller or cabinet. However, the Contractor shall stock, as replacements,
3 approximately 30 percent more than the total for these three items. All excess material
4 shall remain the property of the Contractor following completion of all tests.

5
6 If a failure occurs during Stages 3 or 4, repairs shall be made and completed within 10
7 working days following notification of the malfunction. The Contractor shall have the option
8 of making on-site repairs or repair them at a site selected by the Contractor. Failure to
9 complete repairs within the allotted time shall result in rejection of the controller or cabinet
10 assembly under test.

11
12 A total of two failures will be allowed from the start of Stage 3 to the end of Stage 4. If
13 three failures occur during this time period, the equipment will be rejected. New equipment
14 of different serial numbers submitted as replacement shall be received by the Materials
15 Laboratory for testing under Stage 3 within 10 working days following notification of
16 rejection. Failure to meet this requirement within the allotted time will result in rejection of
17 the entire system. Software errors will be considered as failures and, if not corrected within
18 10 working days, the entire system will be subject to rejection. Following rejection of any
19 equipment, the Contractor shall be responsible for all costs incurred. This shall include but
20 not be limited to all shipping costs.

21
22 When the traffic control program is supplied by the State, the Contractor shall prove that
23 any failures are, in fact, caused by that program and not the hardware.

24 All component or system failures, except load switches and detector amplifiers, shall be
25 documented. This documentation shall be submitted prior to commencing the test or stage
26 in which the failure was found and shall provide the following information:

- 27
28 a. A detailed description of the failure.
29 b. The steps undertaken to correct the failure.
30 c. A list of parts that were replaced, if any.

31
32 Upon completion of the tests, the equipment will be visually inspected. If material changes
33 are observed which adversely affect the life of the equipment, the cause and conditions
34 shall be noted. The Contractor will immediately be given notice to correct these conditions.
35 If not repaired within 10 working days of notification, the equipment will be subject to
36 rejection. A final accounting shall be made of all equipment prior to approval.

37
38 All failed or rejected equipment shall be removed from the Materials Laboratory within 3
39 working days following notification; otherwise, the failed or rejected equipment will be
40 returned, freight collect, to the Contractor.

41
42 Following final approval by the State Materials Laboratory, all equipment shall be removed
43 from the State Materials Laboratory and delivered to sites as designated elsewhere in this
44 contract.

45 **Guarantees**

46 Guarantees and warranties shall be in accordance with Section 1-05.10.

47
48
49 (*****)

50 **Delivery to State Materials Laboratory**

51 The Contractor shall be responsible for delivery of equipment to the State Material

1 Laboratory.

2
3 **Delivery to Site**

4 The Contractor shall be responsible for removal of tested equipment from the State
5 Materials Laboratory and delivery of approved equipment to the project site.

6
7 **8-20.3(14)B Signal Heads**

8 The first paragraph of Section 8-20.3(14)B the first paragraph is revised to read:

9
10 (NWR February 11, 2013)

11 **Signal Heads Installation with Back Plates**

12 Signal heads shall be installed with back plates.

13
14 Where the yellow reflective tape is applied, the application surface of the back plate shall
15 be cleaned, degreased with isopropyl alcohol and dried prior to application of the sheeting.

16
17 **8-20.3(14)C Induction Loop Vehicle Detectors**

18 Section 8-20.3(14)C is supplemented with the following:

19
20 (NWR February 22, 2005)

21 **Induction Loop Installation**

22 Items 2 and 11 and the last two sentences of Item 4 are deleted.

23
24 (NWR August 16, 2010)

25 **Round Loops**

26 Round loops shall be constructed in accordance with the following requirements:

- 27
- 28 1. Loop conductor and lead in cable shall conform to these Special Provisions.
 - 29
 - 30 2. Round sawcuts shall be 6 feet in diameter and shall be constructed using equipment
31 designed for cutting round loops. The equipment shall use a concave, diamond-
32 segmented blade. The sawcuts shall be normal to the pavement surface and shall
33 be a minimum of 0.25 inch wide. The sawcut depth shall be a minimum of 2 5/8
34 inches and a maximum of 3 inches measured at any point along the perimeter,
35 except on bridge decks. Other methods of constructing the round sawcut, such as
36 anchoring a router or flat blade saw, will not be allowed.
 - 37
 - 38 3. The bottom of the sawcut shall be smooth. No edges created by differences in
39 sawcut depths will be allowed.
 - 40
 - 41 4. All sawcut corners shall be rounded to a minimum 1.5-inch radius.
 - 42
 - 43 5. All sawcuts shall be cleaned with a 1000 psi high pressure washer as certified by
44 the manufacturer's label on the machine or as measured by an in line pressure
45 gauge. Wash water and slurry shall be vacuumed out and the sawcut shall be blown
46 dry with compressed air. Disposal of the wash water and slurry shall comply with
47 the requirements of Section 1-07.5(3) and the Special Provision **LEGAL**
48 **RELATIONS AND RESPONSIBILITIES TO THE PUBLIC.**
 - 49
 - 50 6. Loops shall be installed after grinding and prior to the final lift of roadway surfacing
51 material.

- 1
2 7. The conductor shall be installed one turn on top of the previous turn. All turns shall
3 be installed in a clockwise direction. The conductors shall be secured to prevent
4 floating with 2-inch lengths of high temperature foam backer rod sized for a snug fit.
5 The backer rod shall be spaced at 2-foot intervals around the perimeter of the sawcut
6 and at corners.
7
8 8. Installation of the sealant shall completely encapsulate the loop conductors. A
9 minimum of 1 inch of sealant shall be provided between the top of the conductors
10 and the top of the sawcut. The top of the sealant shall be flush to 1/8 inch below the
11 top of the sawcut.
12
13 9. Use of kerosene solvent is prohibited.
14

15 (NWR October 5, 2009)

16 **Existing Traffic Loops**

17 The Contractor shall notify the Area Traffic Engineer through the Engineer a minimum of
18 5 working days in advance of pavement removal or grinding in areas with existing loops.
19

20 If the Engineer suspects that damage to any loop, not identified in the Plans as being
21 replaced, may have resulted from Contractor's operations or is not operating adequately,
22 the Engineer may order the Contractor to perform the field tests specified in Section 8
23 20.3(14)D. The test results shall be recorded and submitted to the Engineer. Loops that
24 fail any of these tests shall be replaced.
25

26 Loops that fail the tests, as described above, and are replaced shall be installed in
27 accordance with current WSDOT design standards and Standard Plans, as determined
28 by the Engineer.
29

30 If traffic signal loops that fail the tests, as described above, are not replaced and
31 operational within 48 hours, the Contractor shall install and maintain interim video
32 detection until the replacement loops are operational. The type of interim video detection
33 furnished shall be approved by the Engineer prior to installation.
34

35 **8-20.3(14)D Test for Induction Loops and Lead-in Cable**

36 Section 8-20.3(14)D is supplemented with the following:
37

38 (NWR October 5, 2009)

39 **Induction Loop Tests**

40 Tests A and D are revised as follows:
41

42 Test A – The DC resistance between the 2 lead-in cable wires, including the loop, shall
43 be measured by a volt ohmmeter. The resistance shall not exceed 5-ohms or lower
44 the Q of the circuit below 5 where Q is equal to the "Inductive Impedance @ 50 kHz"
45 divided by "Resistance".
46

47 Test D – An inductance test shall be made to determine the inductance level of each
48 inductance loop. The Contractor shall record the inductance level of each inductance
49 loop installed on the project and shall furnish the findings to the Engineer. An induction
50 level, as measured from the controller cabinet, below 50-microhenries is considered a
51 failure.

(NWR October 5, 2009)

Existing Lead-in Cable Test

When new induction loops are scheduled to be installed and spliced to an existing two-conductor shielded detector lead-in cable, the Contractor shall perform the following:

1. Disconnect the existing detector lead-in cable in the controller cabinet and at the loop splice.
2. Megger test both detector lead-in cable conductors. A resistance reading of less than 100-megohms is considered a failure.
3. Detector lead-in cables that fail the test shall be replaced and then retested.
4. After final testing of the detector lead-in cable, the loop installation shall be completed and the loop system tested according to Tests A, C and D.
5. Connect the detector lead-in cables in the controller cabinet.

(NWR February 11, 2013)

Loop Sealant

Loop sealants shall be installed per manufacturer's recommendations.

3M Black 5000 sealant shall be installed so that the sealant is protected from wheel tracking prior to the sealant being fully cured. When 3M Black 5000 loop sealant is installed below the final lift of an HMA installation, a minimum of 5 consecutive days of cure time is required before the final lift is installed.

8-20.5 Payment

Section 8-20.5 is supplemented with the following:

(NWR August 10, 2009)

All costs for installing conduit and junction boxes containing both signal wiring and signal interconnect shall be included in the lump sum contract prices for the associated traffic signal system bid item.

(NWR August 10, 2009)

All costs associated with the removal of a temporary traffic signal system, temporary illumination system, temporary traffic and illumination system or a temporary video detection system shall be included in the lump sum contract price for the associated bid item.

(NWR August 10, 2009)

All costs for conduit, junction boxes, and associated hardware and fittings installed on or within a structural item (wall, bridge, or barrier) shall be included in the respective lump sum bid item for work on the associated electrical or conduit system.

(*****)

All costs associated with installing conduits by directional boring, jacking or drilling methods shall be included in the lump sum bid item for the associated system requiring the conduit crossing. The cost of boring, jacking or drilling tunnels used for the combined installation of conduits for a signal system and an ITS or illumination system shall be included in the signal system bid item.

(NWR March 13, 1995)

The construction signs used during signal turn-on will be paid as part of "Construction Signs

Class A".

8-21 Permanent Signing

8-21.2 Materials

9-28.11 Hardware

Section 9-28.11 is supplemented with the following:

(August 3, 2015)

Locknuts shown in the Plans specifying a locknut or locknut with nylon insert shall conform to one of the following:

1. ANCO Pin Locknut, with stainless steel locking pin, as manufactured by Lok-Mor, Inc.
2. Tri-lock Locknut, as manufactured by Lok-Mor, Inc.
3. Grade DH or 2H hex or heavy hex nuts conforming to one of the ASTM material specifications in the Locknut category of the Hardware table of this Section may be modified by installing a nylon insert washer. A minimum of 60-percent of the original number of threads shall meet the requirements of the applicable ASTM material specification after insertion of the nylon insert washer.
4. Hex or heavy hex nuts conforming to one of the ASTM material specifications in the Locknut category of the Hardware table of this Section may be modified by adding one of the following products to a minimum of one-half of the internal threads of the nut and the entire exterior top surface of the nut:
 - a. Nylok Blue Torq-Patch Locknut.
 - b. Nylok Precote 30.
 - c. ND Patch 360 Ring Patch.

The nuts with any of the three listed products are permitted for a single use only and shall have a maximum of two nut widths of thread extending beyond the nut after installation.

The alternatives to locknuts specified in Standard Plans G-90.20, G-90.30, and J-75.41 are deleted and replaced with the four options specified above.

9-28.14 Sign Support Structures

Section 9-28.14 is supplemented with the following:

(April 6, 2015)

Sign Structure Foundation Shaft Casing And Slurry

All temporary casing shall be a smooth wall non corrugated structure of steel base metal. All temporary casing shall be of ample strength to resist damage and deformation from transportation and handling, installation and extraction stresses, and all pressures and forces acting on the casing. The temporary casing shall be capable of being removed

without deforming and causing damage to the completed shaft, and without disturbing the surrounding soil.

The temporary casing shall be clean prior to placement in the excavation. The temporary casing may be telescoped, but the outside diameter of the temporary casing shall not be less than the specified diameter of the shaft.

Slurry for shaft foundations shall be either synthetic slurry or water slurry, conforming to the following requirements:

Synthetic Slurries

Synthetic slurries shall be used in conformance with the manufacturer's recommendations, and the quality control plan specified in Section 8-21.3(9)F as supplemented in these Special Provisions. The sand content of synthetic slurry prior to final cleaning and immediately prior to placing concrete shall be less than 1.0 percent, in accordance with API 13B-1, Section 5.

Water Slurry

Water without site soils may be used as slurry when casing is used for the entire length of the drilled hole. Use of water slurry without full length casing may only be used with the approval of the Engineer. Water slurry shall conform to the following requirements:

Property	Test	Requirement
Density (pcf)	Mud Weight (Density) API 13B-1, Section 1	65 max.
Sand Content (percent)	Sand API 13B-1, Section 5	1.0 max.

Slurry temperature shall be at least 40F when tested.

9-28.14(2) Steel Structures and Posts

Section 9-28.14(2) is supplemented with the following:

(August 3, 2017)

Monotube Sign Structures

Structural steel, except for cover plates, anchor rod templates and as otherwise shown in the Plans, shall conform to either ASTM A 572 Grade 50, or ASTM A 588. Cover plates shall conform to ASTM A 36.

Handhole cover screws shall conform to ASTM F 593, Grade 1.

Sign bracket bolts, nuts, and washers shall conform to Section 9-06.5(1).

Monotube splice bolts, mounting beam rods, and associated nuts and washers, shall conform to ASTM F 3125 Grade A325, and shall be galvanized after fabrication in accordance with AASHTO M 232. Tension control bolts conforming to ASTM F 1852 may be used as monotube splice bolts, and if used shall be galvanized after fabrication in accordance with ASTM B 695 Class 55 Type I.

Anchor rods shall conform to ASTM F 1554 Grade 105, including supplemental requirements S2, S3, and S5. Nuts shall conform to ASTM A 563 Grade DH. Washers shall conform to ASTM F 436. Anchor rods shall be galvanized a minimum of 1'-0" at the exposed end in accordance with ASTM F 2329. Nuts and washers shall be galvanized in accordance with AASHTO M 232.

8-21.3 Construction Requirements

Section 8-21.3 is supplemented with the following:

(*****)

The existing concrete encasement of the Sign Bridge No. 2 anchorage base plates shall be removed to the limits shown in the Plans and disposed of in accordance with Sections 2-02.3 and 2-03.3(7)C. After erection of Sign Bridge No. 2, the Contractor shall not place the deck island concrete encapsulating the sign bridge base until receiving notice of the Engineer's acceptance of the sign bridge base.

8-21.3(9) Sign Structures

8-21.3(9)A Fabrication of Steel Structures

Section 8-21.3(9)A is supplemented with the following:

(January 5, 2015)

Monotube Sign Structures

Bolted Connections

All bolted connections shall be made using the direct tension indicator method in accordance with Section 6-03.3(33).

Surfaces of Bolted Connections and Base Plates

All bolted connection faying surfaces shall be flat after fabrication as required to provide a solid fit upon assembly in accordance with Section 6-03.3(33). The flatness of the faying surfaces shall be flat to within a tolerance of 1/32 inch in 12 inches and a tolerance of 1/16 inch overall. Base plates with leveling nuts shall be flat to within a tolerance of 1/8 inch in 12 inches and a tolerance of 3/16 inch overall.

In order to achieve the flatness requirements, the Contractor may need to mill or machine the plates. The Contractor shall adjust plate thicknesses as required to provide the plate thickness specified in the Plans after milling or machining operations.

At bolted connections, both faying surfaces shall be at right angles to the bolt axis, parallel to each other, and shall be in full contact in the assembled condition. Full contact is defined as 90 percent of the outside and inside perimeters of the splice plates being visually in contact. The outside surface shall be inspected just inside the shell of the monotube and the inside shall be inspected at the handhole. Splices shall be fabricated such that the required camber remains continuous and smooth across the field splice.

Shop Assembly

Prior to galvanizing, the Contractor shall shop assemble the completed

1 structure lying on its side in an undeflected position to ensure correct alignment,
2 accuracy of holes, fit of joints, smooth camber profile, and the specified amount
3 of camber. The joints shall be bolted with a sufficient number of bolts tightened
4 snug tight to close the joints as they would be in the final field assembled
5 position and as specified in the **Surfaces of Bolted Connections and Base**
6 **Plates** subsection of this Special Provision. The Contractor shall not
7 disassemble the sign structure for galvanizing as specified until receiving the
8 Engineer's approval of the shop assembled structure.

9 **Zinc Coating and Painting**

10 All galvanized surfaces exposed to view after erection shall be shop painted or
11 shop powder coated in accordance with Section 6-07.3(11), except when the
12 Plans or Special Provisions require field painting only in accordance with
13 Sections 6-07.3(9)I and 6-07.3(11)A. Contact surfaces of the field bolted
14 connections shall be left as galvanized without any overcoat.

15
16
17 The color of the finish coat shall match color No. 35237 Federal Standard 595
18 latest edition when dry.

19
20 All galvanized surfaces specified to be painted or powder coated shall be
21 prepared for coating in accordance with the ASTM D 6386 and Section 6-
22 07.3(11). The method of preparation shall be as agreed upon by the paint or
23 powder coating manufacturer and the galvanizer.

24
25 After completing erection, the Contractor shall repair all metal surfaces with
26 damaged paint or powder coatings and exposed metal with a field repair
27 coating in accordance with Section 6-07.3(9)I and Section 6-07.3(11)A (for
28 paint) or Section 6-07.3(11)B (for powder coating). The color of the finish coat
29 of the field repair coating, when dry, shall match the color specified above.

30 **Field Assembling**

31 The Contractor shall furnish and install the vibration damper as shown in the
32 Plans. The damper shall be installed before the sign structure is erected.

33 **Welding Inspector Qualification**

34 The fabricator shop will provide a Certified Welding Inspector. The inspector
35 shall be a AWS Certified Welding Inspector (CWI) qualified and certified in
36 accordance with the provisions of AWS QCI Standard for Qualification and
37 Certification.

38 **Welding Inspection**

39 Welds for monotube sign structures shall be inspected using the methods
40 described below.

- 41 1. Visual Inspection in accordance with Section 6-03.3(25)A1.
- 42 2. Magnetic Particle Inspection in accordance with Section 6-
43 03.3(25)A4.
- 44 3. Ultrasonic Inspection in accordance with Section 6-03.3(25)A3.

- 1 4. Dye-Penetrant or Magnetic Particle Inspection
2 The post to beam connection weld shall have 100 percent of its length
3 inspected using dye-penetrant or magnetic-particle testing techniques.
4 The inspection shall be performed after the root pass and after
5 completion of the weld.
6

7 **8-21.3(9)F Foundations**

8 Section 8-21.3(9)F is supplemented with the following:
9

10 (*****)

11 **Shafts For Sign Structure Foundations**

12 Shaft foundations for the sign structures at the following location(s) shall be
13 constructed in accordance with the following requirements, except that temporary
14 casing is not required by the Contracting Agency but is instead a Contractor option:
15

16 Not Applicable
17

18 Shaft foundations for the sign structures at the following location(s) shall be
19 constructed in accordance with the following requirements, including required use
20 of temporary casing:
21

22 Sign Bridge No. 1 at M Line Station 115+25.00

23 Sign Bridge No. 3 at M Line Station 124+59.28
24

25 **Submittals**

26 **Contractor Project Reference and Personnel Experience Submittal**

27 Prior to the start of shaft construction, the Contractor shall submit a Type
28 2 Working Drawing consisting of a project reference list verifying the
29 completion by the Contractor of at least three separate shaft foundation
30 projects in the past 5 years with drilled shafts of diameters and depths
31 similar to or larger than those shown in the Plans and ground conditions
32 similar to those identified in the Contract. A brief description of each listed
33 project shall be provided along with the name and current phone number
34 of the project owner or the owner's Contractor.
35

36
37 Prior to the start of shaft construction, the Contractor shall submit a Type
38 2 Working Drawing consisting of a list identifying the on-site supervisors,
39 and drill rig operators potentially assigned to the project. On-site
40 supervisors shall have a minimum 2 years' experience in supervising
41 construction of shaft foundations, and drill rig operators shall have a
42 minimum 1 year experience in construction of shaft foundations. The list
43 shall contain a brief description of each individual's experience.
44

45 **Shaft Installation Narrative Submittal**

46 The Contractor shall submit a Type 3 Working Drawing consisting of a
47 shaft installation narrative. The narrative shall reference available
48 subsurface data provided in the contract test hole boring logs, and the
49 geotechnical report(s) prepared for this project. This narrative shall provide
50 the following information in a single complete submittal:
51

1. Proposed overall construction operation sequence.
2. Description, size, and capacities of specific equipment that will be available on site, including but not limited to cranes, drills, auger, bailing buckets, final cleaning equipment and drilling unit. The narrative shall describe why the equipment was selected, and describe equipment suitability to the anticipated site conditions and work methods. The narrative shall include a project history of the drilling equipment demonstrating the successful use of the equipment on shafts of equal or greater size in similar soil/rock conditions. The narrative shall also include details of shaft excavation and cleanout methods
3. Details of the method(s) to be used to ensure shaft stability (i.e., prevention of caving, bottom heave, etc. using temporary casing, slurry, and other means) during excavation (including pauses and stops during excavation) and concrete placement. Temporary casing dimensions and detailed procedures for temporary casing installation and removal, and methods of advancing temporary casing with the excavation in accordance with this Special Provision, shall be provided.
4. Detailed procedures for mixing, using, and maintaining the slurry shall be provided. A detailed mix design (including all additives and their specific purpose in the slurry mix), and a discussion of its suitability to the anticipated subsurface conditions, shall also be provided for the proposed slurry.

The submittal shall include a detailed plan for quality control of the selected slurry, including tests to be performed, test methods to be used, and minimum and/or maximum property requirements which shall be met to ensure that the slurry functions as intended, considering the anticipated subsurface conditions and shaft construction methods, in accordance with the slurry manufacturer's recommendations and this Special Provision. As a minimum, the slurry quality control plan shall include the following tests:

Property	Test Method
Density	Mud Weight (Density), API 13B-1, Section 1
Viscosity	Marsh Funnel and Cup, API 13B-1, Section 2.2
PH	Glass Electrode, pH Meter, or pH Paper
Sand Content	Sand, API 13B-1, Section 5

5. Description of the method used to fill or eliminate all voids below the top of shaft between the plan shaft diameter and excavated shaft diameter.
6. Reinforcing steel shop drawings, details of reinforcement

1 placement, including bracing, centering, steel reinforcing bar
2 cage centralizers, and lifting methods, and the method to assure
3 the reinforcing cage position is maintained during construction.
4

5 7. Details of concrete placement, including operational procedures
6 for pumping methods, and a sample uniform yield form to be used
7 by the Contractor for plotting the approximate volume of concrete
8 placed versus the depth of shaft for all shaft concrete placement
9 (except concrete placement in the dry).
10

11 8. Description of the material (either CDF or granular material) used
12 to temporarily backfill a shaft excavation during a stoppage of the
13 excavation operation, as well as the method used to place and
14 remove the material.
15

16 9. Storage and disposal plan for excavated material and drilling
17 slurry (if applicable).
18

18 **Synthetic Slurry Technical Representative Submittal**

19 If synthetic slurry is used to construct the shafts, the Contractor shall
20 provide or arrange for technical assistance in the use of the synthetic slurry
21 as specified in the **Slurry** subsection of this Special Provision. As part of
22 the shaft installation narrative Working Drawing, the Contractor shall
23 submit one of the following:
24

25 1. The name and current phone number of the synthetic slurry
26 manufacturer's technical representative assigned to the project.
27

28 2. The name(s) of the Contractor's personnel assigned to the project and
29 trained by the synthetic slurry manufacturer in the proper use of the
30 synthetic slurry. The submittal shall include a signed training
31 certification letter from the synthetic slurry manufacturer for each
32 trained Contractor's employee listed, including the date of the training.
33

34 **Quality Assurance**

35 Shafts shall be constructed so that the center at the top of the shaft is within 4
36 inches of the Plan location. Shafts shall be within 1.5 percent of plumb. Shaft
37 steel reinforcing bar placement tolerances shall conform to Section 6-
38 02.3(24)C.
39

40 A shaft preconstruction conference shall be held at least 5 working days prior
41 to the Contractor beginning any shaft construction work at the site to discuss
42 construction procedures, personnel, and equipment to be used, and other
43 elements of the approved shaft installation plan as specified elsewhere in this
44 Special Provision. Those attending shall include the superintendent, on site
45 supervisors, and all foremen in charge of excavating the shaft, placing the
46 casing and slurry as applicable, placing the steel reinforcing bars, and placing
47 the concrete, a representative of the concrete supplier, and the pump truck
48 operator. If synthetic slurry is used to construct the shafts, the synthetic slurry
49 manufacturer's representative and/or approved Contractor's employees trained
50 in the use of the synthetic slurry shall also attend.
51

1 If the Contractor proposes a significant revision of the approved shaft
2 installation plan, as determined by the Engineer, the Engineer may require an
3 additional conference be held before any additional shaft construction
4 operations are performed.

5 6 **Shaft Excavation**

7 Once the shaft excavation operation has started, the excavation shall be
8 conducted in a continuous operation until the excavation of the shaft is
9 completed, except for pauses and stops as noted, using approved equipment
10 capable of excavating through the type of material expected.

11
12 Pauses, defined as momentary interruptions of the excavation operation, will
13 be allowed only for casing splicing, tooling changes, slurry maintenance, and
14 removal of obstructions. Shaft excavation operation interruptions not
15 conforming to this definition shall be considered stops. Stops for uncased or
16 partial depth cased excavations shall not exceed 16 hours in duration. Stops
17 for fully cased excavations shall not exceed 65 hours duration.

18
19 For stops exceeding the time durations specified above, the Contractor shall
20 stabilize the excavation using one or both of the following methods:

- 21
22 1. Before the end of the work day, install casing in the hole to the
23 depth of the excavation. The outside diameter of the casing shall
24 not be smaller than 6 inches less than either the Plan diameter of
25 the shaft or the actual excavated diameter of the hole, whichever
26 is greater. Prior to removing the casing and resumption of shaft
27 excavation, the annular space between the casing and the
28 excavation shall be sounded. If the sounding operation indicates
29 that caving has occurred, the casing shall not be removed and
30 shaft excavation shall not resume until the Contractor has
31 stabilized the excavation in accordance with item 3 of the shaft
32 installation narrative as approved by the Engineer.
- 33
34 2. Backfill the hole with CDF or granular material as specified by the
35 Contractor and approved by the Engineer in accordance with
36 item 8 of the shaft installation narrative. The Contractor shall
37 backfill the hole to the ground surface if the excavation is not
38 cased, or to a minimum of 5 feet above the bottom of casing if
39 the excavation is cased. Backfilling of shafts with casing fully
40 seated into rock, as determined by the Engineer, will not be
41 required.

42
43 During stops, the Contractor shall stabilize the shaft excavation to prevent
44 bottom heave, caving, head loss, and loss of ground. The Contractor bears full
45 responsibility for selection and execution of the method(s) of stabilizing and
46 maintaining the shaft excavation, in accordance with Section 1-07.13. Shaft
47 stabilization shall conform to item 3 of the shaft installation narrative.

48
49 If slurry is present in the shaft excavation, the Contractor shall conform to the
50 requirements in the **Slurry** subsection of this Special Provision regarding the
51 maintenance of the slurry and the minimum level of drilling slurry throughout

1 the stop, and shall recondition the slurry to the required slurry properties prior
2 to recommencing shaft excavation operations.

3
4 Temporary casing shall be advanced during excavation operations within the
5 limits of temporary casing shown in the Plans for all sign structure shaft
6 foundation locations specified at the beginning of this Special Provision as
7 requiring temporary casing. Excavation in advance of the casing tip shall not
8 exceed 3 feet, except that in no case shall shaft excavation and casing
9 placement extend below the bottom of shaft excavation as shown in the Plans.
10 Unless partial depth temporary casing is shown in the Plans, temporary casing
11 shall be full depth of the sign bridge shaft.

12
13 The Contractor shall conduct casing installation operations and shaft
14 excavation operations such that the adjacent soil outside the casing and shaft
15 excavation for the full height of the shaft is not disturbed. Disturbed soil is
16 defined as soil whose geotechnical properties have been changed from those
17 of the original in-situ soil.

18
19 The Contractor shall use appropriate means such as a cleanout bucket, smooth
20 mouth grab, or air lift to clean the bottom of the excavation of all shafts. No
21 more than 2 inches of loose or disturbed material shall be present at the bottom
22 of the shaft just prior to placing concrete.

23
24 The excavated shaft shall be inspected and approved by the Engineer prior to
25 proceeding with construction. The bottom of the excavated shaft shall be
26 sounded with an airlift pipe, a tape with a heavy weight attached to the end of
27 the tape, or other means acceptable to the Engineer to determine that the shaft
28 bottom meets the requirements in the Contract.

29
30 When obstructions are encountered, the Contractor shall notify the Engineer
31 promptly. An obstruction is defined as a specific object (including, but not limited
32 to, boulders, logs, and manmade objects) encountered during the shaft
33 excavation operation which prevents or hinders the advance of the shaft
34 excavation. When efforts to advance past the obstruction to the design shaft tip
35 elevation result in the rate of advance of the shaft drilling equipment being
36 significantly reduced relative to the rate of advance for the portion of the shaft
37 excavation in the geological unit that contains the obstruction, then the
38 Contractor shall remove, break-up, or push aside, the obstruction under the
39 provisions of Section 8-21.5 as supplemented in these Special Provisions. The
40 method of dealing with such obstructions, and the continuation of excavation
41 shall be as proposed by the Contractor and approved by the Engineer.

42
43 The Contractor shall use slurry, as specified in the **Slurry** subsection of this
44 Special Provision, to maintain a stable excavation during excavation and
45 concrete placement operations once water begins to enter the shaft excavation
46 and remain present.

47
48 **Slurry**

49 If synthetic slurry is used, either a manufacturer's representative or a
50 Contractor's employee trained in the use of the synthetic slurry, as approved
51 by the Engineer in accordance with the **Submittals** subsection of this Special

Provision, shall provide technical assistance for the use of the synthetic slurry, shall be at the site prior to introduction of the synthetic slurry into the first drilled hole requiring slurry, and shall remain at the site during the construction of the first shaft excavated to adjust the slurry mix to the specific site conditions.

If the Contractor uses slurry in shafts installed below groundwater and in caving or sloughing soils, the slurry level in the excavation shall be maintained above the groundwater level the greater of the following dimensions, except as otherwise noted for the special requirements for all stops in shaft excavation operations:

1. Not less than 10 feet,
2. Dimension as required to provide and maintain a stable hole

The Contractor shall provide casing, or other means, as necessary to meet these requirements.

The slurry level shall be maintained above all unstable zones a sufficient distance to prevent bottom heave, caving or sloughing of those zones.

Throughout all stops in shaft excavation operations as defined in the **Shaft Excavation** subsection of this Special Provision, the Contractor shall monitor and maintain the slurry level in the excavation the greater of the following elevations:

1. No lower than the water level elevation outside the shaft
2. Elevation as required to provide and maintain a stable hole

Synthetic slurry shall be mixed and thoroughly hydrated in slurry tanks, ponds, or storage areas. The Contractor shall draw sample sets from the slurry storage facility and test the samples for the conformance with the specified viscosity and pH properties before beginning slurry placement in the drilled hole. Synthetic slurry shall conform to the quality control plan included in the shaft installation plan as approved by the Engineer. A sample set shall be composed of samples taken at mid-height and within 2 feet of the bottom of the storage area.

When synthetic slurry is used, the Contractor shall keep a written record of all additives and concentrations of the additives in the synthetic slurry. These records shall be provided to the Engineer once the slurry system has been established in the first drilled shaft on the project. The Contractor shall provide revised data to the Engineer if changes are made to the type or concentration of additives during construction.

The Contractor shall sample and test all slurry in the presence of the Engineer, unless otherwise directed. The date, time, names of the persons sampling and testing the slurry, and the results of the tests shall be recorded. A copy of the recorded slurry test results shall be submitted to the Engineer at the completion of each shaft, and during construction of each shaft when requested by the Engineer.

Sample sets of all slurry, composed of samples taken at mid-height and within 2 feet of the bottom of the shaft and the storage area, shall be taken and tested once every 4 hours minimum at the beginning and during drilling shafts and prior to cleaning the bottom of the hole to verify the control of the viscosity and pH properties of the slurry. As a minimum, sample sets of all slurry shall be taken and tested at least once every 2 hours if the previous sample set did not have consistent viscosity and pH properties. All slurry shall be recirculated, or agitated with the drilling equipment, when tests show that the sample sets do not have consistent specified properties. Cleaning of the bottom of the hole shall not begin until tests show the samples taken at mid-height and within 2 feet of the bottom of the hole have consistent viscosity and pH properties.

Sample sets of all slurry, as specified, shall be taken and tested to verify control of the viscosity, pH, density, and sand content properties after final cleaning of the bottom of the hole just prior to placing concrete. Placement of the concrete shall not start until tests show that the samples taken at mid-height and within 2 feet of the bottom of the hole have consistent specified properties.

The Contractor shall clean, recirculate, de-sand, or replace the slurry to maintain the required slurry properties.

If stable conditions are not being maintained, the Contractor shall immediately take action to stabilize the shaft. The Contractor shall submit a revised shaft installation narrative which addresses the problem and prevents future instability. The Contractor shall not continue with shaft construction until the damage which has already occurred is repaired in accordance with the specifications, and until receiving the Engineer's approval of the revised shaft installation narrative.

The Contractor shall dispose of the slurry and slurry-contacted spoils as specified in the shaft installation plan and in accordance with Section 6-19.3(4)F.

Assembly and Placement Of Steel Reinforcing Bars

The steel reinforcing bar cage shall be rigidly braced to retain its configuration during handling and construction.

The reinforcement shall be carefully positioned and securely fastened to provide the minimum clearances listed below, and to ensure that no displacement of the steel reinforcing bars occurs during placement of the concrete. The reinforcing steel centralizers shall be placed at least at the quarter points around the circumference of the steel reinforcing bar cage, and located vertically at least at the 1/4 and 3/4 points of the shaft length below the shaft cap.

The Contractor shall place bars as shown in the Plans with minimum concrete cover of 3 inches for shafts with diameters of 3 feet or less, and 4 inches for shafts with diameters greater than 3 feet.

Placing Concrete

Shaft concrete shall be Class 4000P. Concrete placement shall commence

1 immediately after completion of excavation by the Contractor and inspection by
2 the Engineer. Immediately prior to commencing concrete placement, the shaft
3 excavation and the properties of the slurry (if used) shall conform to the
4 excavation and slurry requirements specified elsewhere in this Special
5 Provision. Concrete placement shall be continuous until the Work is complete.
6

7 During concrete placement, the Contractor shall monitor, and minimize, the
8 difference in the level of concrete inside and outside of the steel reinforcing bar
9 cage. The Contractor shall conduct concrete placement operations to maintain
10 the differential concrete head as 1 foot -0 inch maximum.
11

12 When placing concrete in the dry, only the top 5 feet of concrete shall be
13 vibrated. The amount and extent of vibration shall be sufficient to assure
14 concrete flow to the outside of the shaft with full consolidation without causing
15 segregation to occur. Temporary casing shall be removed before vibration. This
16 requirement may be waived if the temporary casing is removed with a vibratory
17 hammer during the concrete placement operation. Vibration of the top 5 feet of
18 concrete does not affect the maximum slump allowed for the concrete class
19 specified.
20

21 If water is not present, the concrete shall be deposited through the center of
22 the reinforcement cage by a method which prevents segregation of aggregates
23 and splashing of concrete on the reinforcement cage. The concrete shall be
24 placed such that the free-fall is vertical down the center of the shaft without
25 hitting the sides, the steel reinforcing bars, or the steel reinforcing bar cage
26 bracing. The Section 6-02.3(6) restriction for 5 feet 0 inch maximum free-fall
27 shall not apply to placement of Class 4000P concrete into a shaft.
28

29 When placing concrete underwater, including when water in a shaft excavation
30 exceeds 3 inches in depth, the Contractor shall place the concrete by pressure
31 feed using a concrete pump with a watertight tube having a minimum diameter
32 of 4 inches. The discharge end of the tube on the concrete pump shall include
33 a device to seal out water while the tube is first filled with concrete. Alternatively,
34 the Contractor may use a plug that is inserted in the hopper of the concrete
35 pump and travels through the tremie to keep the concrete separated from the
36 water and slurry. Concrete placement by gravity feed is not allowed.
37

38 Throughout the underwater concrete placement operation, the discharge end
39 of the tube shall remain submerged in the concrete at least 5 feet and the tube
40 shall always contain enough concrete to prevent water from entering.
41

42 Before placing any fresh concrete against concrete deposited in water or slurry,
43 the Contractor shall remove all scum, laitance, loose gravel and sediment on
44 the upper surface of the concrete deposited in water or slurry and chip off any
45 high spots on the upper surface of the existing concrete that would prevent the
46 steel reinforcing bar cage from being placed in the position required by the
47 Plans.
48

49 The Contractor's construction operation in the vicinity of a drilled shaft
50 excavation with freshly placed concrete and curing concrete shall conform to
51 Section 6-02.3(6)D.

1
2 Except for shafts where the shaft concrete is placed in the dry, the Contractor
3 shall complete a uniform yield form, consistent with the sample form submitted
4 to the Engineer as part of the shaft installation plan, for each shaft and shall
5 submit the completed form to the Engineer within 24 hours of completing the
6 concrete placement in the shaft.
7

8 **Casing Removal**

9 As the temporary casing is withdrawn, the Contractor shall maintain the
10 concrete and slurry inside the casing at a level sufficient to balance the
11 hydrostatic pressure outside the casing. The Contractor shall completely
12 remove all temporary casings.
13

14 **8-21.4 Measurement**

15 Section 8-21.4 is supplemented with the following:
16

17 (*****)

18 Sign Bridges contain(s) the following approximate quantities of material and work:
19

20 Sign Bridge No. 1

21	Excavation	37 C.Y.
22	Temporary Casing	44 L.F.
23	St. Reinf. Bar	5,034 LB.
24	Conc. Class 4000P and Class 4000	39 C.Y.
25	Structural Steel	59,930 LB.
26		
27		

28 Sign Bridge No. 2

29	Removal and disposal of temp. Conc. Cap	2 ea
30	Structural Steel	55,057 LB.
31		
32		

33 Sign Bridge No. 3

34	Excavation	37 C.Y.
35	Temporary Casing	44 L.F.
36	St. Reinf. Bar	5,034 LB.
37	Conc. Class 4000P and Class 4000	39 C.Y.
38	Structural Steel	56,047 LB.
39		
40		

41 The quantities are listed only for the convenience of the Contractor in determining the
42 volume of work involved and are not guaranteed to be accurate. The prospective bidders
43 shall verify these quantities before submitting a bid. No adjustments other than for approved
44 changes will be made in the applicable sign structure lump sum contract price even though
45 the actual quantities required may deviate from those listed.
46

47 **8-21.5 Payment**

48 Section 8-21.5 is supplemented with the following:
49

50 (April 6, 2015)

51 "Removing Sign Structure Shaft Obstructions", estimated.

1 Payment for removing obstructions, as defined in Section 8-21.3(9)F as supplemented in
2 these Special Provisions, will be made for the changes in shaft construction methods
3 necessary to remove the obstruction. The Contractor and the Engineer shall evaluate the
4 effort made and reach agreement on the equipment and employees utilized, and the number
5 of hours involved for each. Once these cost items and their duration have been agreed upon,
6 the payment amount will be determined using the rate and markup methods specified in
7 Section 1-09.6. For the purpose of providing a common proposal for all bidders, the
8 Contracting Agency has entered an amount for the item "Removing Sign Structure Shaft
9 Obstructions" in the bid proposal to become a part of the total bid by the Contractor.

10
11 If the shaft construction equipment is idled as a result of the obstruction removal work and
12 cannot be reasonably reassigned within the project, then standby payment for the idled
13 equipment will be added to the payment calculations. If labor is idled as a result of the
14 obstruction removal work and cannot be reasonably reassigned within the project, then all
15 labor costs resulting from Contractor labor agreements and established Contractor policies
16 will be added to the payment calculations.

17 The Contractor shall perform the amount of obstruction work estimated by the Contracting
18 Agency within the original time of the contract. The Engineer will consider a time adjustment
19 and additional compensation for costs related to the extended duration of the shaft
20 construction operations, provided:

- 21
22 1. the dollar amount estimated by the Contracting Agency has been exceeded, and
23
24 2. the Contractor shows that the obstruction removal work represents a delay to the
25 completion of the project based on the current progress schedule provided in
26 accordance with Section 1-08.3.
27

28 **Division 9**

29 **Materials**

30 **9-14 Erosion Control and Roadside Planting**

31 **9-14.5 Erosion Control Devices**

32 **9-14.5(6) Compost Socks**

33 The first sentence of the first paragraph of Section 9-14.5(6) is deleted and replaced with the
34 following:
35

36 Compost socks shall of jute or coir fabric, with a minimum strand thickness of 5 mils.
37

38 **(August 7, 2017)**

39 **Standard Plans**

40 The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01
41 transmitted under Publications Transmittal No. PT 16-048, effective August 7, 2017 is made a part
42 of this contract.
43

44 The Standard Plans are revised as follows:
45
46
47
48
49

A-30.15
DELETED

A-40.10

Section View, PCCP to HMA Longitudinal Joint, callout, was – “Sawed Groove ~ Width 3/16” (IN) MIN. to 5/16” (IN) MAX. ~ Depth 1” (IN) MIN. ~ see Std. Spec. 5-04.3(12)B” is revised to read; “Sawed Groove ~ Width 3/16” (IN) MIN. to 5/16” (IN) MAX. ~ Depth 1” (IN) MIN. ~ see Std. Spec. Section 5-04.3(12)A2”

A-50.10

Sheet 2 of 2, Plan, with Single Slope Barrier, reference C-14a is revised to C-70.10

A-50.20

Sheet 2 of 2, Plan, with Anchored Barrier, reference C-14a is revised to C-70.10

A-50.30

Sheet 2 of 2, Plan (top), reference C-14a is revised to C-70.10

A-60.30

Note 4, was – “If the ACP and membrane is to be removed from the bridge deck, see GSP 023106 for deck preparation before placing new membrane.” Is revised to read; “If the ACP and membrane is to be removed from the bridge deck, see GSP 6-02.3(10)D.OPT6.GB6 for deck preparation before placing new membrane.”

B-10.20

Substitute “step” in lieu of “handhold” on plan

B-25.20

Note 4, was – “Bolt-Down capability is required on all frames, grates and covers, unless specified in the Contract. Provide two holes in the Frame that are vertically aligned with the grate slots. The frame shall accept the 5/8” x 11 NC x 2” allen head cap screw by being tapped, or other approved mechanism. The location of bolt-down holes varies among manufacturers. See BOLT-DOWN DETAIL, **Standard Plan B-30.10**. Is revised to read; “Bolt-Down capability is required on all frames, grates and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8” (in) - 11 NC x 2” (in) Allen head cap screw by being tapped, or other approved mechanism. The location of bolt-down holes varies by manufacturer.”

See BOLT-DOWN DETAIL, **Standard Plan B-30.10**.

Add Note 7. See Standard Specification Section 8-04 for Curb and Gutter requirements

B-30.70

Note 2, was – “Bolt-Down capability is required on all frames, grates and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 5/8” -1 NC x 2” Allen head cap screw by being tapped, or other approved mechanism. Location of bolt down holes varies by manufacturer.” Is revised to read; “Bolt-Down capability is required on all frames, grates and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel

(S.S.) 5/8" (in) - 11 NC x 2" (in) Allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer."

RING PLAN, callout, was – "DRILL AND TAP 5/8" – 11NC HOLE FOR 1 1/2" X 5/8" STAINLESS STEEL SOCKET HEAD CAP SCREW (TYP.)" is revised to read; "SEE NOTE 2"

B-90.40

Valve Detail - DELETED

C-16b

DELETED

C-22.14

Note 3, formula, was: "Elevation G = (Elevation S – D x (0.1) + 28" is revised to read: "Elevation G = (Elevation S – D x (0.1) + 28/12"

C-22.16

Note 3, formula, was: "Elevation G = (Elevation S – D x (0.1) + 31" is revised to read: "Elevation G = (Elevation S – D x (0.1) + 31/12"

C-22.41

DELETED

C-25.18

DELETED

D-10.10

Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.15

Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.20

Wall Type 3 may be used in all cases. The last sentence of Note 6 on Wall Type 3 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

D-10.25

Wall Type 4 may be used in all cases. The last sentence of Note 6 on Wall Type 4 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

D-10.30

Wall Type 5 may be used in all cases.

1
2 D-10.35

3 Wall Type 6 may be used in all cases.
4

5 D-10.40

6 Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic
7 barriers attached on top of the wall are considered non-standard and shall be designed in
8 accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge
9 Design memorandum.
10

11 D-10.45

12 Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic
13 barriers attached on top of the wall are considered non-standard and shall be designed in
14 accordance with the current WSDOT BDM and the revisions stated in the revisions stated in
15 the 11/3/15 Bridge Design memorandum.
16

17 D-15.10

18 STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are
19 withdrawn. Special designs in accordance with the current WSDOT BDM are required in
20 place of these STD Plans.
21

22 D-15.20

23 STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are
24 withdrawn. Special designs in accordance with the current WSDOT BDM are required in
25 place of these STD Plans.
26

27 D-15.30

28 STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are
29 withdrawn. Special designs in accordance with the current WSDOT BDM are required in
30 place of these STD Plans.
31

32 F-10.12

33 Section Title, was – "Depressed Curb Section" is revised to read: "Depressed Curb and
34 Gutter Section"
35

36 F-10.40

37 "EXTRUDED CURB AT CUT SLOPE", Section detail - Deleted
38

39 F-10.42

40 DELETE – "Extruded Curb at Cut Slope" View
41

42 G-22.10

43 Sheet 2, Elevation , Three-Post Installation, Dimension, upper right, was – ".035" is revised
44 to read: " 0.35X"
45

46 G-24.60

47 Sheet 1, View A, Dimension @ Bottom of sign, is = 3" is revised to read: 6".
48

49 G-60.10

Sheet 3, TYPICAL TRUSS DETAILS, BASE ~ TOP, callout, was – “15/16”(IN) DIAM. HOLES FOR FOUR, 7/8” (IN) DIAM. BOLTS (ASTM A 325)” is revised to read: “15/16”(IN) DIAM. HOLES FOR FOUR, 7/8” (IN) DIAM. BOLTS (ASTM F3125, GRADE A325)”

G-90.10

TOP VIEW, callout, was – “Vertical Brace ~ W4 x 13 steel (TYP.)(See Note 4)” is revised to read; “Vertical Brace ~ W4 x 13 steel (TYP.)(See Note 3)”

G-95.10

Sheet 2, Detail “B”, Plan View, callout, was – “5/8” DIAM. ASTM A 325 H.S. BOLT W/HEAVY HEX NUT AND WASHER, GALV. (TYP.) TIGHTEN PER STD. SPEC. 6-03.3(33)” is revised to read: “5/8” DIAM. ASTM F 3125, GRADE A325 H.S. BOLT W/HEAVY HEX NUT AND WASHER, GALV. (TYP.) TIGHTEN PER STD. SPEC. 6-03.3(33)”

H-70.20

Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

I-30.30

8” Diameter Wattle Spacing Table, lower left corner, was – “Slope:1H : 1V, Maximum Spacing:10’ – 0”” is revised to read: “Slope:1H : 1V, Maximum Spacing:8’ – 0””.

J-3

DELETED

J-3b

DELETED

J-3C

DELETED

J-10.21

Note 18, was – “When service cabinet is installed within right of way fence, see Standard Plan J-10.22 for details.” Is revised to read; “When service cabinet is installed within right of way fence, or the meter base is mounted on the exterior of the cabinet, see Standard Plan J-10.22 for details.”

J-10.22

Key Note 1, was – “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305.” Is revised to read; “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305. When the utility requires meter base to be mounted on the side or back of the service cabinet, the meter base enclosure shall be fabricated from type 304 stainless steel.”

Key Note 4, “Test with (SPDT Snap Action, Positive close 15 Amp – 120/277 volt “T” rated). Is revised to read: “Test Switch (SPDT snap action, positive close 15 amp – 120/277 volt “T” rated).”

Key Note 14, was – “Hinged dead front with ¼ turn fasteners or slide latch.” Is revised to read; “Hinged dead front with ¼ turn fasteners or slide latch. ~ Dead front panel bolts shall not extend into the vertical limits of the breaker array(s).”

Key Note 15, was – “Cabinet Main Bonding Jumper. Buss shall be 4 lug tinned copper. See Cabinet Main bonding Jumper detail, Standard Plan J-3b.” is revised to read; “Cabinet Main Bonding Jumper Assembly ~ Buss shall be 4 lug tinned copper ~ See Standard Plan J-10.20 for Cabinet Main Bonding Jumper Assembly details.”

J-20.10

Add Note 5, “5. One accessible pedestrian signal assembly per pedestrian pushbutton post.”

J-20.11

Sheet 2, Foundation Detail, Elevation, callout – “Type 1 Signal Pole” is revised to read: “Type PS or Type 1 Signal Pole”

Sheet 2, Foundation Detail, Elevation, add note below Title, “(Type 1 Signal Pole Shown)”

Add Note 6, “6. One accessible pedestrian signal assembly per pedestrian pushbutton post.”

J-20.26

Add Note 1, “1. One accessible pedestrian pushbutton station per pedestrian pushbutton post.”

J-20.16

View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE

J-21.10

Sheet 1, Elevation View, Round Concrete Foundation Detail, callout – “ANCHOR BOLTS ~ ¾” (IN) x 30” (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY” IS REVISED TO READ: “ANCHOR BOLTS ~ ¾” (IN) x 30” (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY”

Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3” CLR.. Delete “(TYP.)” from the 2 ½” CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3” CLR. Delete “(TYP.)” from the 2 ½” CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3” CLR. Delete “(TYP.)” from the 2 ½” CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3” CLR. Delete “(TYP.)” from the 2 ½” CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Detail F, callout, “Heavy Hex Clamping Bolt (TYP.) ~ ¾” (IN) Diam. Torque Clamping Bolts (see Note 3)” is revised to read; “Heavy Hex Clamping Bolt (TYP.) ~ ¾” (IN) Diam. Torque Clamping Bolts (see Note 1)”

Detail F, callout, “¾” (IN) x 2' – 6” Anchor Bolt (TYP.) ~ Four Required (See Note 4)” is revised to read; “¾” (IN) x 2' – 6” Anchor Bolt (TYP.) ~ Three Required (See Note 2)”

J-21.15

Partial View, callout, was – LOCK NIPPLE ~ 1 ½” DIAM., is revised to read; CHASE NIPPLE ~ 1 ½” (IN) DIAM.

J-21.16

Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15

Ramp Meter Signal Standard, elevation, dimension 4’ - 6” is revised to read; 6’-0”
(2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½” DIAM. is revised to read; CHASE NIPPLE ~ 1 ½” (IN) DIAM.

J-26.20

Sheet 1, NOTES, Note 5, was - “Connecting/clamping bolts AASHTO M 164 (ASTM A325)” is revised to read: “Connecting/clamping bolts ASTM F3125 GRADE A325”

Was - “NUTS AASHTO M 291 (ASTM A263) GRADE DH” is revised to read: “NUTS ASTM A563 GRADE DH”

J-28.43

KEY notes, note 1, was – “CLAMPING BOLTS, 7/8” (IN) DIAM. HEX HEAD BOLT AND NUT, TWO PLATE WASHERS, ONE HARDENED ROUND WASHER, 87 FT-LBS TORQUE (THREE CLAMPING BOLT ASSEMBLIES PER SLIP BASE) (PER ASTM A325)” is revised to read: “CLAMPING BOLTS, 7/8” (IN) DIAM. HEX HEAD BOLT AND NUT, TWO PLATE WASHERS, ONE HARDENED ROUND WASHER, 87 FT-LBS TORQUE (THREE CLAMPING BOLT ASSEMBLIES PER SLIP BASE) (PER ASTM F3125 GRADE A325)”

J-40.10

Sheet 2 of 2, Detail F, callout, “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 12” S. S. FLAT WASHER” is revised to read; “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 1/2” (IN) S. S. FLAT WASHER”

J-60.14

All references to J-16b (6x) are revised to read; J-60.11

K-80.30

In the NARROW BASE, END view, the reference to Std. Plan C-8e is revised to Std. Plan K-80.35

M-11.10

Layout, dimension (from stop bar to “X”), was – 23’ is revised to read; 24’

The following are the Standard Plan numbers applicable at the time this project was advertised. The date shown with each plan number is the publication approval date shown in the lower right-hand corner of that plan. Standard Plans showing different dates shall not be used in this contract.

A-10.10-00.....8/7/07	A-40.00-00.....8/11/09	A-50.30-00.....11/17/08
A-10.20-00.....10/5/07	A-40.10-03.....12/23/14	A-50.40-00.....11/17/08
A-10.30-00.....10/5/07	A-40.15-00.....8/11/09	A-60.10-03.....12/23/14
A-20.10-00.....8/31/07	A-40.20-04.....1/18/17	A-60.20-03.....12/23/14

A-30.10-00.....11/8/07	A-40.50-02.....12/23/14	A-60.30-00.....11/8/07
A-30.30-01.....6/16/11	A-50.10-00.....11/17/08	A-60.40-00.....8/31/07
A-30.35-00.....10/12/07	A-50.20-01.....9/22/09	

1

B-5.20-02.....1/26/17	B-30.50-02.....1/26/17	B-75.20-01.....6/10/08
B-5.40-02.....1/26/17	B-30.70-03.....4/26/12	B-75.50-01.....6/10/08
B-5.60-02.....1/26/17	B-30.80-00.....6/8/06	B-75.60-00.....6/8/06
B-10.20-01.....2/7/12	B-30.90-02.....1/26/17	B-80.20-00.....6/8/06
B-10.40-01.....1/26/17	B-35.20-00.....6/8/06	B-80.40-00.....6/1/06
B-10.60-00.....6/8/06	B-35.40-00.....6/8/06	B-82.20-00.....6/1/06
B-10.70-00.....1/26/17	B-40.20-00.....6/1/06	B-85.10-01.....6/10/08
B-15.20-01.....2/7/12	B-40.40-02.....1/26/17	B-85.20-00.....6/1/06
B-15.40-01.....2/7/12	B-45.20-01.....7/11/17	B-85.30-00.....6/1/06
B-15.60-02.....1/26/17	B-45.40-01.....7/21/17	B-85.40-00.....6/8/06
B-20.20-02.....3/16/12	B-50.20-00.....6/1/06	B-85.50-01.....6/10/08
B-20.40-03.....3/16/12	B-55.20-01.....1/26/17	B-90.10-00.....6/8/06
B-20.60-03.....3/15/12	B-60.20-00.....6/8/06	B-90.20-00.....6/8/06
B-25.20-01.....3/15/12	B-60.40-00.....6/1/06	B-90.30-00.....6/8/06
B-25.60-01.....1/26/17	B-65.20-01.....4/26/12	B-90.40-01.....1/26/17
B-30.10-02.....1/26/17	B-65.40-00.....6/1/06	B-90.50-00.....6/8/06
B-30.20-03.....1/26/17	B-70.20-00.....6/1/06	B-95.20-01.....2/3/09
B-30.30-02.....1/26/17	B-70.60-01.....1/26/17	B-95.40-00.....6/8/06
B-30.40-02.....1/26/17		

2

C-1.....7/12/16	C-6.....7/15/16	C-23.60-04.....7/21/17
C-1a.....7/14/15	C-6a.....10/14/09	C-24.10-01.....6/11/14
C-1b.....7/14/15	C-6c.....7/15/16	C-25.20-06.....7/14/15
C-1c.....7/12/16	C-6d.....7/15/16	C-25.22-05.....7/14/15
C-1d.....10/31/03	C-6f.....7/15/16	C-25.26-03.....7/14/15
C-2.....1/6/00	C-7.....6/16/11	C-25.80-04.....7/15/16
C-2a.....6/21/06	C-7a.....6/16/11	C-40.14-02.....7/2/12
C-2b.....6/21/06	C-8.....2/10/09	C-40.16-02.....7/2/12
C-2c.....6/21/06	C-8a.....7/25/97	C-40.18-03.....7/21/17
C-2d.....6/21/06	C-8b.....2/29/16	C-70.10-01.....6/17/14
C-2e.....6/21/06	C-8e.....2/21/07	C-75.10-01.....6/11/14
C-2f.....3/14/97	C-8f.....6/30/04	C-75.20-01.....6/11/14
C-2g.....7/27/01	C-10.....7/15/16	C-75.30-01.....6/11/14
C-2h.....3/28/97	C-16a.....7/21/17	C-80.10-01.....6/11/14
C-2i.....3/28/97	C-20.10-04.....7/21/17	C-80.20-01.....6/11/14
C-2j.....6/12/98	C-20.11-00.....7/21/17	C-80.30-01.....6/11/14
C-2k.....7/12/16	C-20.14-03.....6/11/14	C-80.40-01.....6/11/14
C-2n.....7/12/16	C-20.15-02.....6/11/14	C-80.50-00.....4/8/12
C-2o.....7/13/01	C-20.18-02.....6/11/14	C-85.10-00.....4/8/12
C-2p.....10/31/03	C-20.19-02.....6/11/14	C-85.11-00.....4/8/12
C-3.....7/2/12	C-20.40-06.....7/21/17	C-85.14-01.....6/11/14
C-3a.....10/4/05	C-20.41-01.....7/14/15	C-85.15-01.....6/30/14
C-3b.....6/27/11	C-20.42-05.....7/14/15	C-85.16-01.....6/17/14
C-3c.....6/27/11	C-20.45.01.....7/2/12	C-85.18-01.....6/11/14
C-4b.....7/15/16	C-22.14-04.....7/15/16	C-85.20-01.....6/11/14
C-4e.....7/15/16	C-22.16-06.....7/21/17	C-90.10-00.....7/3/08
C-4f.....7/2/12	C-22.40-06.....7/21/17	

C-22.45-03.....7/21/17

1

D-2.04-00.....11/10/05	D-2.48-00.....11/10/05	D-3.17-02.....5/9/16
D-2.06-01.....1/6/09	D-2.64-01.....1/6/09	D-4.....12/11/98
D-2.08-00.....11/10/05	D-2.66-00.....11/10/05	D-6.....6/19/98
D-2.14-00.....11/10/05	D-2.68-00.....11/10/05	D-10.10-01.....12/2/08
D-2.16-00.....11/10/05	D-2.80-00.....11/10/05	D-10.15-01.....12/2/08
D-2.18-00.....11/10/05	D-2.82-00.....11/10/05	D-10.20-00.....7/8/08
D-2.20-00.....11/10/05	D-2.84-00.....11/10/05	D-10.25-00.....7/8/08
D-2.32-00.....11/10/05	D-2.86-00.....11/10/05	D-10.30-00.....7/8/08
D-2.34-01.....1/6/09	D-2.88-00.....11/10/05	D-10.35-00.....7/8/08
D-2.36-03.....6/11/14	D-2.92-00.....11/10/05	D-10.40-01.....12/2/08
D-2.42-00.....11/10/05	D-3.09-00.....5/17/12	D-10.45-01.....12/2/08
D-2.44-00.....11/10/05	D-3.10-01.....5/29/13	D-15.10-01.....12/2/08
D-2.60-00.....11/10/05	D-3.11-03.....6/11/14	D-15.20-03.....5/9/16
D-2.62-00.....11/10/05	D-3.15-02.....6/10/13	D-15.30-01.....12/02/08
D-2.46-01.....6/11/14	D-3.16-02.....5/29/13	

2

E-1.....2/21/07	E-4.....8/27/03
E-2.....5/29/98	E-4a.....8/27/03

3

F-10.12-03.....6/11/14	F-10.62-02.....4/22/14	F-40.15-03.....6/29/16
F-10.16-00.....12/20/06	F-10.64-03.....4/22/14	F-40.16-03.....6/29/16
F-10.18-01.....7/11/17	F-30.10-03.....6/11/14	F-45.10-02.....7/15/16
F-10.40-03.....6/29/16	F-40.12-03.....6/29/16	F-80.10-04.....7/15/16
F-10.42-00.....1/23/07	F-40.14-03.....6/29/16	

4

G-10.10-00.....9/20/07	G-25.10-04.....6/10/13	G-90.10-03.....7/11/17
G-20.10-02.....6/23/15	G-30.10-04.....6/23/15	G-90.11-00.....4/28/16
G-22.10-03.....7/10/15	G-50.10-02.....6/23/15	G-90.20-05.....7/11/17
G-24.10-00.....11/8/07	G-60.10-03.....6/18/15	G-90.30-04.....7/11/17
G-24.20-01.....2/7/12	G-60.20-02.....6/18/15	G-90.40-02.....4/28/16
G-24.30-01.....2/7/12	G-60.30-02.....6/18/15	G-95.10-01.....6/2/11
G-24.40-06.....2/29/16	G-70.10-03.....6/18/15	G-95.20-02.....6/2/11
G-24.50-04.....7/11/17	G-70.20-04.....7/21/17	G-95.30-02.....6/2/11
G-24.60-04.....6/23/15	G-70.30-04.....7/21/17	

5

H-10.10-00.....7/3/08	H-32.10-00.....9/20/07	H-70.10-01.....2/7/12
H-10.15-00.....7/3/08	H-60.10-01.....7/3/08	H-70.20-01.....2/16/12
H-30.10-00.....10/12/07	H-60.20-01.....7/3/08	H-70.30-02.....2/7/12

6

I-10.10-01.....8/11/09	I-30.20-00.....9/20/07	I-40.20-00.....9/20/07
I-30.10-02.....3/22/13	I-30.30-01.....6/10/13	I-50.20-01.....6/10/13
I-30.15-02.....3/22/13	I-30.40-01.....6/10/13	I-60.10-01.....6/10/13
I-30.16-00.....3/22/13	I-30.60-00.....5/29/13	I-60.20-01.....6/10/13
I-30.17-00.....3/22/13	I-40.10-00.....9/20/07	I-80.10-02.....7/15/16

7

J-10.....7/18/97	J-26.20-00.....6/11/14	J-40.38-01.....5/20/13
J-10.10-03.....6/3/15	J-27.10-01.....7/21/16	J-40.39-00.....5/20/13
J-10.15-01.....6/11/14	J-27.15-00.....3/15/12	J-40.40-01.....4/28/16
J-10.16-00.....6/3/15	J-28.10-01.....5/11/11	J-45.36-00.....7/21/17

J-10.17-00.....6/3/15	J-28.22-00.....8/07/07	J-50.05-00.....7/21/17
J-10.18-00.....6/3/15	J-28.24-01.....6/3/15	J-50.10-00.....6/3/11
J-10.20-01.....6/1/16	J-28.26-01.....12/02/08	J-50.11-01.....7/21/17
J-10.21-00.....6/3/15	J-28.30-03.....6/11/14	J-50.12-01.....7/21/17
J-10.22-00.....5/29/13	J-28.40-02.....6/11/14	J-50.15-01.....7/21/17
J-10.25-00.....7/11/17	J-28.42-01.....6/11/14	J-50.16-01.....3/22/13
J-15.10-01.....6/11/14	J-28.43-00.....6/11/14	J-50.20-00.....6/3/11
J-15.15-02.....7/10/15	J-28.45-03.....7/21/16	J-50.25-00.....6/3/11
J-20.10-03.....6/30/14	J-28.50-03.....7/21/16	J-50.30-00.....6/3/11
J-20.11-02.....6/30/14	J-28.60-02.....7/21/16	J-60.05-01.....7/21/16
J-20.15-03.....6/30/14	J-28.70-03.....7/21/17	J-60.11-00.....5/20/13
J-20.16-02.....6/30/14	J-29.10-01.....7/21/16	J-60.12-00.....5/20/13
J-20.20-02.....5/20/13	J-29.15-01.....7/21/16	J-60.13-00.....6/16/10
J-20.26-01.....7/12/12	J-29.16-02.....7/21/16	J-60.14-00.....6/16/10
J-21.10-04.....6/30/14	J-30.10-00.....6/18/15	J-75.10-02.....7/10/15
J-21.15-01.....6/10/13	J-40.05-00.....7/21/16	J-75.20-01.....7/10/15
J-21.16-01.....6/10/13	J-40.10-04.....4/28/16	J-75.30-02.....7/10/15
J-21.17-01.....6/10/13	J-40.20-03.....4/28/16	J-75.40-02.....6/1/16
J-21.20-01.....6/10/13	J-40.30-04.....4/28/16	J-75.41-01.....6/29/16
J-22.15-02.....7/10/15	J-40.35-01.....5/29/13	J-75.45-02.....6/1/16
J-22.16-03.....7/10/15	J-40.36-02.....7/21/17	J-90.10-02.....4/28/16
J-26.10-03.....7/21/16	J-40.37-02.....7/21/17	J-90.20-02.....4/28/16
J-26.15-01.....5/17/12		J-90.21-01.....4/28/16

1

K-70.20-01.....6/1/16
K-80.10-01.....6/1/16
K-80.20-00.....12/20/06
K-80.30-00.....2/21/07
K-80.35-00.....2/21/07
K-80.37-00.....2/21/07

2

L-10.10-02.....6/21/12	L-40.10-02.....6/21/12	L-70.10-01.....5/21/08
L-20.10-03.....7/14/15	L-40.15-01.....6/16/11	L-70.20-01.....5/21/08
L-30.10-02.....6/11/14	L-40.20-02.....6/21/12	

3

M-1.20-03.....6/24/14	M-12.10-00.....7/11/17	M-40.10-03.....6/24/14
M-1.40-02.....6/3/11	M-15.10-01.....2/6/07	M-40.20-00.....10/12/07
M-1.60-02.....6/3/11	M-17.10-02.....7/3/08	M-40.30-01.....7/11/17
M-1.80-03.....6/3/11	M-20.10-02.....6/3/11	M-40.40-00.....9/20/07
M-2.20-03.....7/10/15	M-20.20-02.....4/20/15	M-40.50-00.....9/20/07
M-2.21-00.....7/10/15	M-20.30-04.....2/29/16	M-40.60-00.....9/20/07
M-3.10-03.....6/3/11	M-20.40-03.....6/24/14	M-60.10-01.....6/3/11
M-3.20-02.....6/3/11	M-20.50-02.....6/3/11	M-60.20-02.....6/27/11
M-3.30-03.....6/3/11	M-24.20-02.....4/20/15	M-65.10-02.....5/11/11
M-3.40-03.....6/3/11	M-24.40-02.....4/20/15	M-80.10-01.....6/3/11
M-3.50-02.....6/3/11	M-24.50-00.....6/16/11	M-80.20-00.....6/10/08
M-5.10-02.....6/3/11	M-24.60-04.....6/24/14	M-80.30-00.....6/10/08
M-7.50-01.....1/30/07	M-24.65-00.....7/11/17	
M-9.50-02.....6/24/14	M-24.66-00.....7/11/17	
M-9.60-00.....2/10/09		
M-11.10-02.....7/11/17		