CONTRACT
SPECIFICATIONS

TERRACE HEIGHTS DRIVE
OVERLAYS
(M.P. 0.36 TO M.P. 0.94)

Yakima County Public Services Project Number
C 3388
CONTRACT SPECIFICATIONS INDEX
(Yakima County, Washington)

C 3388 – Terrace Heights Drive Overlay
(M.P. 0.36 to M.P. 0.94)

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Amendments to Standard Specifications
Special Provisions
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Standard Plans
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## AMENDMENTS TO THE STANDARD SPECIFICATIONS

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CERTIFICATE

I HEREBY CERTIFY THAT THE ATTACHED DOCUMENTS, PLANS AND SPECIFICATIONS CONFORM TO ORIGINALS WHICH ARE ON FILE IN THE OFFICE OF THE COUNTY ENGINEER OF YAKIMA COUNTY, WASHINGTON.

GARY N. EKSTEDT, P.E.
COUNTY ENGINEER
INSTRUCTIONS TO BIDDERS

DELIVERY OF PROPOSALS

Sealed bids will be received at the following location before the specified time:

Office of the County Engineer of Yakima County, 4th Floor, Yakima County Courthouse, Yakima, Washington 98901 until 2:00 p.m. of the bid opening date.

Each proposal, or bid shall be completely sealed in a separate package, addressed to the County Engineer of Yakima County with the name of the improvements for which the bid is submitted plainly written on the outside of the package.

No oral, telephonic, facsimile, or telegraphic Bids or modifications shall be accepted.

DATE OF OPENING BIDS

The bid opening date for this project shall be **August 10, 2011**

The bids shall be publicly opened and read after 2:00 p.m. on that date at the following location:

Public Services Conference Room, Room 419, Yakima County Courthouse, 128 N. 2nd Street, Yakima, Washington 98901.

RIGHT TO REJECT BIDS:

The right is reserved to reject any and all proposals, to accept the proposal or proposals deemed best for the County or to advertise for new proposals when in the opinion of the Board the best interest of the County shall be promoted thereby.

PROPOSAL GUARANTY:

A certified check, cashiers check, cash or bid bond made payable to the Treasurer of the County of Yakima for an amount equal to at least five percent (5%) of the total amount bid must accompany each bid as evidence of good faith and as a guarantee that if awarded the Contract the bidder shall execute the Contract and give Bond as required.

FORM FURNISHED:

Each bid must be made on the form attached to these Specifications.

Yakima County in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000-4 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 shall affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises shall be afforded full opportunity to submit bids in response to this invitation and shall not be discriminated against on the grounds of race, color or national origin in consideration for an award.

YAKIMA COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER
PROPOSAL

This certifies that the undersigned has examined the location of:

C 3388, Terrace Heights Drive Overlay

and that the Plans, Specifications and Contract governing the work embraced in this improvement, and the method by which payment will be made for said work, is understood. The undersigned hereby, proposes to undertake and complete the work embraced in this improvement, or as much as can be completed with the money available, in accordance with the said Plans, Specifications, and Contract, and the following schedule of rates and prices:

NOTE: Unit Prices for all items, all extensions, and total amount of bid shall be shown, Sales Tax shall be included in Unit Prices. No oral, telephonic, facsimile, or telegraphic Bids or modifications shall be considered or accepted.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Approx. Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total Item Amt.</th>
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<tr>
<td>1</td>
<td>MOBILIZATION</td>
<td>1</td>
<td>L.S.</td>
<td>$</td>
<td>$</td>
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<td>2</td>
<td>TRAFFIC CONTROL SUPERVISOR</td>
<td>1</td>
<td>L.S.</td>
<td>$</td>
<td>$</td>
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<tr>
<td>3</td>
<td>FLAGGERS AND SPOTTERS</td>
<td>160</td>
<td>HOUR</td>
<td>$</td>
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<td>5</td>
<td>CEMENT CONC TRAFFIC CURB AND GUTTER</td>
<td>51</td>
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<td>$</td>
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<td>6</td>
<td>CEMENT CONCRETE SIDEWALK</td>
<td>28</td>
<td>S.Y.</td>
<td>$</td>
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<td>7</td>
<td>BRIDGE EXPANSION JOINT REPLACEMENT</td>
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<td>L.S.</td>
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<td>$</td>
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<td>8</td>
<td>RAIL SPUR CROSSING REMOVAL</td>
<td></td>
<td>L.S.</td>
<td>$</td>
<td>$</td>
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<tr>
<td>9</td>
<td>CONSTRUCTION SIGNS CLASS A</td>
<td>151</td>
<td>S.F.</td>
<td>$</td>
<td>$</td>
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<tr>
<td>10</td>
<td>SEQUENTIAL ARROW SIGN</td>
<td>300</td>
<td>HOUR</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td>CRUSHED SURFACING TOP COURSE</td>
<td>100</td>
<td>TON</td>
<td>$</td>
<td>$</td>
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<tr>
<td>12</td>
<td>PLANING BITUMINOUS PAVEMENT</td>
<td>13,000</td>
<td>S.Y.</td>
<td>$</td>
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<td>13</td>
<td>HMA CL. 3/8 IN. PG 64-28</td>
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<td>TON</td>
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<td>$</td>
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<tr>
<td>14</td>
<td>ANTI STRIPPING ADDITIVE</td>
<td>1</td>
<td>CALC</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
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<tr>
<td>15</td>
<td>ADJUST SANITARY SEWER MANHOLES</td>
<td>2</td>
<td>EACH</td>
<td>$</td>
<td>$</td>
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<tr>
<td>16</td>
<td>ADJUST WATER VALVES</td>
<td>6</td>
<td>EACH</td>
<td>$</td>
<td>$</td>
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<td>17</td>
<td>MONUMENT CASE AND COVER (county furnished)</td>
<td>2</td>
<td>EACH</td>
<td>$</td>
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<td>18</td>
<td>MINOR CHANGES</td>
<td>1</td>
<td>FORCE ACCOUNT</td>
<td>$15,000.00</td>
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<tr>
<td>19</td>
<td>SPCC PLAN</td>
<td>1</td>
<td>L.S.</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

**TOTAL BID AMOUNT: $**
The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

A proposal guaranty in an amount of five percent (5%) of the total bid, based upon the approximate estimate of quantities at the above prices and in the form as indicated below, is attached hereto:

CASH [ ] IN THE AMOUNT OF ________________________________

CASHIER'S CHECK [ ] ________________________________ DOLLARS

CERTIFIED CHECK [ ] ($__________) PAYABLE TO THE COUNTY TREASURER

PROPOSAL BOND [ ] IN THE AMOUNT OF 5 PERCENT (5%) OF THE BID

Bidder acknowledges receipt of the following Addendum’s:

No. Date ____________________________________________

The undersigned has telephoned the Office of the Yakima County Engineer for verification of the number of Addendum’s issued.

SIGNATURE OF AUTHORIZED OFFICIAL(S)

__________________________

The

Firm Name:

Address:

Phone No.:

Washington Registration No.:

Federal ID Tax No.:

UBI No.:

E-Mail Address:

Signed and sworn (or affirmed) before me on __________________________ (Date)

__________________________

NOTARY PUBLIC

My appointment expires ____________________________

State of ___________________ County of ________________ (Seal and Stamp)

NOTE: (1) This proposal is not transferable and any alteration of the firm's name entered hereon without prior permission from the County Engineer shall be cause for considering the proposal irregular and subsequent rejection of the bid.

(2) Please refer to Section 1-02.6 of the Standard Specifications, re: “Preparation of Proposal” or “Article 4” of the Instruction to Bidders for building construction jobs.

(3) Should it be necessary to modify this proposal either in writing or by electronic means, please make reference to the following proposal number in your communications; C 3388.
LETTER OF RESPONSIBILITY

Date: ____________________________
County Road Project No.: C 3388

TO: 
BOARD OF COUNTY COMMISSIONERS OF YAKIMA COUNTY, WASHINGTON 
(Party awarding principal contract)

Dear Sirs:

I hereby maintain that I am a responsible bidder as contemplated by the policies of the State of Washington (Chapter 157, Laws of Washington of 1937).

a. My permanent place of business is ________________________________, which I have maintained for ________ years.

b. I have adequate plant equipment to do expeditiously and properly the work contemplated for Yakima County, Washington.

DESCRIPTION OF WORK:

C 3388 - TERRACE HEIGHTS DRIVE OVERLAY (M.P. 0.36 TO M.P. 0.93)

I have the following equipment available for this work.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

c. I have adequate funds to promptly meet obligations incident to this work.
   Bank reference: ____________________________________________________

   ___________________________________________________________________

d. I have had experience in this class of work, having constructed the following improvements.

I hereby certify that the above is a true and accurate statement.

Very truly yours,

______________________________
Contractor

NOTE: This sheet need not be submitted, unless so requested by the Engineer subsequent to opening of bid. This "letter of responsibility" shall not be construed to be a request for prequalification of bidder.

CASH [ ] IN THE AMOUNT OF ____________________________

CASHIER'S CHECK [ ] ____________________________ DOLLARS
DEFINITION OF TERMS

In interpreting these specifications, the following definitions shall prevail:


SECRETARY OF TRANSPORTATION: Secretary of Transportation of the State of Washington.

BOARD: The Board of County Commissioners of Yakima County.

ENGINEER: County, or construction engineer, or his duly authorized assistants by whom all explanations and directions necessary for the satisfactory prosecution and completion of the work described in these specifications will be given.

CONTRACTOR: The person, firm, co-partnership, or corporation, or any lawful agent of such person, firm, partnership or corporation constituting one of the principals to the contract and undertaking to perform the work herein specified.

CONTRACT: The Agreement between the Contractor and the County of Yakima acting through the Board of County Commissioners. The contract shall include the accepted “Proposal”, “Plans”, “Specifications” and “Contract Bond”, also any and all supplemental agreements which reasonably could be required to complete the construction of the work in a substantial and acceptable manner.

PROPOSAL: The written offer, or copy thereof of the bidder to perform the work proposed.

PLANS: The officially approved drawings, or reproductions thereof attached to this contract.

SPECIFICATIONS: The directions, provisions and requirements contained herein, together with all written agreements made, or to be made pertaining to the method and manner of performing the work, or to the quantities and qualities of materials to be furnished under the contract.

CONTRACT BOND: The approved form of security furnished by the Contractor and his surety as a guarantee of good faith on the part of the Contractor to execute the work in accordance with the terms of the contract.

LABORATORY: The laboratories of the Department of Transportation, or other laboratories designated by the engineer.

AMOUNT OF THE CONTRACT: For the purpose of awarding the contract and determining the amount of the bond, the lump sum bid, or the summation of the products of the approximate quantities shown on the plans or otherwise stated by the unit prices will be considered the total amount of the bid and the full amount of the contract price.
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 have agreed to the provisions of this declaration.

NOTICE TO ALL BIDDERS

To report bid 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.
Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98, Section 98.510, Participant’s responsibilities. The regulations were published as Part VII of the May 26, 1998 Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ ATTACHED INSTRUCTIONS WHICH ARE AN INTEGRAL PART OF THE CERTIFICATION)

(1) The prospective recipient of federal assistance funds certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

(2) Where the prospective recipient of federal assistance funds is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

__________________________________________
Name and Title of Authorized Representative

_________________________    _________________
Signature                    Date
CONTRACT

THIS AGREEMENT, made and entered into between Yakima County acting under and by virtue of Titles 36 and 39 RCW, hereinafter called the “COUNTY” and______________________, hereinafter called the “CONTRACTOR”.

That in consideration of the terms and conditions contained herein and attached and made a part of this agreement, the parties hereto covenant and agree as follows:

I. The CONTRACTOR shall do all work and furnish all tools, materials and equipment for C 3388 – Terrace Heights Drive Overlay and shall perform any changes in the work in accordance with the Contract Documents.

II. The CONTRACTOR shall provide and bear the expense of all equipment, material and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work provided for in the Contract Documents except those items mentioned therein to be furnished by Yakima County.

III. The COUNTY hereby promises and agrees to pay the CONTRACTOR according to the attached Specifications and the schedule of unit or itemized prices at the time and in the manner and upon the conditions provided for in the Contract Documents.

IV. The CONTRACTOR for itself, and for its heirs, executors, administrators, successors and assigns does hereby agree to the full performance of all the covenants herein contained upon the part of the CONTRACTOR.

V. It is further provided that no liability shall attach to the COUNTY by reason of entering into this Contract, except as expressly provided herein.

VI. The parties agree that, for the purpose of this agreement, the CONTRACTOR is an independent contractor and neither the CONTRACTOR nor any employee of the CONTRACTOR is an employee of the COUNTY. Neither the CONTRACTOR nor any employee of the CONTRACTOR is entitled to any benefits that the COUNTY provides its employees. The CONTRACTOR is solely responsible for payment of any statutory workers compensation or employer’s liability insurance as required by state law.

IN WITNESS WHEREOF, the CONTRACTOR has executed this instrument, on the date indicated below and Yakima County has caused this instrument to be executed in the name of said COUNTY by and through the Board of Yakima County Commissioners on the date indicated below.

Executed by the CONTRACTOR_______, 20____

BOARD OF YAKIMA COUNTY COMMISSIONERS

Kevin J. Bouche, Chairman

J. Rand Elliott, Commissioner

Michael D. Leita, Commissioner

ATTEST: Clerk of the Board

Tiera L. Girard

Approved as to form:

Deputy Prosecuting Attorney
PERFORMANCE BOND
(RCW 39.08)

KNOW ALL MEN BY THESE PRESENTS, That __________________________________________, as "PRINCIPAL", and __________________________________________, a corporation authorized to do business in the State of Washington, as "SURETY", are jointly and severally held and bound unto Yakima County, Washington in the penal sum __________________________________________ Dollars ($__________________________) for the payment of which by these presents we jointly and severally bind ourselves, our heirs, executors, administrators, assigns, and successors.

THE CONDITION of this bond is such that WHEREAS, on __________________, 20__, the PRINCIPAL executed a certain Contract with the County, by the terms of which PRINCIPAL agrees to furnish all material and labor and will undertake and complete the construction of for C 3388 – Terrace Heights Drive Overlay according to the maps, plans and specifications made a part of said Contract, which Contract is attached hereto and by this reference is incorporated herein and made a part hereof. FURTHER, the SURETY agrees to be bound by the laws of the State of Washington and subjected to the jurisdiction of the State of Washington.

NOW, THEREFORE, if the PRINCIPAL shall faithfully perform all the provisions of such contract and pay all laborers, mechanics, subcontractors and materialmen, and all persons who supply such persons or subcontractors with provisions or supplies for the carrying on of such work, then this obligation to be void, otherwise to remain in full force and effect.

Dated this _____day of ________________________, 20__.

PRINCIPAL

By: ____________________________

Title: ____________________________

SURETY

By: ____________________________

Attorney-in-Fact

Approved as to form:

Deputy Prosecuting Attorney

Name of Local Office of Agent

Address of Local Office Agent

BOND NUMBER

YAKIMA COUNTY CONTRACT NUMBER
The following sheets are included as Informational Only. The originals must be obtained from Burlington Northern Santa Fe Railroad (BNSF) and filled out.

Included is an informational copy of the Application for Roadway Surfacing Agreement, this application has already been submitted by Yakima County.

Also included is an informational copy of the Roadway Surfacing Agreement that must be filled out by the successful bidder and submitted to BNSF.

The successful bidder must also provide the insurance requirements in the Agreement, including the Railroad Protective Insurance and the Application for the BNSF Blanket Railroad Protective Program.

Once the contract has been awarded the contractor must contact the BNSF representative immediately to finish the Permit process.

BNSF leases the trackage rights to Central Washington Railroad. Central Washington Railroad will be performing the flagging when work is being done at the crossing.

The contact representative for BNSF locally is:

**Kim Johnson Rath, Real Estate Manager/Designated Broker**

Iron Horse Real Estate & Property Management  
111 University Parkway, Suite 200  
Yakima, WA 98901  
(509) 834-2533 Direct Line  
(509) 453-9349 Fax  
(509) 388-6602 Mobile

krath@ihdlc.com Email
APPLICATION FOR ROADWAY SURFACING AGREEMENT

Iron Horse Development, LLC
c/o Almon Commercial Real Estate
111 University Parkway, Ste 200
Yakima, WA 98901

APPLICANT'S TAX I.D.NO./SS#  91-6001387
APPLICANT'S UBI NUMBER:  397016924

We submit for your approval the following application for Roadway Surfacing Agreement on BNSF RAILWAY COMPANY'S right-of-way, as shown on enclosed sketch.

Purpose of license:    __Grind and overlay Terrace Heights Drive__
Legal name of company or municipality who will occupy/use the property:    Yakima County Public Services
Name of contact:    Matt Pietrusiewicz
State in which incorporated:    Washington
If not incorporated, correct name of owners or all partners:    
Correct mailing address:    1216 S. 18th Street, Yakima, WA    Zip Code  98901
Telephone 509.574.2396    Fax Number 509.574.2298

Location of proposed occupancy:    SW 1/4 Sec. 16 Twp. 13 Rng. 19 RR MP
Name of nearest town on Railroad:    Yakima    County    Yakima    State    Washington
Name of nearest roadway crossing Railroad:    Terrace Heights Drive

Will this project be located entirely within the limits of a public street? Yes    No
Is the work to be performed within 50 feet from the track? Yes    No
Total cost of project: $230,000.00

Describe work to be done on property by contractor (Please show details on attached sketch):
    __Grind and overlay Terrace Heights Drive, railroad crossings located at Sta. 311+55.09__

Was services requested by BNSF? Yes    or No    X    If yes, who requested?

I understand that submission of this application does not authorize occupancy of the property. Exact fees and insurance requirements will be forwarded after the application has been reviewed and approved by the railroad.

Signed: __________________________
Print Name: ________________________
Title: ____________________________
Telephone: ________________________
The Burlington Northern Santa Fe Railway Company
Blanket Railroad Protective Program – Leases/Permits
Application for Insurance

BNSF REQUIRES RAILROAD PROTECTIVE LIABILITY INSURANCE IN THE NAME OF THE BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY FOR LIMITS OF $5MM PER OCCURRENCE/$10,000,000 AGGREGATE PER ISO/RIMA POLICY FORM CG00351093 ENDORSED TO INCLUDE LIMITED SEEPAGE, POLLUTION AND EVACUATION COVERAGE.

1. Contractor Name/ Address
   [Space]
   Are you the permittee: YES NO
   Have you applied for a permit: YES NO
   Do you have a contract with BNSF: YES NO
   If not, who is the contract with: ________
   Contractor Contact: ____________________________ (Name) ____________________________ (Phone)

2. Who is your BNSF Contact Person: ____________________________ (Phone)

3. Job Description: ____________________________________________
   Job Location: ________________________________________________
   If applicable Project No. ________________________________________

   Please Specify Limits Needed: $2M/$6M: ☐ $5M/$10M: ☐
   Transverse: YES NO
   Longitudinal: YES NO
   Open Cut: YES NO
   Length (feet): ________
   Underground # of Bores: ________
   Overhead or Underground: ________

4. Start Up and Estimated Completion Dates: ________________________

5. Contract Cost Total: ____________________________
   Contract Cost Within 50 Feet of Track: ____________________________

6. Permittee’s Insurance:
   A certificate of insurance is required evidencing $5MM per occurrence/$10MM aggregate general liability coverage including contractual liability with the “work within 50 feet of a railroad” exclusion deleted. The certificate should also evidence the addition of The BNSF Railway Company, P.O. Box 961073, Ft. Worth, Texas 76161-0073 as an additional insured, including 30 days cancellation notice, or as required by contract.

7. Quoted Premium: _____________ Quoted By: _____________ Date: ________

   To receive a quote, please complete form and fax to 214-303-8500. Quotation is valid for 30-days only; thereafter we will close our file.

   In order to bind coverage, we will need a check sent for the quoted premium made payable to Marsh USA, Inc., referencing account # 454883 to the below Lock Box, along with a copy of this completed form:

   Marsh USA Inc
   Lockbox Number 973770
   TX1-0006
   14800 Frye Road
   Fort Worth, TX 76155

RRP Contacts:
   Rosa M. Martinez, Phone: 214-303-8519
   e-mail: Rosa.M.Martinez@marsh.com
   Elvira Bond, Phone: 214-303-8419
   Email: Elvira.Bond@marsh.com
   Fax: 214-765-8500

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ROADWAY SURFACING AGREEMENT

This Roadway Surfacing Agreement ("Agreement") is entered into effective as of __________ 2011, by and between ______________ ("Contractor"), Washington corporation, and BNSF Railway Company ("Railway"), a Delaware corporation.

WHEREAS, Railway operates a freight transportation system by rail with operations throughout the United States and Canada; and

WHEREAS, City of Othello desires Contractor to surface the roadway adjacent to and upon Railway’s right of way, and Contractor is willing to perform such services.

NOW, THEREFORE, in consideration for Railway entering this Agreement with Contractor and granting Contractor permission to enter upon the Premises (defined herein), Contractor agrees with Railway as follows:

SECTION 1. SCOPE OF SERVICES AND TERM

Contractor shall perform the following services, hereinafter described as Work: resurface roadway as per construction specifications noted on Exhibit “A” dated __________ for a term beginning on __________ 2011 and expiring on __________ 2011.

Performance of the Work will necessarily require Contractor to enter Railway’s right of way and property ("Premises"). Contractor agrees that no work shall be commenced on the Premises until (i) this Agreement is executed by both Contractor and Railway; and (ii) Railway approves the insurance required to be maintained by Contractor hereunder. Contractor further agrees that if this Agreement is not executed by the owner, general partner, president, or vice-president of Contractor, Contractor shall furnish Railway with evidence certifying that the signatory is empowered to execute this Agreement.

SECTION 2. PAYMENT OF FEES

City of Othello shall be responsible for payment to Contractor for the Work performed under this Agreement.

SECTION 3. RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorney's fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. THE LIABILITY ASSUMED BY CONTRACTOR SHALL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR SHALL INCLUDE ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE BOILER INSPECTION ACT, WHenever so claimed.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it shall adjust and settle all claims made against Railway, and shall, at Railway’s discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any
liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway shall give notice to Contractor, in writing, of the receipt or pendency of such claims and thereupon Contractor shall proceed to adjust and handle to a conclusion such claims, and in the event of a suit brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway’s discretion, shall defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney’s fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement shall survive any termination of this Agreement.

SECTION 4. INSURANCE.

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability Insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $2,000,000 per occurrence and an aggregate limit of at least $4,000,000. Coverage must be purchased on a post 1995 ISO occurrence form or equivalent and include coverage for, but not limited to, the following:
   ♦ Bodily Injury and Property Damage
   ♦ Personal Injury and Advertising Injury
   ♦ Fire legal liability
   ♦ Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:
   ♦ It is agreed that any workers’ compensation exclusion does not apply to Railroad payments related to the Federal Employers Liability Act or a Railroad Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any Workers Compensation, disability benefits, or unemployment compensation law or similar law.
   ♦ The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
   ♦ Any exclusions related to the explosion, collapse and underground hazards shall be removed.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:
   ♦ Bodily injury and property damage
   ♦ Any and all vehicles owned, used or hired

C. Workers Compensation and Employers Liability Insurance. This insurance shall include coverage for, but not limited to:
   ♦ Contractor’s statutory liability under the worker’s compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
   ♦ Employers’ Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.
D. Railroad Protective Liability Insurance. This insurance shall name only the Railroad as the Insured with coverage of at least $2,000,000 per occurrence and $6,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement
- Endorsed to include Evacuation Expense Coverage Endorsement
- No other endorsements restricting coverage may be added
- The original endorsements must be provided to the Railroad prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate in Licensor's Blanket Railroad Protective Liability Insurance Policy available to Licensee or its contractor. The limits of coverage are the same as above. The cost is $_____.

☐ I elect to participate in Licensor’s Blanket Policy.

X ☐ I elect not to participate in Licensor’s Blanket Policy.

E. Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under contractor's care, custody or control.

Contractor’s insurance policies through policy endorsement, must include wording which states that the policy shall be primary and non-contributing with respect to any insurance carried by Railroad. The certificate of insurance must reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and if applicable, Railroad Protective) shall include a severability of interest endorsement and Railroad and Iron Horse Development, LLC shall be named as an additional insured with respect to work performed under this agreement. Severability of interest and naming Railroad and Iron Horse Development, LLC as additional insured shall be indicated on the certificate of insurance.

Contractor is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims shall be covered directly by contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor’s insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the Work, contractor shall furnish to Railroad an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. The policy(ies) shall contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railroad in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision shall be indicated on the certificate of insurance. Upon request from Railroad, a certified duplicate original of any required policy shall be furnished.
Any insurance policy shall be written by a reputable insurance company acceptable to Railroad or with a current Best’s Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

Contractor represents that this Agreement has been thoroughly reviewed by contractor’s insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, Railroad may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by contractor, contractor shall require that the subcontractor shall provide and maintain insurance coverages as set forth herein, naming Railroad as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railroad to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railroad herein.

Failure to provide evidence as required by this section shall entitle, but not require, Railroad to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by contractor shall not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

For purposes of this section, Railroad shall mean “Burlington Northern Santa Fe Corporation”, “BNSF Railway Company” and the subsidiaries, successors, assigns and affiliates of each.

SECTION 5. PROTECTION OF RAILWAY FACILITIES AND RAILWAY FLAGGER SERVICES

A. The Contractor shall give a minimum of at least thirty (30) working days notice to Tim Marshall the Railways Roadmaster at telephone (509) 969-1746, in advance of when flagging services will be required to bulletin the flaggers position and shall provide five (5) working days notice to the Roadmaster to abolish the position per union requirements.

B. Railway flagger and protective services and devices will be required and furnished when Contractor's work activities are located over or under of and within twenty-five (25) feet measured horizontally from center line of the nearest track and when cranes or similar equipment positioned outside of 25-foot horizontally from track center line that could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:

(1). When in the opinion of the Railway's representative, it is necessary to safeguard the Premises, employees, trains, engines and facilities.

(2). When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.

(3). When work in any way interferes with the safe operation of trains at timetable speeds.

(4). When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.

(5). Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.
C. Flagging services will be performed by qualified Railway flaggers. The estimated cost for one (1) flagger is $600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging and supervision. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. The flagging rate in effect at the time of performance by Contractor hereunder shall be used to calculate the actual costs of flagging pursuant to this paragraph.

(1) A flagging crew generally consists of one employee. However, additional personnel may be required to protect the Premises and operations, if deemed necessary by the Railway's representative.

(2) Each time a flagger is called, the minimum period for billing shall be the eight (8) hour basic day.

(3) The cost of flagger services provided by the Railway, when deemed necessary by the Railway's representative, will be borne by the City's contractor.

SECTION 6. INDEPENDENT CONTRACTOR

In the performance of the Work under this Agreement, Contractor will be considered as an independent contractor, neither Contractor nor any of its employees, subcontractors, agents or servants will be considered as employees of Railway in any respect. Contractor shall have the exclusive right and duty to control the work of its employees. All persons employed by Contractor or any of its subcontractors in the performance of this Agreement shall be the sole employees of Contractor or its subcontractors. Contractor will be given general directions and instructions regarding the Work to be rendered under this Agreement; however, direct supervision of Contractor's employees will be Contractor's responsibility and obligation.

Iron Horse Development, LLC is acting as a representative for BNSF Railway Company.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first written above.

BNSF Railway Company

By ______________________________
Name: ____________________________
Title: _____________________________
Address __________________________
City, State, Zip ____________________

By ______________________________
Name: ____________________________
Title: _____________________________
Amendments to Standard Specifications
AMENDMENTS TO THE STANDARD SPECIFICATIONS

C3388 – TERRACE HEIGHTS DRIVE OVERLAY
YAKIMA COUNTY, WASHINGTON

INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2010 Standard Specifications for Road, Bridge, and Municipal Construction.

AMENDMENTS TO THE STANDARD SPECIFICATIONS

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

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

SECTION 1-01, DEFINITIONS AND TERMS

August 2, 2010

1-01.2(1) Associations and Miscellaneous
The abbreviation and definition “AREA American Railway Engineering Association” is replaced with the following:
AREMA American Railway Engineering and Maintenance Association

SECTION 1-02, BID PROCEDURES AND CONDITIONS

January 4, 2010

1-02.7 Bid Deposit
In the first paragraph, the third sentence is revised to read:

For projects scheduled for bid opening in Olympia, the proposal bond may be in hard copy or electronic format via Surety2000.com or Insurevision.com and BidX.com.

1-02.9 Delivery of Proposal
In the first paragraph, the first sentence is revised to read:

For projects scheduled for bid opening in Olympia, each Proposal shall be sealed and submitted in the envelope provided with it, or electronically via Expedite software and BidX.com at the location and time identified in Section 1-02.12.

The following new paragraph is inserted after the first paragraph:
For projects scheduled for bid opening in the Region, each Proposal shall be sealed and submitted in the envelope provided with it, at the location and time identified in Section 1-02.12. The Bidder shall fill in all blanks on this envelope to ensure proper handling and delivery.

SECTION 1-06, CONTROL OF MATERIALS
January 3, 2011

1-06.1 Approval of Materials Prior to Use
This section is supplemented with the following new sub-section:

1-06.1(4) Fabrication Inspection Expense
In the event the Contractor elects to have items fabricated beyond 300 miles from Seattle, Washington the Contracting Agency will deduct from payment due the Contractor costs to perform fabrication inspection on the following items:

- Steel Bridges and Steel Bridge components
- Cantilever Sign Structures and Sign Bridges
- Prestressed Concrete Girders and Precast Bridge Components
- Cylindrical, Disc, Pin, and Spherical Bearings
- Modular Expansion Joints
- Epoxy Coated Reinforcing Steel
- Painted and Powder Coated Luminaire and Signal Poles
- Additional items as may be determined by the Engineer

The deductions for fabrication inspection costs will be as shown in the Payment Table below.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Place of Fabrication</th>
<th>Reduction in Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Within 300 airline miles from Seattle</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Between 300 and 3,000 airline miles from Seattle</td>
<td>$700.00 per *inspection day</td>
</tr>
<tr>
<td>3</td>
<td>Over 3,000 airline miles from Seattle</td>
<td>$1,000 per *inspection day, but not less than $2,500 per trip</td>
</tr>
</tbody>
</table>

*Note - An inspection day includes any calendar day or portion of a calendar day spent inspecting at or traveling to and from a place of fabrication.

Where fabrication of an item takes place in more than one zone, the reduction in payment will be computed on the basis of the entire item being fabricated in the furthest of zones where any fabrication takes place on that item.

The rates for Zone 2 and 3 shall be applied for the full duration time of all fabrication inspection activities to include but not limited to; plant approvals, prefabrication meetings, fabrication, coatings and final inspection.
1-06.2(2)A General

Table 2 “Pay Factors” on page 1-39 is revised to read:

<table>
<thead>
<tr>
<th>PAY FACTOR</th>
<th>Minimum Required Percent of Work Within Specification Limits for a Given Factor (PU + PL) = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category</td>
</tr>
<tr>
<td>1.05</td>
<td>100</td>
</tr>
<tr>
<td>1.04</td>
<td>100</td>
</tr>
<tr>
<td>1.03</td>
<td>100</td>
</tr>
<tr>
<td>1.02</td>
<td>100</td>
</tr>
<tr>
<td>1.01</td>
<td>100</td>
</tr>
</tbody>
</table>

(Continued)

Table 2 “Pay Factors” on page 1-40 is revised to read:

<table>
<thead>
<tr>
<th>PAY FACTOR</th>
<th>Minimum Required Percent of Work Within Specification Limits for a Given Factor (PU + PL) = 100</th>
</tr>
</thead>
</table>

SECTION 1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

April 4, 2011

1-07.2 Sales Tax

The third sentence in the first paragraph is revised to read:
The Contractor shall contact the Contract Payment section of the Division of Accounting & Financial Services of the Department of Transportation, Olympia WA for questions on sales tax.

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

The Contracting Agency will pay the retained percentage only if the Contractor has obtained from the State Department of Revenue a certificate showing that all Contract-related taxes have been paid (RCW 60.28.051).

1-07.9(1) General
The second sentence in the fourth paragraph is revised to read:

When the project involves highway Work, heavy Work and building Work, the Contract Provisions may list a Federal wage and fringe benefit rate for the highway Work, a separate Federal wage and fringe benefit rate for both the heavy Work and the building Work.

1-07.13(4) Repair of Damage
The last sentence in the first paragraph is revised to read:

For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2), 1-07.13(3), or 8-17.5, payment will be made in accordance with Section 1-09.4 using the estimated bid item “Reimbursement for Third Party Damage”.

1-07.14 Responsibility for Damage
The third, fourth and fifth paragraphs are revised to read:

Subject to the limitations in this section and RCW 4.24.115 the Contractor shall indemnify, defend, and save harmless the State, Governor, Commission, Secretary, and all officers and employees of the State from all claims, suits, or actions brought for injuries to, or death of, any persons or damages resulting from construction of the Work or in consequence of any negligence or breach of contract regarding the Work, or the use of any improper materials in the Work, caused in whole or in part by any act or omission by the Contractor or the agents or employees of the Contractor during performance or at any time before final acceptance. In addition to any remedy authorized by law, the State may retain so much of the money due the Contractor as deemed necessary by the Engineer to ensure indemnification until disposition has been made of such suits or claims.

Subject to the limitations in this section and RCW 4.24.115, the Contractor shall indemnify, defend, and save harmless any county, city, or region, its officers, and employees connected with the Work, within the limits of which county, city, or region the Work is being performed, all in the same manner and to the same extent as provided above for the protection of the State, its officers and employees, provided that no retention of money due the Contractor be made by the State except as provided in RCW 60.28, pending disposition of suits or claims for damages brought against the county, city, or district.

Pursuant to RCW 4.24.115, where such claims, suits, or actions result from the concurrent negligence of (a) the indemnitee or the indemnitee’s agents or employees and (b) the Contractor or the Contractor’s agent or employees, the indemnity provisions provided in the preceding paragraphs of
this section shall be valid and enforceable only to the extent of the Contractor’s negligence or the
negligence of its agents and employees.

This section is supplemented with the following:

THE CONTRACTOR SPECIFICALLY ASSUMES ALL POTENTIAL LIABILITY FOR ACTIONS
BROUGHT BY EMPLOYEES OF THE CONTRACTOR AND, SOLELY FOR THE PURPOSE OF
ENFORCING THE DEFENSE AND INDEMNIFICATION OBLIGATIONS SET FORTH IN
SECTION 1-07.14, THE CONTRACTOR SPECIFICALLY WAIVES ANY IMMUNITY GRANTED
UNDER THE STATE INDUSTRIAL INSURANCE LAW, RCW TITLE 51. THIS WAIVER HAD
BEEN MUTUALLY NEGOTIATED BY THE PARTIES. THE CONTRACTOR SHALL
SIMILARLY REQUIRE THAT EACH SUBCONTRACTOR IT RETAINS IN CONNECTION WITH
THE PROJECT COMPLY WITH THE TERMS OF THIS PARAGRAPH, WAIVE ANY IMMUNITY
GRANTED UNDER RCW TITLE 51 AND ASSUME ALL LIABILITY FOR ACTIONS BROUGHT
BY EMPLOYEES OF THE SUBCONTRACTOR.

1-07.15 Temporary Water Pollution/Erosion Control

The fourth paragraph is deleted.

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

This section is deleted in its entirety and replaced with the following:

The Contractor shall prepare and implement a project-specific spill prevention, control, and
countermeasures plan (SPCC Plan) for the duration of the project. The Contractor shall submit the plan
to the Project Engineer no later than the date of the preconstruction conference. No on-site
construction activities may commence until the Contracting Agency accepts an SPCC Plan for the
project. SPCC Plan template and guidance information is available at:

The SPCC Plan shall address all fuels, petroleum products and hazardous materials, as defined in
Chapter 447 of the WSDOT Environmental Procedures Manual (M 31-11). Occupational safety and
health requirements that may pertain to SPCC Plan implementation are contained in, but not limited to,
WAC 296-824 and WAC 296-843. The SPCC Plan shall address conditions that may be required by
Section 3406 of the current International Fire Code, or as approved by the local Fire Marshal.

Implementation Requirements

The Contractor shall update the SPCC Plan throughout project construction so that the written plan
reflects actual site conditions and practices. The Contractor shall update the SPCC Plan at least
annually and maintain a copy of the updated SPCC Plan on the project site. The Contractor shall fully
implement the SPCC Plan, as accepted and updated, at all times.

SPCC Plan Element Requirements

The SPCC Plan shall set forth the following information in the following order:

1. Responsible Personnel
   Identify the names, titles, and contact information for the personnel responsible for
   implementing and updating the plan and for responding to spills.
2. Spill Reporting
   List the names and telephone numbers of the Federal, State, and local agencies the Contractor
   shall notify in the event of a spill.

3. Project and Site Information
   Describe the following items:

   A. The project Work.
   B. The site location and boundaries.
   C. The drainage pathways from the site.
   D. Nearby waterways and sensitive areas and their distances from the site.

4. Potential Spill Sources
   Describe each of the following for all potentially hazardous materials brought or generated
   on-site (including materials used for equipment operation, refueling, maintenance, or
   cleaning):

   A. Name of material and its intended use.
   B. Estimated maximum amount on-site at any one time.
   C. Location(s) (including any equipment used below the ordinary high water line)
      where the material will be staged, used, and stored and the distance(s) from nearby
      waterways and sensitive areas.

5. Pre-Existing Contamination
   Describe any pre-existing contamination and contaminant sources (such as buried pipes or
   tanks) in the project area that are described in the Contract provisions and Plans. Identify
   equipment and work practices that shall be used to prevent the release of contamination.

6. Spill Prevention and Response Training
   Describe how and when all project personnel, including refueling personnel and other
   Subcontractors, shall be trained in spill prevention, containment, and response and in the
   location of spill response kits.

7. Spill Prevention
   Describe the following items:

   A. The contents and locations of spill response kits that the Contractor shall supply and
      maintain that are appropriately stocked, located in close proximity to hazardous
      materials and equipment, and immediately accessible.
   B. Security measures for potential spill sources to prevent accidental spills and
      vandalism.
C. Methods used to prevent stormwater from contacting hazardous materials.

D. Secondary containment for each potential spill source listed in 4, above. Secondary containment structures shall be in accordance with Section S9.D.9 of Ecology's Construction Stormwater General NPDES Permit, where secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.

E. BMP Methods used to prevent discharges to ground or water during mixing and transfers of hazardous materials and fuel. Methods to control pollutants shall use BMPs in accordance with Ecology's Construction Stormwater General NPDES Permit. BMPs guidance is provided in Ecology's Stormwater Management Manuals, such as Volume II - Construction Stormwater Pollution Prevention, BMP C153 and Volume IV Source Control BMPs.

F. Refueling procedures for equipment that cannot be moved from below the ordinary high water line.

G. Daily inspection and cleanup procedures that ensure all equipment used below the ordinary high water line is free of all external petroleum-based products.

H. Routine equipment, storage area, and structure inspection and maintenance practices to prevent drips, leaks or failures of hoses, valves, fittings, containers, pumps, or other systems that contain or transfer hazardous materials.

I. Site inspection procedures and frequency.

8. Spill Response
Outline the response procedures the Contractor shall follow for each scenario listed below, indicating that if hazardous materials are encountered or spilled during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. Include a description of the actions the Contractor shall take and the specific on-site spill response equipment that shall be used to assess the spill, secure the area, contain and eliminate the spill source, clean up spilled material, decontaminate equipment, and dispose of spilled and contaminated material.

A. A spill of each type of hazardous material at each location identified in 4, above.

B. Stormwater that has come into contact with hazardous materials.

C. A release or spill of any pre-existing contamination and contaminant source described in 5, above.

D. A release or spill of any unknown pre-existing contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.
E. A spill occurring during Work with equipment used below the ordinary high water line.

If the Contractor will use a Subcontractor for spill response, provide contact information for the Subcontractor under item 1 (above), identify when the Subcontractor shall be used, and describe actions the Contractor shall take while waiting for the Subcontractor to respond.

9. Project Site Map
Provide a map showing the following items:

A. Site location and boundaries.
B. Site access roads.
C. Drainage pathways from the site.
D. Nearby waterways and sensitive areas.
E. Hazardous materials, equipment, and decontamination areas identified in 4, above.
F. Pre-existing contamination or contaminant sources described in 5, above.
G. Spill prevention and response equipment described in 7 and 8, above.

10. Spill Report Forms
Provide a copy of the spill report form(s) that the Contractor shall use in the event of a release or spill.

Payment
Payment will be made in accordance with Section 1-04.1 for the following bid item when it is included in the Proposal:

"SPCC Plan," lump sum.

When the written SPCC Plan is accepted by Contracting Agency, the Contractor shall receive 50-percent of the lump sum Contract price for the plan. The remaining 50-percent of the lump sum price will be paid after the materials and equipment called for in the Plan are mobilized to the project.

The lump sum payment for "SPCC Plan" shall be full pay for all costs associated with creating and updating the accepted SPCC Plan, all costs associated with the set up of prevention measures, and implementing the current SPCC Plan as required by this Specification.

As to other costs associated with releases or spills, including restocking spill kits, the Contractor may request payment as provided for in the Contract. No payment shall be made if the release or spill was caused by or resulted from the Contractor's operations, negligence, or omissions.

1-07.16(2) Vegetation Protection and Restoration
The second paragraph is revised to read:
Damage which may require replacement of vegetation includes torn bark stripping, broken branches, exposed root systems, cut root systems, poisoned root systems, compaction of surface soil and roots, puncture wounds, drastic reduction of surface roots or leaf canopy, changes in grade greater than 6-inches, or any other changes to the location that may jeopardize the survival or health of the vegetation to be preserved.

The third paragraph is revised to read:

When large roots of trees designated to be saved are exposed by the Contractor’s operation, they shall be wrapped with heavy, moist material such as burlap or canvas for protection and to prevent excessive drying. The material shall be kept moist and securely fastened until the roots are covered to finish grade. All material and fastening material shall be removed from the roots before covering. All roots 1-inch or larger in diameter, which are damaged, shall be pruned with a sharp saw or pruning shear. Damaged, torn, or ripped bark shall be removed as designated by the Engineer at no additional cost to the Contracting Agency.

The fourth paragraph is revised to read:

Any pruning activity required to complete the Work as specified shall be performed by a Certified Arborist as designated by the Engineer.

1-07.18 Public Liability and Property Damage Insurance
This section is deleted in its entirety and replaced with the following:

1-07.18 Public Liability and Property Damage Insurance
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 Chapter 48.05, RCW. 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 Secretary (Section 1-05.12).

1. Owners and Contractors Protective (OCP) Insurance providing bodily injury and property damage liability coverage with limits of $3,000,000 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 $3,000,000 per occurrence and in the aggregate for each one year policy period. This coverage may be any combination of primary, umbrella or excess liability coverage affording total liability limits of not less than $3,000,000 per occurrence and in the aggregate. Products and completed operations coverage shall be provided for a period of three years following Substantial Completion of the Work.

3. Commercial Automobile Liability Insurance providing bodily injury and property damage liability coverage for all owned and nonowned vehicles assigned to or used in the performance of the Work with a combined single limit of not less than $1,000,000 each occurrence. This coverage
may be any combination of primary, umbrella or excess liability coverage affording total liability
limits of not less than $1,000,000 per occurrence with the State named as an additional insured or
designated insured in connection with the Contractor’s Performance of the Contract. If pollutants
are to be transported, MCS 90 and CA 99 48 endorsements are required on the Commercial
Automobile Liability insurance policy unless in-transit pollution risk is covered under a Pollution
Liability insurance policy.

4. The Contractor shall be Named Insured and the Contracting Agency, the State, the Governor, the
Commission, the Secretary, the Department, all officers and employees of the State, and their
respective members, directors, officers, employees, agents and consultants (collectively the
“Additional Insureds”) shall be included as Additional Insureds for all policies and coverages
specified in this Section, with the exception of the OCP policy. Said insurance coverage shall be
primary and non-contributory insurance with respect to the insureds and the Additional Insureds.
Any insurance or self-insurance beyond that specified in this Contract that is maintained by any
Additional Insured shall be in excess of such insurance and shall not contribute with it. All
insurance coverage required by this Section shall be written and provided by “occurrence-based”
policy forms rather than by “claims made” forms.

All endorsements adding Additional Insureds to required policies shall be issued on (i) form
CG 20 10 11 85 or a form deemed equivalent by the Contracting Agency, providing the
Additional Insureds with all policies and coverages set forth in this Section, with the exception of
the OCP and Commercial Auto policies or (ii) form CA 20 48 or forms deemed equivalent by
Contracting Agency, providing the Additional Insureds with all coverage’s required under the
Commercial Automobile Liability.

5. The coverage limits to be provided by Contractor for itself and to the Contracting Agency and
Additional Insureds pursuant to this section or any Special Provision, shall be on a “per project”
aggregate basis with the minimum limits of liability as set forth herein for both general liability
and products/completed operations claims. The additional insured coverage required under this
Section for products/completed operations claims shall remain in full force and effect for not less
than three years following Substantial Completion of the project. If the Contractor maintains, at
any time, coverage limits for itself in excess of limits set forth in this Section 1-07.18 or any
Special Provision, then those additional coverage limits shall also apply to the Contracting
Agency and the Additional Insureds. This includes, but is not limited to, any coverage limits
provided under any risk financing program of any description, whether such limits are primary,
excess, contingent or otherwise.

6. All insurance policies and coverage’s required under Section 1-07.18 and Section 1-07.10 shall
contain a waiver of subrogation against the Contracting Agency, the State, any Additional Insured
and their respective departments, agencies, boards, and commissions and their respective officers,
officials, agents, and employees for losses arising from Work performed by or on behalf of the
Contractor. This waiver has been mutually negotiated by the parties.

7. Where applicable, the Contractor shall cause each Subcontractor to provide insurance that
complies with all applicable requirements of the Contractor-provided insurance as set forth herein,
in circumstances where the Subcontractor is not covered by the Contractor-provided insurance.
The Contractor shall have sole responsibility for determining the limits of coverage required, if
any, to be obtained by Subcontractors, which determination shall be made in accordance with
reasonable and prudent business practices. In the event that a Subcontractor is required to add the Contractor as an additional insured pursuant to its contract for Work at the Project, then the Contractor shall also cause each Subcontractor to include the Contracting Agency and the Additional Insureds as additional insureds as well, for primary and non-contributory limits of liability under each Subcontractor’s Commercial General Liability, Commercial Automobile Liability and, any other coverage’s which may be required pursuant to a “Special Provision”.

8. Unless specifically noted otherwise in the Contract Documents, the parties to this Contract do not intend by any of the provisions of this Contract to cause the public or any member thereof or any other Person to be a third party beneficiary of the Contract Documents. Nothing in this Contract authorizes anyone not a party to this Contract or a designated third party beneficiary to this Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Contract. It is the further intent of the Contracting Agency and the Contractor in executing the Form of Contract that no individual, firm, corporation or any combination thereof which supplies materials, labor, services, or equipment to the Contractor for the performance of the Work shall become thereby a third party beneficiary of this Contract.

The Contract Documents shall not be construed to create a contractual relationship of any kind between the Contracting Agency and a Subcontractor or any other Person except the Contractor.

9. The Owners and Contractors Protective Insurance policy shall not be subject to a deductible or contain provisions for a deductible. The Commercial General Liability policy and the Commercial Automobile Liability Insurance policy may, at the discretion of the Contractor, contain such provisions. If a deductible applies to any claim under these policies, then payment of that deductible will be the responsibility of the Contractor, notwithstanding any claim of liability against the Contracting Agency. However in no event shall any provision for a deductible provide for a deductible in excess of $50,000.00.

10. With the exception of the Commercial Automobile liability coverage, no policies of insurance required under this Section shall contain an arbitration or alternative dispute resolution clause applicable to disputes between the insurer and its insureds. Any and all disputes concerning (i) terms and scope of insurance coverage afforded by the policies required hereunder and/or (ii) extra contractual remedies and relief which may be afforded policy holders in connection with coverage disputes, shall be resolved in Washington Superior Court, applying Washington law.

11. Prior to Contract execution, the Contractor shall file with the Department of Transportation, Contract Payment Section, P.O. Box 47420, Olympia, WA 98504-7420, ACORD Form Certificates of Insurance evidencing the minimum insurance coverages required under these Specifications. Within 30 days of being awarded a Contract, the Contractor shall provide the Department with complete copies, which may be electronic copies, of all insurance policies required under this section and any Special Provisions.

12. The Contractor shall provide written notice to the Engineer of any policy cancellations and provide the Department of Transportation, Contract Payment Section, P.O. Box 47420 Olympia, WA 98504-7420, by U.S Mail, notice of any policy cancellation within two business days of receipt of cancellation.
13. Failure on the part of the Contractor to maintain the insurance as required, or to not provide
certification and copies of the insurance prior to the time specified in subsection 11 above, shall
constitute a material breach of Contract upon which the Contracting Agency may, after giving 5-
business days notice to the Contractor to correct the breach, immediately terminate the Contract
or, at its discretion, procure or renew such insurance and pay any and all premiums in connection
therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at
the sole discretion of the Contracting Agency, offset against funds due the Contractor from the
Contracting Agency. All costs for insurance, including any payments of deductible amounts, shall
be considered incidental to and included in the unit Contract prices and no additional payment
will be made.

SECTION 1-08, PROSECUTION AND PROGRESS
April 4, 2011

1-08.1 Subcontracting
The second and third sentences in the eighth paragraph are revised to read:

This Certification shall be submitted to the Project Engineer on WSDOT form 421-023, “Quarterly
Report of Amounts Paid as MBE/WBE Participants”, quarterly for the State fiscal quarters: January 1
through March 31, April 1 through June 30, July 1 through September 30, October 1 through
December 31, and for any remaining portion of a quarter through Physical Completion of the Contract.
The report is due 20 calendar days following the fiscal quarter end or 20-calendar days after Physical
Completion of the Contract.

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

On all projects funded with both Contracting Agency funds and Federal assistance the Contractor shall
submit a “Quarterly Report of Amounts Credited as DBE Participation” on a quarterly basis in which
DBE work is accomplished, for every quarter in which the Contract is active or upon completion of the
project, as appropriate.

The last sentence in the ninth paragraph is revised to read:

When required, this “Quarterly Report of Amounts Credited as DBE Participation” is in lieu of
WSDOT form 421-023, “Quarterly Report of Amounts Paid as MBE/WBE Participants”.

1-08.5 Time for Completion
The last two sentences in the first paragraph are revised to read:

When any of these holidays fall on a Sunday, the following Monday shall be counted a nonworking
day. When the holiday falls on a Saturday, the preceding Friday shall be counted a nonworking day.
The days between December 25 and January 1 will be classified as nonworking days.

Item number 2.c. in the sixth paragraph is revised to read:

c. Quarterly Reports of Amounts Paid as MBE/WBE Participants, or Quarterly Reports of Amounts
Credited as DBE Participation, as required by the Contract Provisions.
SECTION 1-09, MEASUREMENT AND PAYMENT
January 3, 2011

1-09.2(1) General Requirement for Weighing Equipment
This section is revised to read:

Unless specified otherwise, any Highway or Bridge construction materials to be proportioned or measured and paid for by weight shall be weighed on a scale.

**Scales**
Scales shall:

1. be accurate to within 0.5-percent of the correct weight throughout the range of use;
2. not include spring balances;
3. include beams, dials, or other reliable readout equipment;
4. be built to prevent scale parts from binding, vibrating, or being displaced and to protect all working parts and;
5. be carefully maintained, with bunkers and platforms kept clear of accumulated materials that could cause errors.

**Scale Operations**
Contractor provided scale operations are defined as operations where a scale is set up by the Contractor specifically for the project and most, if not all, material weighed on the scale is utilized for Contract Work. In this situation, the Contractor shall provide a person to operate the project scale, write tickets, perform scale checks and prepare reports.

Commercial scale operations include the use of established scales used to sell materials to the public on a regular basis. In addition, for the purposes of this specification, all batch, hopper, and belt scales are considered to be commercial scales. When a commercial scale is used as the project scale, the Contractor may utilize a commercial scale operator provided it is at no additional cost to the contracting agency.

In addition, the Contractor shall ensure that:

1. the Engineer is allowed to observe the weighing operation and check the daily scale weight record;
2. scale verification checks are performed at the direction of the Contracting Agency (see Section 1-09.2(5));
3. several times each day, the scale operator records and makes certain the platform scale balances and returns to zero when the load is removed; and
4. Test results and scale weight records for each day’s hauling operations are provided to the
   Engineer daily. Unless otherwise approved, reporting shall utilize form 422-027, Scaleman’s
   Daily Report.

**Trucks and Tickets**

Each truck to be weighed shall bear a unique identification number. This number shall be legible and
in plain view of the scale operator. Each vehicle operator shall obtain a weigh or load ticket from the
scale operator. The Contracting Agency will provide item quantity tickets for scales that are not self-
printing. The Contractor shall provide tickets for self-printing scales. All tickets shall, at a minimum,
contain the following information:

1. date of haul;

2. contract number;

3. contract unit Bid item;

4. unit of measure;

5. identification number of hauling vehicle; and

6. weight delivered
   a. net weight in the case of batch and hopper scales
   b. gross weight, tare and net weight in the case of platform scales (tare may be omitted if a
tare beam is used)
   c. approximate load out weight in the case of belt conveyor scales

The vehicle operator shall deliver the ticket in legible condition to the material receiver at the material
delivery point. The material delivery point is defined as the location where the material is
incorporated into the permanent Work.

**1-09.2(2) Specific Requirements for Batching Scales**

In the first paragraph, the last sentence is revised to read:

Batching scales used for Portland Cement concrete or hot mix asphalt shall not be used for batching
other materials.

**1-09.2(3) Specific Requirements for Platform Scales**

In the first paragraph, the last sentence is revised to read:

A tare weight shall be taken of each hauling vehicle at least once daily.

The third paragraph is deleted.
1-09.2(5) Measurement

This section is revised to read:

Scale Verification Checks
The Engineer will verify the accuracy of each batch, hopper or platform scale. The frequency of verification checks will be such that at least one test weekly is performed for each weighed contract item of work being performed during that week.

Verification checks may not be routinely conducted for weighed material, who’s proposal quantity multiplied by the unit bid price, has a value less than $20,000.

The verification will consist of one of the following methods and be at the Contractor’s option:

1. Weigh a loaded truck on a separate certified platform scale designated by the Contractor, for the purpose of scale verification.

2. Weigh a vehicle that weighs at least 10,000 pounds on a separate certified scale and then check the project scale with it.

3. Establish a certified fixed load weighing at least 10,000 pounds as a check-weight. The certification shall consist of an affidavit affirming the correct weight of the fixed load.

Should the scale verification check reveal a weight difference of more than 0.5-percent, a second scale verification check shall be performed immediately. If the weight differences of both comparison checks exceed the 0.5-percent limit, the Contractor shall immediately stop weighing and the scale shall be recertified at the Contractor’s expense.

Belt Scales
To test the accuracy of a belt-conveyor scale, the Contractor shall weigh five or more payloads from sequential hauling units and compare these weights with weights of the same payloads taken on a separate certified platform scale. If the test results fluctuate, the Engineer may require more than five check loads. Conveyor weights will be based on tonnage values taken from the sealed odometer at the beginning and end of each check period.

If scale verification checks show the scale has been under weighing, it shall be adjusted immediately.

If scale verification checks show the scale has been overweighing, its operation will cease immediately until adjusted.

Minor Construction Items
If the specifications and plans require weight measurement for minor construction items, the Contractor may request permission to convert volume to weight. If the Engineer approves, an agreed factor may be used to make this conversion and volume may be used to calculate the corresponding weight for payment.

1-09.2(6) Payment
This section is revised to read:
Unless specified otherwise the Contracting Agency will pay for no materials received by weight unless they have been weighed as required in this section or as required by another method the Engineer has approved in writing.

The Contractor shall not be compensated for any loss from under weighing that is revealed by scale verification checks.

If scale verification checks reveal that the scale is over weighing, then payment for all material weighed since the last valid scale verification check will be adjusted. The contracting agency will calculate the combined weight of all materials weighed after the last verification check showing accurate results. This combined weight will then be reduced for payment by the percentage of scale error that exceeds 0.5-percent unless the Contractor demonstrates to the satisfaction of the Engineer that the defect in the scale was present for a lesser period of time.

Unit contract prices for the various pay items of the project cover all costs related to weighing and proportioning materials for payment. These costs include but are not limited to:

- furnishing, installing, certifying, and maintaining scales;
- providing a weigher to operate a Contractor provided scale;
- providing a weigher to operate a commercial scale, if necessary;
- providing self-printing tickets, if necessary;
- rerouting a truck for verification weighing;
- assisting the Engineer with scale verification checks;
- any other related costs associated with meeting the requirements of this section.

1-09.9 Payments

The first paragraph is revised to read:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum Items to enable the Project Engineer to determine the Work performed on a monthly basis. Lump sum item breakdowns shall be submitted prior to the first progress payment that includes payment for the Bid Item in question. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown the Project Engineer will make a determination based on information available. The Project Engineer’s determination of the cost of work shall be final.

In the third paragraph, the second sentence is deleted.

1-09.11(1)A Disputes Review Board Membership

This section is supplemented with the following new paragraph:
The Contracting Agency and Contractor shall indemnify and hold harmless the Board Members from and against all claims, damages, losses and expenses, including but not limited to attorney’s fees arising out of and resulting from the actions and recommendations of the Board.

SECTION 1-10, TEMPORARY TRAFFIC CONTROL
April 4, 2011

In Division 1-10, all references to "truck mounted" are revised to read "transportable".

1-10.1 General
The following sentence is inserted at the beginning of this section:

Temporary traffic control refers to the control of all types of traffic, including vehicles, bicyclists, and pedestrians (including pedestrians with disabilities).

1-10.2(1)(A) Traffic Control Management
Item number 2. in the first paragraph is revised to read:

2. Providing the Contractor’s designated TCS with approved Traffic Control Plans (TCPs) which are compatible with the Work operations and traffic control for which they will be implemented. Having the latest adopted edition of the Manual On Uniform Traffic Control Devices for Streets and Highways (MUTCD,) including the Washington State Modifications to the MUTCD, the most current edition of the Public Rights-Of-Way Accessibility Guidelines (PROWAG), and applicable standards and Specifications available at all times on the project.

1-10.2(1)(B) Traffic Control Supervisor
Item number 1. in the third paragraph is revised to read:

1. Having a current set of approved traffic control plans (TCPs), applicable Contract Provisions as provided by the Contractor, the latest adopted edition of the MUTCD, including the Washington State Modifications to the MUTCD, the book Quality Guidelines for Temporary Work Zone Traffic Control Devices, the most current edition of the PROWAG, and applicable standards and Specifications.

The third paragraph is supplemented with the following:

7. Ensuring that all pedestrian routes or access points, existing or temporary, are kept clear and free of obstructions and that all temporary pedestrian routes or access points are detectable and accessible to persons with disabilities as provided for in the approved Plans.

1-10.2(2) Traffic Control Plans
The second paragraph is revised to read:

When the Contractor's chosen method of performing the Work in the Contract requires some form of temporary traffic control for vehicles, bicyclists, or pedestrians, the Contractor shall either: (1.) designate and adopt, in writing, the traffic control plan or plans from the Contract documents that support that method; or (2.) submit a Contractor’s plan that modifies, supplements or replaces a plan
from the Contract documents. Any Contractor-proposed modification, supplement or replacement shall show the necessary construction signs, flaggers, spotters and other traffic control devices required to support the Work. Any Contractor-proposed traffic control plan shall conform to the established standards for plan development as shown in the MUTCD, Part 6 and the most current edition of the PROWAG. The Contractor’s submittal, either designating and adopting a traffic control plan from the Contract documents or proposing a Contractor-developed plan, shall be provided to the Engineer for approval at least 10-calendar days in advance of the time the signs and other traffic control devices are scheduled to be installed and utilized. The Contractor shall be solely responsible for submitting any proposed traffic control plan or modification, obtaining the Engineer’s approval and providing copies of the approved Traffic Control Plans to the Traffic Control Supervisor.

1-10.2(3) Conformance to Established Standards
The reference “(TMA’s)” in the paragraph that starts with “Category 3” is deleted.

The first paragraph is revised to read:


1-10.3(1) Traffic Control Labor
The first paragraph is revised to read:

The Contractor shall furnish all personnel for flagging, spotting, for the execution of all procedures related to temporary traffic control and for the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations.

1-10.3(2)C Lane Closure Setup/Takedown
Item number 1 in the first paragraph is revised to read:

1. If the Plans show a portable changeable message sign, it shall be established in advance of the operation; far enough back to provide warning of both the operation and any queue of traffic that has formed during the operation.

In the second paragraph, the reference to "TMA/arrow board" is revised to read "transportable attenuator/arrow board".

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Amendments
1-10.3(3) Traffic Control Devices
The following paragraph is inserted at the beginning of this section:

Traffic control devices, including signs, furnished or provided shall conform to the standards established in the latest WSDOT adopted edition of the Manual On Uniform Traffic Control Devices for Streets and Highways (MUTCD), published by the U.S. Department of Transportation and the Washington State Modifications to the MUTCD. Requirements for pedestrian traffic control devices are addressed in the MUTCD.

1-10.3(3)A Construction Signs
In the fourth paragraph “height” is replaced with “top of the ballast”.

1-10.3(3)J Truck Mounted Attenuator
The title for this section is revised to read:

1-10.3(3)J Transportable Attenuator

In the second and fourth paragraphs, the references to "TMA" are revised to read "Transportable Attenuator".

In the first paragraph, the first sentence is revised to read:

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate, and maintain transportable impact attenuators as required in Section 9-35.12.

In the third paragraph, the reference to "truck's" is revised to read "host vehicle's".

1-10.4(2) Item Bids with Lump Sum for Incidentals
All references to "Truck Mounted Impact Attenuator(s)" are revised to read "Transportable Attenuator(s)".

In the eighth paragraph, the first sentence is revised to read:

"Transportable Attenuator" will be measured per each one time only for each host vehicle with mounted or attached impact attenuator used on the project.

In the last sentence of the ninth paragraph, the reference to "TMA" is replaced with "transportable attenuator".

This Section is supplemented with the following:

No specific unit of measurement will apply to the lump sum item of "Pedestrian Traffic Control."

1-10.5(2) Item Bids with Lump Sum for Incidentals
All references to "truck mounted impact attenuator(s)" are revised to read "transportable attenuator(s)".

This Section is supplemented with the following:

"Pedestrian Traffic Control", lump sum.
The lump sum Contract payment shall be full compensation for all costs of labor and materials incurred by the Contractor in performing pedestrian traffic control Contract Work defined in Section 1-10.

SECTION 2-01, CLEARING, GRUBBING, AND ROADSIDE CLEANUP
April 5, 2010

2-01.3(2) Grubbing
In the first paragraph Item 2. e. is revised to read:
e. Upon which embankments will be placed except stumps may be close-cut or trimmed as allowed in Section 2-01.3(1) item 3.

SECTION 8-01, EROSION CONTROL AND WATER POLLUTION CONTROL
April 4, 2011

8-01.2 Materials
In the first paragraph, the following is inserted after the first sentence:

Corrugated Polyethylene Drain Pipe 9-05.1(6)

8-01.3(1) General
In the sixth paragraph, the first sentence is revised to read:

When natural elements rut or erode the slope, the Contractor shall restore and repair the damage with the eroded material where possible, and remove and dispose of any remaining material found in ditches and culverts.

In the seventh paragraph the first two sentences are deleted.

The table in the seventh paragraph is revised to read:

**Western Washington (West of the Cascade Mountain crest)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1 through September 30</td>
<td>17</td>
</tr>
<tr>
<td>October 1 through April 30</td>
<td>5</td>
</tr>
</tbody>
</table>

**Eastern Washington (East of the Cascade Mountain crest)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1 through October 31</td>
<td>17</td>
</tr>
<tr>
<td>November 1 through March 31</td>
<td>5</td>
</tr>
</tbody>
</table>

The eighth paragraph is revised to read:

The Engineer may increase or decrease the limits based on project conditions.

The ninth paragraph is revised to read:
Erodible earth is defined as any surface where soils, grindings, or other materials may be capable of being displaced and transported by rain, wind, or surface water runoff.

The 10th paragraph is revised to read:

Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time period, (see the tables below) using an approved soil covering practice.

Western Washington (West of the Cascade Mountain crest)
October 1 through April 30     2-days maximum
          May 1 to September 30    7-days maximum

Eastern Washington (East of the Cascade Mountain crest.)
October 1 through June 30       5-days maximum
       July 1 through September 30   10-days maximum

8-01.3(1)A Submittals
This section is revised to read:

When a Temporary Erosion and Sediment Control (TESC) Plan is included in the Plans, the Contractor shall either adopt or modify the existing TESC Plan. If modified, the Contractor's TESC Plan shall meet all requirements of Chapter 6-2 of the current edition of the WSDOT Highway Runoff Manual. The Contractor shall provide a schedule for TESC Plan implementation and incorporate it into the Contractor's progress schedule. The Contractor shall obtain the Engineer's approval of the TESC Plan and schedule prior to the beginning of Work. The TESC Plan shall cover all areas that may be affected inside and outside the limits of the project (including all Contracting Agency-provided sources, disposal sites, and haul roads, and all nearby land, streams, and other bodies of water).

The Contractor shall allow at least 5-working days for the Engineer to review any original or revised TESC Plan. Failure to approve all or part of any such Plan shall not make the Contracting Agency liable to the Contractor for any Work delays.

8-01.3(1)B Erosion and Sediment Control (ESC) Lead
In the last paragraph, "Form Number 220-030 EF" is revised to read "WSDOT Form Number 220-030 EF".

8-01.3(1)C Water Management
In number 2., the reference to "Standard Specification" is revised to read "Section".

Number 3., is revised to read:

3. Offsite Water
Prior to disruption of the normal watercourse, the Contractor shall intercept the offsite stormwater and pipe it either through or around the project site. This water shall not be combined with onsite stormwater. It shall be discharged at its pre-construction outfall point in such a manner that there is no increase in erosion below the site. The method for performing this Work shall be submitted by the Contractor for the Engineer's approval.
8-01.3(1)D Dispersion/Infiltration

This section is revised to read:

Water shall be conveyed only to dispersion or infiltration areas designated in the TESC Plan or to sites approved by the Engineer. Water shall be conveyed to designated dispersion areas at a rate such that, when runoff leaves the area, and enters waters of the State, turbidity standards are achieved. Water shall be conveyed to designated infiltration areas at a rate that does not produce surface runoff.

8-01.3(2)B Seeding and Fertilizing

The fourth paragraph is revised to read:

The seed applied using a hydroteeder shall have a tracer added to visibly aid uniform application. This tracer shall not be harmful to plant, aquatic or animal life. If Short Term Mulch is used as a tracer, the application rate shall not exceed 250-pounds per acre.

In the fifth paragraph, "hydro seeder" is revised to read "hydroteeder".

8-01.3(2)D Mulching

In the second paragraph, the second sentence is revised to read:

Wood strand mulch shall be applied by hand or by straw blower on seeded areas.

In the third paragraph, "1" is revised to read "a single" and "hydro seeder" is revised to read "hydroteeder".

The fourth paragraph is revised to read:

Temporary seed applied outside the application windows established in 8-01.3(2)F shall be covered with a mulch containing either Moderate Term Mulch or Long Term Mulch, as designated by the Engineer.

8-01.3(2)E Tackling Agent and Soil Binders

The following new paragraph is inserted at the beginning of this Section:

Tacking agent or soil binders applied using a hydroteeder shall have a mulch tracer added to visibly aid uniform application. This tracer shall not be harmful to plant, aquatic or animal life. If Short Term Mulch is used as a tracer, the application rate shall not exceed 250-pounds per acre.

The third sentence in the first paragraph below “Soil Binding Using Polyacrylamide (PAM)” is revised to read:

A minimum of 200-pounds per acre of Short Term Mulch shall be applied with the dissolved PAM.

In the second paragraph below “Soil Binding Using Polyacrylamide (PAM)”, “within” is revised to read “after”.

The paragraph “Soil Binding Using Bonded Fiber Matrix (BFM)” including title is revised to read:
Soil Binding Using Moderate Term Mulch
The Moderate Term Mulch shall be hydraulically applied in accordance with the manufacturer’s installation instructions. The Moderate Term Mulch may require a 24 to 48 hour curing period to achieve maximum performance and shall not be applied when precipitation is predicted within 24 to 48 hours, or on saturated soils, as determined by the Engineer.

The last paragraph including titled is revised to read:

Soil Binding Using Long Term Mulch
The Long Term Mulch shall be hydraulically applied in accordance with the manufacturer’s installation instructions and recommendations.

8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch
The first paragraph is revised to read:

Unless otherwise approved by the Engineer, the final application of seeding, fertilizing, and mulching of slopes shall be performed during the following periods:

<table>
<thead>
<tr>
<th>Western Washington</th>
<th>Eastern Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>(West of the Cascade Mountain crest)</td>
<td>(East of the Cascade Mountain crest)</td>
</tr>
<tr>
<td>March 1 through May 15</td>
<td>October 1 through November 15 only</td>
</tr>
<tr>
<td>September 1 through October 1</td>
<td></td>
</tr>
</tbody>
</table>

1 Where Contract timing is appropriate, seeding, fertilizing, and mulching shall be accomplished during the fall period listed above. Written permission to seed after October 1 will only be given when Physical Completion of the project is imminent and the environmental conditions are conducive to satisfactory growth.

8-01.3(2)G Protection and Care of Seeded Areas
The first paragraph is revised to read:

The Contractor shall be responsible to ensure a healthy stand of grass. The Contractor shall restore eroded areas, clean up and properly dispose of eroded materials, and reapply the seed, fertilizer, and mulch, at no additional cost to the Contracting Agency.

In the second paragraph, number 1. is revised to read:

1. At the Contractor’s expense, seed, fertilizer and mulch shall be reapplied in areas that have been damaged through any cause prior to final inspection, and reapplied to areas that have failed to receive a uniform application at the specified rate.

8-01.3(2)H Inspection
The first sentence is revised to read:

Inspection of seeded areas will be made upon completion of seeding, temporary seeding, fertilizing, and mulching.
The third sentence is revised to read:

Areas that have not received a uniform application of seed, fertilizer, or mulch at the specified rate, as determined by the Engineer, shall be reseeded, refertilized, or remulched at the Contractor's expense prior to payment.

8-01.3(2)I Mowing

In the first paragraph, the last sentence is revised to read:

Trimming around traffic facilities, Structures, planting areas, or other features extending above ground shall be accomplished preceding or simultaneously with each mowing.

8-01.3(3) Placing Erosion Control Blanket

In the first sentence, "Standard" is deleted.

The second sentence is revised to read:

Temporary erosion control blankets, having an open area of 60-percent or greater, may be installed prior to seeding.

8-01.3(4) Placing Compost Blanket

In the first paragraph, "before" is revised to read "prior to".

The last sentence is revised to read:

Compost shall be Coarse Compost.

8-01.3(5) Placing Plastic Covering

The first sentence is revised to read:

Plastic shall be placed with at least a 12-inch overlap of all seams.

8-01.3(6)A Geotextile-Encased Check Dam

The first paragraph is deleted.

8-01.3(6)B Rock Check Dam

This section including title is revised to read:

8-01.3(6)B Quarry Spall Check Dam

The rock used to construct rock check dams shall meet the requirements for quarry spalls.

8-01.3(6)D Wattle Check Dam

This section is revised to read:

Wattle check dams shall be installed in accordance with the Plans.

8-01.3(6)E Coir Log

This section is revised to read:
Coir logs shall be installed in accordance with the Plans.

8-01.3(9)A Silt Fence
In the second paragraph, the second sentence is revised to read:

The strength of the wire or plastic mesh shall be equivalent to or greater than what is required in Section 9-33.2(1), Table 6 for unsupported geotextile (i.e., 180 lbs. grab tensile strength in the machine direction).

8-01.3(9)B Gravel Filter, Wood Chip or Compost Berm
In the second paragraph, the last sentence is deleted.

The third paragraph is revised to read:

The Compost Berm shall be constructed in accordance with the detail in the Plans. Compost shall be Coarse Compost.

8-01.3(9)C Straw Bale Barrier
This section is revised to read:

Straw Bale Barriers shall be installed in accordance with the Plans.

8-01.3(9)D Inlet Protection
The first three paragraphs are revised to read:

Inlet protection shall be installed below or above, or as a prefabricated cover at each inlet grate, as shown in the Plans. Inlet protection devices shall be installed prior to beginning clearing, grubbing, or earthwork activities.

Geotextile fabric in all prefabricated inlet protection devices shall meet or exceed the requirements of Section 9-33.2, Table 1 for Moderate Survivability, and the minimum filtration properties of Table 2.

When the depth of accumulated sediment and debris reaches approximately ½ the height of an internal device or ¼ the height of the external device (or less when so specified by the manufacturers) or as designated by the Engineer, the deposits shall be removed and stabilized on site in accordance with Section 8-01.3(16).

8-01.3(10) Wattles
In the first paragraph, the third sentence is revised to read:

Excavated material shall be spread evenly along the uphill slope and be compacted using hand tamping or other method approved by the Engineer.

This section is supplemented with the following new paragraph:

The Contractor shall exercise care when installing wattles to ensure that the method of installation minimizes disturbance of waterways and prevents sediment or pollutant discharge into waterbodies.
8-01.3(12) Compost Sock
In the first paragraph, "sock" is revised to read "socks" and "streambed" is revised to read "waterbodies".

In the second paragraph "bank" is revised to read "slope".

In the third paragraph "and" is revised to read "or".

This section is supplemented with the following new paragraph:

Compost for Compost Socks shall be Coarse Compost.

8-01.3(14) Temporary Pipe Slope Drain
The first paragraph is revised to read:

Temporary pipe slope drain shall be Corrugated Polyethylene Drain Pipe and shall be constructed in accordance with the Plans

The last paragraph is revised to read:

Placement of outflow of the pipe shall not pond water on road surface.

8-01.3(15) Maintenance
In the fourth paragraph, the last sentence is revised to read:

Clean sediments may be stabilized on site using approved BMPs as approved by the Engineer.

8-01.3(16) Removal
In the second paragraph, the last sentence is revised to read:

This may include, but is not limited to, ripping the soil, incorporating soil amendments, and seeding with the specified seed.

8-01.4 Measurement
The eighth paragraph is revised to read:

Silt fence, gravel filter, compost berms, and wood chip berms will be measured by the linear foot along the ground line of completed barrier.

8-01.5 Payment
The following bid items are relocated after the bid item "Check Dam":

"Inlet Protection", per each.

"Gravel Filter Berm", per linear foot.

The following new paragraph is inserted before the bid item "Stabilized Construction Entrance":

...
The unit Contract price per linear foot for “Check Dam” and “Gravel Filter Berm” and per each for “Inlet Protection” shall be full pay for all equipment, labor and materials to perform the Work as specified, including installation, removal and disposal at an approved disposal site.

The paragraph after the bid item "Temporary Curb" is revised to read:

The unit Contract price per linear foot for “Temporary Curb” shall include all costs to install, maintain, remove, and dispose of the temporary curb.

The following bid item is inserted after the bid item “Mulching with Pam”:

“Mulching with Short Term Mulch”, per acre.

The bid item “Mulching with BFM” is revised to read:

“Mulching with Moderate Term Mulch”

The bid item “Mulching with MBFM/FRM” is revised to read:

“Mulching with Long Term Mulch”

SECTION 8-02, ROADSIDE RESTORATION
January 3, 2011

8-02.2 Materials
In the first paragraph, the following item is inserted after the item “Fertilizer 9-14.3”:

Mulch and Amendments 9-14.4

8-02.3(2) Roadside Work Plan
In the first paragraph, the second sentence is revised to read:

The roadside work plan shall define the Work necessary to provide all Contract requirements, including: wetland excavation, soil preparation, habitat, Structure placement, planting area preparation, seeding area preparation, bark mulch and compost placement, seeding, planting, plant replacement, irrigation, and weed control in narrative form.

The first sentence under "Progress Schedule" is revised to read:

A progress schedule shall be submitted in accordance with Section 1-08.3. The Progress Schedule shall include the planned time periods for Work necessary to provide all Contract requirements in accordance with Sections 8-01, 8-02, and 8-03.

The first sentence under "Weed and Pest Control Plan" is revised to read:

The Weed and Pest Control Plan shall be submitted and approved prior to starting any Work defined in Sections 8-01, and 8-02.
In the third paragraph under "Weed and Pest Control Plan" the first and second sentences are revised to read:

The plan shall be prepared and signed by a licensed Commercial Pest Control Operator or Consultant when chemical pesticides are proposed. The plan shall include methods of weed control; dates of weed control operations; and the name, application rate, and Material Safety Data Sheets of all proposed herbicides.

The last paragraph under "Plant Establishment Plan" is deleted.

8-02.3(2)A Chemical Pesticides
This section is deleted.

8-02.3(2)B Weed Control
This section is deleted.

8-02.3(3) Planting Area Weed Control
This section including title is revised to read:

8-02.3(3) Weed and Pest Control
The Contractor shall control weed and pest species within the project area using integrated pest management principles consisting of mechanical, biological and chemical controls that are outlined in the Weed and Pest Control Plan or as designated by the Engineer.

Those weeds specified as noxious by the Washington State Department of Agriculture, the local Weed District, or the County Noxious Weed Control Board and other species identified by the Contracting Agency shall be controlled on the project in accordance with the weed and pest control plan.

The Contractor shall control weeds not otherwise covered in accordance with Section 8-02.3(3)A, Planting Area Weed Control in all areas within the project limits, including erosion control seeding area and vegetation preservation areas, as designated by the Engineer.

This section is supplemented with the following new sub-sections:

8-02.3(3)A Planting Area Weed Control
All planting areas shall be prepared so that they are weed and debris free at the time of planting and until completion of the project. The planting areas shall include the entire ground surface, regardless of cover, all planting beds, areas around plants, and those areas shown in the Plans.

All applications of post-emergent herbicides shall be made while green and growing tissue is present. Should unwanted vegetation reach the seed stage, in violation of these Specifications, the Contractor shall physically remove and bag the seed heads. All physically removed vegetation and seed heads shall be disposed of off site at no cost to the Contracting Agency.

Weed barrier mats shall be installed as shown in the Plans. Mats shall be 3-feet square and shall be secured by a minimum of 5-staples per mat. Mats and staples shall be installed according to the manufacturer’s recommendations.
8-02.3(3)B Chemical Pesticides

Application of chemical pesticides shall be in accordance with the label recommendations, the Washington State Department of Ecology, local sensitive area ordinances, and Washington State Department of Agriculture laws and regulations. Only those herbicides listed in the table Herbicides Approved for Use on WSDOT Rights of Way at http://www.wsdot.wa.gov/Maintenance/Roadside/herbicide_use.htm may be used.

The applicator shall be licensed by the State of Washington as a Commercial Applicator or Commercial Operator with additional endorsements as required by the Special Provisions or the proposed weed control plan. The Contractor shall furnish the Engineer evidence that all operators are licensed with appropriate endorsements, and that the pesticide used is registered for use by the Washington State Department of Agriculture. All chemicals shall be delivered to the job site in the original containers. The licensed applicator or operator shall complete a Commercial Pesticide Application Record (DOT Form 540-509) each day the pesticide is applied, and furnish a copy to the Engineer by the following business day.

The Contractor shall ensure confinement of the chemicals within the areas designated. The use of spray chemical pesticides shall require the use of anti-drift and activating agents, and a spray pattern indicator unless otherwise allowed by the Engineer.

The Contractor shall assume all responsibility for rendering any area unsatisfactory for planting by reason of chemical application. Damage to adjacent areas, either on or off the Highway Right of Way, shall be repaired to the satisfaction of the Engineer or the property owner, and the cost of such repair shall be borne by the Contractor.

8-02.3(5) Planting Area Preparation

In the first paragraph, the second sentence is revised to read:

Material displaced by the Contractor’s operations that interferes with drainage shall be removed from the channel and disposed of as approved by the Engineer.

8-02.3(7) Layout of Planting

The second paragraph is deleted.

8-02.3(8) Planting

In the second paragraph, the first and second sentences are revised to read:

Under no circumstances will planting be permitted during unsuitable soil or weather conditions as determined by the Engineer. Unsuitable conditions may include frozen soil, freezing weather, saturated soil, standing water, high winds, heavy rains, and high water levels.

The fourth paragraph is revised to read:

Plants shall not be placed below the finished grade.

The fifth paragraph is revised to read:
Planting hole sizes for plant material shall be in accordance with the details shown in the Plans. Any glazed surface of the planting hole shall be roughened prior to planting.

The following new paragraph is inserted after the fifth paragraph:

All cuttings shall be planted immediately if buds begin to swell.

8-02.3(9) Pruning, Staking, Guying, and Wrapping
In the first paragraph, the last sentence is revised to read:

All other pruning shall be performed only after the plants have been in the ground at least one year and when plants are dormant.

8-02.3(13) Plant Establishment
In the third paragraph, the first sentence is revised to read:

During the first-year plant establishment period, the Contractor shall perform all Work necessary to ensure the resumption and continued growth of the transplanted material.

In the fourth paragraph, "propose" is revised to read "submit".

8-02.3(15) Live Fascines
In the first paragraph, the fourth sentence is revised to read:

Dead branches may be placed within the live fascine and on the side exposed to the air.

In the second paragraph, the third sentence is deleted.

In the second paragraph, the seventh sentence is revised to read:

The live stakes shall be driven through the live fascine vertically into the slope.

8-02.3(16)A Lawn Installation
In the third paragraph, the last two items "West of the summit of the Cascade Range - March 1 to October 1." and "East of the summit of the Cascade Range - April 15 to October 1." are revised to read:

Western Washington
(West of the Cascade Mountain crest)
March through May 15
September 1 through October 1

Eastern Washington
(East of the Cascade Mountain crest)
October 1 through November 15

The fifth paragraph is revised to read:

Topsoil for seeded or sodded lawns shall be placed at the depth and locations as shown in the Plans. The topsoil shall be cultivated to the specified depth, raked to a smooth even grade without low areas that trap water and compacted, all as approved by the Engineer.

In the sixth paragraph, the last sentence is revised to read:
Following placement, the sod shall be rolled with a smooth roller to establish contact with the soil.

**8-02.4 Measurement**
The seventh paragraph is revised to read:

"Fine compost, medium compost and coarse compost will be measured by the cubic yard in the haul conveyance at the point of delivery."

**8-02.5 Payment**
The following new paragraph is inserted above the paragraph beginning with “Payment shall be increased to 90-percent……”:

"Plant establishment milestones are achieved when plants meet conditions described in Section 8-02.3(13)."

The following is inserted after the bid item "Fine Compost":

"Medium Compost", per cubic yard.

The paragraph for the bid item "Weed Control" is revised to read:

"Weed and Pest Control", will be paid in accordance with Section 1-09.6.

The following new paragraph is inserted after the bid item "Soil Amendment":

The unit Contract price per cubic yard for “Soil Amendment” shall be full pay for furnishing and incorporating the soil amendment into the existing soil.

The following new paragraph is inserted after the bid item "Bark or Wood Chip Mulch":

The unit Contract price per cubic yard for “Bark or Wood Chip Mulch” shall be full pay for furnishing and spreading the mulch onto the existing soil.

**SECTION 8-21, PERMANENT SIGNING**
**April 4, 2011**

**8-21.3(4) Sign Removal**

In the fourth paragraph, the following sentence is inserted after the second sentence:

Where signs are removed from existing overhead sign Structures, the existing vertical sign support braces shall also be removed.

In the fourth paragraph, the third sentence is revised to read:

Aluminum signs, wood signs, wood sign posts, wood structures, metal sign posts, wind beams, and other metal structural members, and all existing fastening hardware connecting such members being removed, shall become the property of the Contractor and shall be removed from the project.
8-21.3(9)F Foundations
In the ninth paragraph, the following new statement is inserted as number 1. Existing numbers 1 through 6 of the ninth paragraph shall be renumbered to 2 through 7.

1. Foundation excavations shall conform to the requirements of Section 2-09.3(3).

In the tenth paragraph, item number 2 is revised to read:

2. Steel reinforcement, including spiral reinforcing, shall conform to Section 9-07.2.

8-21.3(9)G Identification Plates
This section including title is revised to read:

8-21.3(9)G Sign Structure Identification Information
Whenever existing bridge mounted sign brackets, cantilever sign structures, or sign bridge structures are removed from their anchorage, whether temporary or permanent, the Contractor shall provide the sign structure identification information, attached to the sign structures, to the Engineer. The identification information may be in the form of a riveted plate, sticker, or other means.

8-21.3(12) Steel Sign Posts
This section is supplemented with the following:

For roadside sign structures on SB-1, SB-2, or SB-3 slip bases, the Contractor shall use the following procedures and manufacturer’s recommendations:

1. The Contractor shall assemble the perforated square steel post or solid square steel post to the upper slip plate with bolts, nuts, and washers as shown in the Plans.

2. The three bolts connecting the upper and lower slip plates shall be tightened using as a torque wrench to the torque, following the procedures in the Plans.

For roadside structures on ST-2 and ST-4 sign supports, the Contractor shall use the following procedures:

1. The Contractor shall assemble the perforated square steel post to the lower sign post support with bolts, nuts, and washers as shown in the Plans.

SECTION 9-14, EROSION CONTROL AND ROADSIDE PLANTING
April 4, 2011

Section 9-14 is deleted in its entirety and replaced with the following:

9-14.1 Soil

9-14.1(1) Topsoil Type A
Topsoil Type A shall be as specified in the Special Provisions.
9-14.1(2) Topsoil Type B

Topsoil Type B shall be native topsoil taken from within the project limits either from the area where roadway excavation is to be performed or from strippings from borrow, pit, or quarry sites, or from other designated sources. The general limits of the material to be utilized for topsoil will be indicated in the Plans or in the Special Provisions. The Engineer will make the final determination of the areas where the most suitable material exists within these general limits. The Contractor shall reserve this material for the specified use. Material for Topsoil Type B shall not be taken from a depth greater than 1 foot from the existing ground unless otherwise designated by the Engineer.

In the production of Topsoil Type B, all vegetative matter less than 4 feet in height, shall become a part of the topsoil. Prior to topsoil removal, the Contractor shall reduce the native vegetation to a height not exceeding 1 foot. Noxious weeds, as designated by authorized State and County officials, shall not be incorporated in the topsoil, and shall be removed and disposed of as designated elsewhere or as approved by the Engineer.

9-14.1(3) Topsoil Type C

Topsoil Type C shall be native topsoil meeting the requirements of Topsoil Type B but obtained from a source provided by the Contractor outside of the Contracting Agency owned right of way.

9-14.2 Seed

Grasses, legumes, or cover crop seed of the type specified shall conform to the standards for "Certified” grade seed or better as outlined by the State of Washington Department of Agriculture “Rules for Seed Certification,” latest edition. Seed shall be furnished in standard containers on which shall be shown the following information:

1. Common and botanical names of seed
2. Lot number
3. Net weight
4. Pure live seed

All seed vendors must have a business license issued by the Washington State Department of Licensing with a “seed dealer” endorsement. Upon request, the Contractor shall furnish the Engineer with copies of the applicable licenses and endorsements.

Upon request, the Contractor shall furnish to the Engineer duplicate copies of a statement signed by the vendor certifying that each lot of seed has been tested by a recognized seed testing laboratory within six months before the date of delivery on the project. Seed which has become wet, moldy, or otherwise damaged in transit or storage will not be accepted.

9-14.3 Fertilizer

Fertilizer shall be a standard commercial grade of organic or inorganic fertilizer of the kind and quality specified. It may be separated or in a mixture containing the percentage of total nitrogen, available phosphoric acid, water-soluble potash, or sulfur in the amounts specified. All fertilizers shall be furnished in standard unopened containers with weight, name of plant nutrients, and manufacturer’s guaranteed statement of analysis clearly marked, all in accordance with State and Federal laws.

Fertilizer shall be supplied in one of the following forms:
1. A dry free-flowing granular fertilizer, suitable for application by agricultural fertilizer spreader.

2. A soluble form that will permit complete suspension of insoluble particles in water, suitable for application by power sprayer.

3. A homogeneous pellet, suitable for application through a ferti-blast gun.

4. A tablet or other form of controlled release with a minimum of a six month release period.

5. A liquid suitable for application by a power sprayer or hydroteeder.

9-14.4 Mulch and Amendments
All amendments shall be delivered to the site in the original, unopened containers bearing the manufacturer's guaranteed chemical analysis and name. In lieu of containers, amendments may be furnished in bulk. A manufacturer's certificate of compliance shall accompany each delivery. Compost and other organic amendments shall be accompanied with all applicable health certificates and permits.

9-14.4(1) Straw
Straw shall be in an air dried condition free of noxious weeds, seeds, and other materials detrimental to plant life. Hay is not acceptable.

All straw material shall be Certified Weed Free Straw using North American Weed Management Association (NAWMA) standards or the Washington Wilderness Hay and Mulch (WWHAM) program run by the Washington State Noxious Weed Control Board. Information can be found at http://www.nwcb.wa.gov/http://www.nwcb.wa.gov/

In lieu of Certified Weed Free Straw, the Contractor shall provide documentation that the material is steam or heat treated to kill seeds, or shall provide U.S., Washington, or other State’s Department of Agriculture laboratory test reports, dated within 90 days prior to the date of application, showing there are no viable seeds in the straw.

Straw mulch shall be suitable for spreading with mulch blower equipment.

9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)
All HECPs shall be biodegradable 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. Up to 5 percent by weight may be photodegradable material.

The HECP shall be suitable for spreading with a hydroteeder.

All HECPs shall be furnished premixed by the manufacturer with Type A or Type B Tackifier as specified in 9-14.4(7). Under no circumstances will field mixing of additives or components be acceptable.
The Contractor shall provide test results, dated within three years prior to the date of application, from an independent, accredited laboratory, as approved by the Engineer, showing the product meets the following requirements:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>EPA-821-R-02-012 Methods for Measuring Acute Toxicity of Effluents. Test leachate from recommended application rate receiving 2 inches of rainfall per hour using static test for No-observed-adverse-effect-concentration (NOEC)</td>
<td>Four replicates are required with no statistically significant reduction in survival in 100% leachate for a Daphnidae at 48 hours and <em>Oncorhynchus mykiss</em> (rainbow trout) at 96 hours</td>
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<tr>
<td>Solvents</td>
<td>EPA 8260B</td>
<td>Benzene - &lt; 0.03 mg/kg</td>
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<td></td>
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<td>Methylene chloride - 0.02 mg/kg</td>
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<td>Naphthalene - &lt; 5 mg/kg</td>
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<td>Tetrachloroethylene - &lt; 0.05 mg/kg</td>
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<td>Toluene - &lt; 7 mg/kg</td>
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<td>Trichloroethylene - &lt; 0.03 mg/kg</td>
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<td>Xylenes - &lt; 9 mg/kg</td>
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<td>Heavy Metals</td>
<td>EPA 6020A Total Metals</td>
<td>Antimony - &lt; 4 mg/kg</td>
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<td>Arsenic - &lt; 6 mg/kg</td>
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<td>Barium - &lt; 80 mg/kg</td>
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<td>Nickel - &lt; 2 mg/kg</td>
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<td>Selenium - &lt; 10 mg/kg</td>
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<td>Strontium - &lt; 30 mg/kg</td>
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<td>Zinc - &lt; 5 mg/kg</td>
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<tr>
<td>Water Holding Capacity</td>
<td>ASTM D 7367</td>
<td>900 percent minimum</td>
</tr>
<tr>
<td>Organic Matter Content</td>
<td>ASTM D 586</td>
<td>90 percent minimum</td>
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<tr>
<td>Moisture Content</td>
<td>ASTM D 644</td>
<td>15 percent maximum</td>
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<tr>
<td>Seed Germination Enhancement</td>
<td>ASTM D 7322</td>
<td>Long Term</td>
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</table>
If the HECP contains cotton or straw, the Contractor shall provide documentation that the material has been steam or heat treated to kill seeds, or shall provide U.S., Washington, or other State’s Department of Agriculture laboratory test reports, dated within 90 days prior to the date of application, showing there are no viable seeds in the mulch.

The HECP shall be manufactured in such a manner that when agitated in slurry tanks with water, the fibers will become uniformly suspended, without clumping, to form a homogeneous slurry. When hydraulically applied, the material shall form a strong moisture-holding mat that allows the continuous absorption and infiltration of water.

The HECP shall contain a dye to facilitate placement and inspection of the material. Dye shall be non-toxic to plants, animals, and aquatic life and shall not stain concrete or painted surfaces.

The HECP shall be furnished with a Material Safety Data Sheet (MSDS) that demonstrates that the product is not harmful to plants, animals, and aquatic life.

9-14.4(2)A Long Term Mulch

Long Term Mulch shall demonstrate the ability to adhere to the soil and create a blanket-like mass within two hours of application and shall bond with the soil surface to create a continuous, porous, absorbent, and flexible erosion resistant blanket that allows for seed germination and plant growth and conforms to the requirements in Table 1 Long Term Mulch Test Requirements.

The Contractor shall provide test results documenting the mulch meets the requirements in Table 1 Long Term Mulch Test Requirements.

Prior to January 1, 2012, the Contractor shall supply independent ASTM D 6459 test results from one of the following testing facilities:

National Transportation Product Evaluation Program (NTPEP)
Utah State University’s Utah Water Research Laboratory
Texas Transportation Institute
San Diego State University’s Soil Erosion Research Laboratory
TRI Environmental, Inc

Effective January 1, 2012, the Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP).

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in Protecting Slopes from Rainfall-Induced</td>
<td>ASTM D 6459 - Test in one soil type. Soil tested shall be sandy loam as defined by the NRCS Soil Texture Triangle</td>
<td>C Factor = 0.01 maximum using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
</tbody>
</table>
9-14.4(2)B  Moderate Term Mulch
Within 48 hours of application, the Moderate Term Mulch shall bond with the soil surface to create a continuous, absorbent, flexible erosion resistant blanket that allows for seed germination and plant growth and conform to the requirements in Table 2 Moderate Term Mulch Test Requirements.

The Contractor shall provide test results documenting the mulch meets the requirements in Table 2 Moderate Term Mulch Test Requirements.

Prior to January 1, 2012, the Contractor shall supply independent ASTM D 6459 test results from one of the following testing facilities:

- National Transportation Product Evaluation Program (NTPEP)
- Utah State University’s Utah Water Research Laboratory
- Texas Transportation Institute
- San Diego State University’s Soil Erosion Research Laboratory
- TRI Environmental, Inc

Effective January 1, 2012, the Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP).

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<th>Requirements</th>
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</thead>
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<tr>
<td>Performance in Protecting</td>
<td>ASTM D 6459 - Test in one soil type. Soil</td>
<td>C Factor = 0.05 maximum using Revised Universal</td>
</tr>
<tr>
<td>Slopes from Rainfall-Induced Erosion</td>
<td>tested shall be sandy loam as defined by the NRCS Soil Texture Triangle</td>
<td>Soil Loss Equation (RUSLE)</td>
</tr>
<tr>
<td>Properties</td>
<td>Test Method</td>
<td>Requirements</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Performance in Protecting Slopes from Rainfall-Induced Erosion</td>
<td>ASTM D 6459 - Test in one soil type. Soil tested shall be sandy loam as defined by the National Resources Conservation Service (NRCS) Soil Texture Triangle</td>
<td>C Factor = 0.15 maximum using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
</tbody>
</table>

**9-14.4(3) Bark or Wood Chips**

Bark or wood chip mulch shall be derived from Douglas fir, pine, or hemlock species. It shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust shall not be used as mulch.

Bark or wood chips, when tested, shall be according to WSDOT Test Method T 123 prior to placement and shall meet the following loose volume gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td>95</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>No. 4</td>
<td>0</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

**9-14.4(4) Wood Strand Mulch**

Wood strand mulch shall be a blend of angular, loose, long, thin wood pieces that are frayed, with a high length-to-width ratio and shall be derived from native conifer or deciduous trees. A minimum of 95 percent of the wood strand shall have lengths between 2 and 10 inches. At least 50 percent of the length of each strand shall have a width and thickness between 1/16 and ½ inch. No single strand shall have a width or thickness greater than ½ inch.

The mulch shall not contain salt, preservatives, glue, resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust or wood chips or shavings will not be acceptable. Products shall be tested according to WSDOT Test Method 125 prior to acceptance.

**9-14.4(5) Lime**

Agriculture lime shall be of standard manufacture, flour grade or in pelletedized form, meeting the requirements of ASTM C 602.

**9-14.4(6) Gypsum**

Gypsum shall consist of Calcium Sulfate (CaSO42H2O) in a pelleted or granular form. 100 percent shall pass through a No. 8 sieve.

**9-14.4(7) Tackifier**

Tackifiers are used as a tie-down for soil, compost, seed, and/or mulch. Tackifier shall contain no growth or germination inhibiting materials, and shall not reduce infiltration rates. Tackifier shall hydrate in water and readily blend with other slurry materials and conform to the requirements in Table 4 Tackifier Test Requirements.
The Contractor shall provide test results documenting the tackifier meets the requirements in Table 4 Tackifier Test Requirements.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Metals Solvents Acute Toxicity</td>
<td>See Table in Section 9-14.4(2). Test at manufacturer’s recommended application rate</td>
<td>See Table in Section 9-14.4(2)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>ASTM D 2364. Testing shall be performed by an accredited, independent laboratory</td>
<td>4000 cPs minimum</td>
</tr>
</tbody>
</table>

9-14.4(7)A Organic Tackifier
Organic tackifier shall be derived from natural plant sources and shall have an MSDS that demonstrates to the satisfaction of the Engineer that the product is not harmful to plants, animals, and aquatic life.

9-14.4(7)B Synthetic Tackifier
Synthetic tackifier shall have an MSDS that demonstrates to the satisfaction of the Engineer that the product is not harmful to plants, animals, and aquatic life.

9-14.4(8) Compost
Compost products shall be the result of the biological degradation and transformation of organic materials under controlled conditions designed to promote aerobic decomposition. Compost shall be stable with regard to oxygen consumption and carbon dioxide generation. Compost shall be mature with regard to its suitability for serving as a soil amendment or an erosion control BMP as defined below. The compost shall have a moisture content that has no visible free water or dust produced when handling the material.

Compost production and quality shall comply with Chapter 173-350 WAC.

Compost products shall meet the following physical criteria:

1. Compost material shall be tested in accordance with U.S. Composting Council Testing Methods for the Examination of Compost and Composting (TMECC) 02.02-B, “Sample Sieving for Aggregate Size Classification”.

Fine compost shall meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing Minimum</th>
<th>Percent Passing Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>

Maximum particle length of 6 inches.
Medium compost shall meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>2”</td>
<td>100</td>
</tr>
<tr>
<td>1”</td>
<td>95</td>
</tr>
<tr>
<td>5/8”</td>
<td>90</td>
</tr>
<tr>
<td>1/4”</td>
<td>70</td>
</tr>
</tbody>
</table>

Maximum particle length of 6 inches.

Medium compost shall have a carbon to nitrogen ratio (C:N) between 18:1 and 30:1. The carbon to nitrogen ratio shall be calculated using the dry weight of “Organic Carbon” using TMECC 04.01A divided by the dry weight of “Total N” using TMECC 04.02D.

Coarse compost shall meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>3”</td>
<td>100</td>
</tr>
<tr>
<td>1”</td>
<td>90</td>
</tr>
<tr>
<td>3/4”</td>
<td>70</td>
</tr>
<tr>
<td>1/4”</td>
<td>40</td>
</tr>
</tbody>
</table>

Maximum particle length of 6 inches.

Coarse Compost shall have a Carbon to Nitrogen ratio (C:N) between 25:1 and 35:1. The Carbon to Nitrogen ratio shall be calculated using the dry weight of “Organic Carbon” using TMECC 04.01A divided by the dry weight of “Total N” using TMECC 04.02D.

2. The pH shall be between 6.0 and 8.5 when tested in accordance with U.S. Composting Council TMECC 04.11-A, “1:5 Slurry pH”.

3. Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 1.0 percent by weight as determined by U.S. Composting Council TMECC 03.08-A “Classification of Inerts by Sieve Size”.

4. Minimum organic matter shall be 40 percent by dry weight basis as determined by U.S. Composting Council TMECC 05.07A “Loss-On-Ignition Organic Matter Method (LOI)”.

5. Soluble salt contents shall be less than 4.0 mmhos/cm when tested in accordance with U.S. Composting Council TMECC 04.10 “Electrical Conductivity”.

6. Maturity shall be greater than 80 percent in accordance with U.S. Composting Council TMECC 05.05-A, “Germination and Root Elongation”.

7. Stability shall be 7 mg CO2-C/g OM/day or below in accordance with U.S. Composting Council TMECC 05.08-B “Carbon Dioxide Evolution Rate”.

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8. The compost product shall originate from recycled plant waste as defined in WAC 173-350 as 
"Type 1 Feedstocks", "Type 2 Feedstocks," and/or "Type 3 Feedstocks". The Contractor shall 
provide a list of feedstock sources by percentage in the final compost product.

9. The Engineer may evaluate compost for maturity using U.S. Composting Council TMECC 05.08-
E "Solvita® Maturity Index". Fine compost shall score a number 6 or above on the Solvita® 
Compost Maturity Test. Medium and Coarse compost shall score a 5 or above on the Solvita® 
Compost Maturity Test.

9-14.4(8)A Compost Submittal Requirements
The Contractor shall submit the following information to the Engineer for approval:

1. The Qualified Products List printed page or a Request for Approval of Material(DOT Form 
350-071EF).

2. A copy of the Solid Waste Handling Permit issued to the manufacturer by the Jurisdictional 
Health Department in accordance with WAC 173-350 (Minimum Functional Standards for 
Solid Waste Handling).

3. The Contractor shall verify in writing, and provide lab analyses, that the material complies 
with the processes, testing, and standards specified in WAC 173-350 and these 
Specifications. An independent Seal of Testing Assurance (STA) Program certified 
laboratory shall perform the analysis.

4. A copy of the manufacturer’s Seal of Testing Assurance (STA) certification as issued by the 
U.S. Composting Council.

9-14.4(8)B Compost Acceptance
Fourteen days prior to application, the Contractor shall submit a sample of the compost approved for 
use, and a STA test report dated within 90 calendar days of the application, and the list of feed stocks 
by volume for each compost type to the Engineer for review.

The Contractor shall use only compost that has been tested within 90 calendar days of application and 
meets the requirements in Section 9-14.4(8). Compost not conforming to the above requirements or 
taken from a source other than those tested and accepted shall not be used.

9-14.4(9) Vacant

9-14.4(10) Vacant

9-14.5 Erosion Control Devices

9-14.5(1) Polyacrylamide (PAM)
PAM is used as a tie-down for soil, compost, or seed, and is also used as a flocculent. Polyacrylamide 
(PAM) products shall meet ANSI/NSF Standard 60 for drinking water treatment with an AMD content 
not to exceed 0.05 percent. PAM shall be anionic, linear, and not cross-linked. The minimum average 
molecular weight shall be greater than 5 mg/mole and minimum 30 percent charge density. The
product shall contain at least 80 percent active ingredients and have a moisture content not exceeding 10 percent by weight. PAM shall be delivered in a dry granular or powder form.

9-14.5(2) Erosion Control Blanket
Temporary erosion control blanket shall be made of natural plant fibers. The Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP) meeting the requirements in the following table:

<table>
<thead>
<tr>
<th>Properties</th>
<th>ASTM Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protecting Slopes from Rainfall-Induced Erosion</td>
<td>D 6459 - Test in one soil type. Soil tested shall be sandy loam as defined by the NRCS Soil Texture Triangle</td>
<td>Maximum C factor of 0.15 using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
<tr>
<td>Dry Weight per Unit Area</td>
<td>D 6475</td>
<td>0.36 lb/sq. yd. minimum</td>
</tr>
<tr>
<td>Performance in Protecting Earthen Channels from Stormwater-Induced Erosion</td>
<td>D 6460 Test in one soil type. Soil tested shall be loam as defined by the NRCS Soil Texture Triangle</td>
<td>1.0 lb/sq. ft. minimum</td>
</tr>
<tr>
<td>Seed Germination Enhancement</td>
<td>D 7322</td>
<td>200 percent minimum</td>
</tr>
</tbody>
</table>

Netting, if present, shall be biodegradable with a life span not to exceed two years.

Permanent erosion control blanket/turf reinforcement mats shall meet the following requirements:

<table>
<thead>
<tr>
<th>Properties</th>
<th>ASTM Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV Stability</td>
<td>D 4355</td>
<td>Minimum 80 percent strength retained after 500 hours in a xenon arc device</td>
</tr>
<tr>
<td>Protecting Slopes from Rainfall-Induced Erosion</td>
<td>D 6459 with 0.12 inch average raindrop size.* Test in one soil type. Soil tested shall be loam as defined by the NRCS Soil Texture Triangle **</td>
<td>Maximum C factor of 0.15 using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
<tr>
<td>Dry Weight per Unit Area</td>
<td>D 6566</td>
<td>0.50 lb/sq. yd. minimum</td>
</tr>
<tr>
<td>Performance in Protecting Earthen Channels from Stormwater-Induced Erosion</td>
<td>D 6460 Test in one soil type. Soil tested shall be loam as defined by the NRCS Soil Texture Triangle**</td>
<td>2.0 lb/sq. ft. minimum</td>
</tr>
<tr>
<td>Seed Germination</td>
<td>D 7322</td>
<td>200 percent minimum</td>
</tr>
</tbody>
</table>
9-14.5(2) A Erosion Control Blanket Approval

The Contractor shall select erosion control blanket products that bear the Quality and Data Oversight and Review (QDOR) seal from the Erosion Control and Technology Council (ECTC). All materials selected shall be currently listed on the QDOR products list available at www.ectc.org/qdor

9-14.5(3) Clear Plastic Covering

Clear plastic covering shall meet the requirements of ASTM D 4397 for polyethylene sheeting having a minimum thickness of 6 mils.

9-14.5(4) Geotextile-Encased Check Dam

The geotextile-encased check dam shall be a urethane foam core encased in geotextile material. The minimum length of the unit shall be 7 feet.

The foam core shall be a minimum of 8 inches in height, and have a minimum base width of 16 inches. The geotextile material shall overhang the foam by at least 6 inches at each end, and shall have apron type flaps that extend a minimum of 24 inches on each side of the check dam. The geotextile material shall meet the requirements in Section 9-33.

9-14.5(5) Wattles

Wattles shall consist of cylinders of biodegradable plant material such as weed-free straw, coir, compost, wood chips, excelsior, or wood fiber or shavings encased within biodegradable netting. Wattles shall be a minimum of 5 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 have a minimum lifespan of 6 months and a maximum lifespan of not more than 24 months.

Compost filler shall be coarse compost and shall meet the material requirements as specified in Section 9-14.4(8). If wood chips are used they shall meet the material requirements as specified in Section 9-14.4(3). 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.

Wood stakes for wattles shall be made from untreated Douglas fir, hemlock, or pine species. Wood stakes shall be 2 inch by 2 inch nominal dimension and 36 inches in length.

9-14.5(6) Compost Socks

Compost socks shall consist of extra heavy weight biodegradable fabric, with a minimum strand thickness of 5 mils. The fabric shall be filled with Coarse Compost. Compost socks shall be at least 8 inches in diameter. The fabric shall be clean, evenly woven, and free of encrusted concrete or other contaminating materials and shall be free from cuts, tears, broken or missing yarns, and be free of thin, open, or weak areas and shall be free of any type of preservative. Netting material shall have a minimum lifespan of 6 months and a maximum lifespan of not more than 24 months.

Coarse compost filler shall meet the material requirements as specified in Section 9-14.4(8).

Wood stakes for compost socks shall be made from untreated Douglas fir, hemlock, or pine species. Wood stakes shall be 2 inch by 2 inch nominal dimension and 36 inches in length.
9-14.5(7) Coir Log
Coir logs shall be made of 100 percent durable coconut (coir) fiber uniformly compacted within woven netting made of bristle coir twine with minimum strength of 80 lbs tensile strength. The netting shall have nominal 2 inch by 2 inch openings. Log segments shall have a maximum length of 20 feet, with a minimum diameter as shown in the Plans. Logs shall have a minimum density of 7 lbs/cf.

Stakes shall be untreated Douglas fir, hemlock, or pine species. Wood stakes shall have a notch to secure the rope ties. Rope ties shall be of 1/4 inch diameter commercially available hemp rope.

9-14.5(8) High Visibility Fencing
High visibility fence shall be UV stabilized, orange, high-density polyethylene or polypropylene mesh, and shall be at least 4-feet in height.

Support posts shall be wood or steel in accordance with Standard Plan I-10.10-00. The posts shall have sufficient strength and durability to support the fence through the life of the project.

9-14.6 Plant Materials

9-14.6(1) Description
Bareroot plants are grown in the ground and harvested without soil or growing medium around their roots.

Container plants are grown in pots or flats that prevent root growth beyond the sides and bottom of the container.

Balled and burlapped plants are grown in the ground and harvested with soil around a core of undisturbed roots. This rootball is wrapped in burlap and tied or placed in a wire basket or other supportive structure.

Cuttings are live plant material without a previously developed root system. Source plants for cuttings shall be dormant when cuttings are taken and all cuts shall be made with a sharp instrument. Cuttings may be collected. If cuttings are collected, the requirement to be nursery grown or held in nursery conditions does not apply. Written permission shall be obtained from property owners and provided to the Engineer before cuttings are collected. The Contractor shall collect cuttings in accordance with applicable sensitive area ordinances. Cuttings shall meet the following requirements:

A. Live branch cuttings shall have flexible top growth with terminal buds and may have side branches. The rooting end shall be cut at an approximate 45 degree angle.

B. Live stake cuttings shall have a straight top cut immediately above a bud. The lower, rooting end shall be cut at an approximate 45 degree angle. Live stakes are cut from one to two year old wood. Live stake cuttings shall be cut and installed with the bark intact with no branches or stems attached, and be ½ to 1½ inch in diameter.

C. Live pole cuttings shall have a minimum 2 inch diameter and no more than three branches which shall be pruned back to the first bud from the main stem.
Rhizomes shall be a prostrate or subterranean stem, usually rooting at the nodes and becoming erect at the apex. Rhizomes shall have a minimum of two growth points. Tubers shall be a thickened and short subterranean branch having numerous buds or eyes.

**9-14.6(2) Quality**

At the time of delivery all plant material furnished shall meet the grades established by the latest edition of the American Standard for Nursery Stock, (ASNS) ANSI Z60.1 and shall conform to the size and acceptable conditions as listed in the Contract, and shall be free of all foreign plant material.

All plant material shall comply with State and Federal laws with respect to inspection for plant diseases and insect infestation.

All plant material shall be purchased from a nursery licensed to sell plants in Washington State.

Live woody or herbaceous plant material, except cuttings, rhizomes, and tubers, shall be vigorous, well formed, with well developed fibrous root systems, free from dead branches, and from damage caused by an absence or an excess of heat or moisture, insects, disease, mechanical or other causes detrimental to good plant development. Evergreen plants shall be well foliated and of good color. Deciduous trees that have solitary leaders shall have only the lateral branches thinned by pruning. All conifer trees shall have only one leader (growing apex) and one terminal bud, and shall not be sheared or shaped. Trees having a damaged or missing leader, multiple leaders, or Y-crotches shall be rejected.

Root balls of plant materials shall be solidly held together by a fibrous root system and shall be composed only of the soil in which the plant has been actually growing. Balled and burlapped rootballs shall be securely wrapped with jute burlap or other packing material not injurious to the plant life. Root balls shall be free of weed or foreign plant growth.

Plant materials shall be nursery grown stock. Plant material, with the exception of cuttings, gathered from native stands shall be held under nursery conditions for a minimum of one full growing season, shall be free of all foreign plant material, and meet all of the requirements of these Specifications, the Plans, and the Special Provisions.

Container grown plants shall be plants transplanted into a container and grown in that container sufficiently long for new fibrous roots to have developed so that the root mass will retain its shape and hold together when removed from the container, without having roots that circle the pot. Plant material which is root bound, as determined by the Engineer, shall be rejected. Container plants shall be free of weed or foreign plant growth.

Container sizes for plant material of a larger grade than provided for in the container grown Specifications of the ASNS shall be determined by the volume of the root ball specified in the ASNS for the same size plant material.

All bare root plant materials shall have a heavy fibrous root system and be dormant at the time of planting.

Average height to spread proportions and branching shall be in accordance with the applicable sections, illustrations, and accompanying notes of the ASNS.
Plants specified or identified as "Street Tree Grade" shall be trees with straight trunks, full and symmetrical branching, central leader, and be developed, grown, and propagated with a full branching crown. A "Street Tree Grade" designation requires the highest grade of nursery shade or ornamental tree production which shall be supplied.

Street trees with improperly pruned, broken, or damaged branches, trunk, or root structure shall be rejected. In all cases, whether supplied balled and burlapped or in a container, the root crown (top of root structure) of the tree shall be at the top of the finish soil level. Trees supplied and delivered in a nursery fabric bag will not be accepted.

Plants which have been determined by the Engineer to have suffered damage for the following reasons will be rejected:

1. Girdling of the roots, stem, or a major branch.
2. Deformities of the stem or major branches.
3. Lack of symmetry.
4. Dead or defoliated tops or branches.
5. Defects, injury, and condition which renders the plant unsuitable for its intended use.

Plants that are grafted shall have roots of the same genus as the specified plant.

9-14.6(3) Handling and Shipping
Handling and shipping shall be done in a manner that is not detrimental to the plants. The nursery shall furnish a notice of shipment in triplicate at the time of shipment of each truck load or other lot of plant material. The original copy shall be delivered to the Project Engineer, the duplicate to the consignee and the triplicate shall accompany the shipment to be furnished to the Inspector at the job site. The notice shall contain the following information:

1. Name of shipper.
2. Date of shipment.
3. Name of commodity. (Including all names as specified in the Contract.)
4. Consignee and delivery point.
5. State Contract number.
6. Point from which shipped.
7. Quantity contained.
8. Size. (Height, runner length, caliper, etc. as required.)
9. Signature of shipper by authorized representative.

To acclimate plant materials to Northwest conditions, all plant materials used on a project shall be
grown continuously outdoors north of the 42nd Latitude (Oregon-California border) from not later
than August 1 of the year prior to the time of planting.

All container grown plants shall be handled by the container.

All balled and burlapped plants shall be handled by the ball.

Plant material shall be packed for shipment in accordance with prevailing practice for the type of plant
being shipped, and shall be protected at all times against drying, sun, wind, heat, freezing, and similar
detrimental conditions both during shipment and during related handling. Where necessary, plant
material shall be temporarily heeled in. When transported in closed vehicles, plants shall receive
adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected
by tarpaulins or other suitable cover material.

9-14.6(4) Tagging
Plants delivered as a single unit of 25 or less of the same size, species, and variety, shall be clearly
marked and tagged. Plants delivered in large quantities of more than 25 shall be segregated as to
variety, grade, and size; and one plant in each 25, or fraction thereof, of each variety, grade, and size
shall be tagged.

9-14.6(5) Inspection
The Contracting Agency will make an inspection of plant material at the source when requested by the
Engineer. However, such preliminary approval shall not be considered as final acceptance for payment.
Final inspection and approval (or rejection) will only occur when the plant material has been delivered
to the Project site. The Contractor shall notify the Engineer, not less than 48 hours in advance, of plant
material delivery to the project.

9-14.6(6) Substitution of Plants
No substitution of plant material, species or variety, will be permitted unless evidence is submitted in
writing to the Engineer that a specified plant cannot be obtained and has been unobtainable since the
Award of the Contract. If substitution is permitted, it can be made only with written approval by the
Engineer. The nearest variety, size, and grade, as approved by the Engineer, shall then be furnished.

Container or balled and burlapped plant material may be substituted for bare root plant material.
Container grown plant material may be substituted for balled and burlapped plant materials. When
substitution is allowed, use current ASNS standards to determine the correct rootball volume
(container or balled and burlapped) of the substituted material that corresponds to that of the specified
material. These substitutions shall be approved by the Engineer and be at no cost to the Contracting
Agency.

9-14.6(7) Temporary Storage
Plants stored under temporary conditions prior to installation shall be the responsibility of the
Contractor.
Plants stored on the project shall be protected at all times from extreme weather conditions by insulating the roots, root balls, or containers with sawdust, soil, compost, bark or wood chips, or other approved material and shall be kept moist at all times prior to planting.

Cuttings shall continually be shaded and protected from wind. Cuttings shall be protected from drying at all times and shall be heeled into moist soil or other insulating material or placed in water if not installed within eight hours of cutting. Cuttings to be stored for later installation shall be bundled, laid horizontally, and completely buried under 6 inches of water, moist soil or placed in cold storage at a temperature of 34°F and 90 percent humidity. Cuttings that are not planted within 24 hours of cutting shall be soaked in water for 24 hours prior to planting. Cuttings taken when the temperature is higher than 50°F shall not be stored for later use. Cuttings that already have developed roots shall not be used.

9-14.6(8) Sod
The available grass mixtures on the current market shall be submitted to the Engineer for selection and approval.

The sod shall be field grown one calendar year or older, have a well developed root structure, and be free of all weeds, disease, and insect damage.

Prior to cutting, the sod shall be green, in an active and vigorous state of growth, and mowed to a height not exceeding 1 inch.

The sod shall be cut with a minimum of 1 inch of soil adhering.

9-14.7 Stakes, Guys, and Wrapping
Stakes shall be installed as shown in the Plans.

Commercial plant ties may be used in lieu of hose and wire guying upon approval of the Engineer. The minimum size of wire used for guying shall be 12 gauge, soft drawn.

Hose for guying shall be nylon, rubber, or reinforced plastic and shall have an inside diameter of at least 1 inch.

Tree wrap shall be a crinkled waterproof paper weighing not less than 4.0 pounds per 100 square feet and shall be made up of two sheets cemented together with asphalt.
<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>EPA-821-R-02-012 Methods</td>
<td>Four replicates are required with No statistically significant reduction in</td>
</tr>
<tr>
<td></td>
<td>for Measuring Acute Toxicity of Effluents. Test leachate from recommended application rate receiving 2 inches of rainfall per hour using static test for No-Observed-Adverse-Effect-Concentration (NOEC)</td>
<td>survival in 100% leachate for a Daphni at 48 hours and Oncorhynchus mykiss (rainbow trout) at 96 hours.</td>
</tr>
<tr>
<td>Solvents</td>
<td>EPA 8260B</td>
<td>Benzene – &lt; 0.03 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Methylene chloride – &lt; 0.02 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Naphthalene – &lt; 5 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tetrachloroethylene – &lt; 0.05 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toluene – &lt; 7 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trichloroethylene – &lt; 0.03 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xylenes – &lt; 9 mg/kg</td>
</tr>
<tr>
<td>Heavy Metals</td>
<td>EPA 6020A Total Metals</td>
<td>Antimony – &lt; 4 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arsenic – &lt; 6 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Barium – &lt; 80 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boron – &lt; 100 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cadmium – &lt; 2 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chromium – &lt; 2 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Copper – &lt; 5 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lead – &lt; 5 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mercury – &lt; 2 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nickel – &lt; 2 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selenium – &lt; 10 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strontium – &lt; 30 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zinc – &lt; 5 mg/kg</td>
</tr>
<tr>
<td>Water Holding Capacity</td>
<td>ASTM D 7367</td>
<td>900 percent minimum</td>
</tr>
<tr>
<td>Organic Matter Content</td>
<td>ASTM D 586</td>
<td>90 percent minimum</td>
</tr>
<tr>
<td>Moisture Content</td>
<td>ASTM D 644</td>
<td>15 percent maximum</td>
</tr>
<tr>
<td>Seed Germination Enhancement</td>
<td>ASTM D 7322</td>
<td>HECP Type 1  HECP Type 2  HECP Type 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>420 percent minimum  400 percent minimum  200 percent minimum</td>
</tr>
</tbody>
</table>

If the HECP contains cotton or straw, the Contractor shall provide documentation that the material has been steam or heat treated to kill seeds, or shall provide U.S., Washington, or other State's Department of Agriculture laboratory test reports, dated within 90 days prior to the date of application, showing there are no viable seeds in the mulch.

The HECP shall be manufactured in such a manner that when agitated in slurry tanks with water, the fibers will become uniformly suspended, without clumping, to form a homogeneous slurry. When hydraulically applied, the material shall form a strong moisture-holding mat that allows the continuous absorption and infiltration of water.

The HECP shall contain a dye to facilitate placement and inspection of the material. Dye shall be non-toxic to plants, animals, and aquatic life and shall not stain concrete or painted surfaces.
The HECP shall be furnished with a Material Safety Data Sheet (MSDS) that demonstrates that the product is not harmful to plants, animals, and aquatic life.

9-14.4(2)A HECP Type 1 Mulch
HECP Type 1 Mulch shall demonstrate the ability to adhere to the soil and create a blanket-like mass within two hours of application and shall bond with the soil surface to create a continuous, porous, absorbent, and flexible erosion resistant blanket that allows for seed germination and plant growth and conforms to the requirements in Table 1 HECP Type 1 Mulch Test Requirements.

The Contractor shall provide test results documenting the mulch meets the requirements in Table 1 HECP Type 1 Mulch Test Requirements.

Prior to January 1, 2012, the Contractor shall supply independent ASTM D 6459 test results from one of the following testing facilities:

- National Transportation Product Evaluation Program (NTPEP)
- Utah State University’s Utah Water Research Laboratory
- Texas Transportation Institute
- San Diego State University’s Soil Erosion Research Laboratory
- TRJ Environmental, Inc

Effective January 1, 2012, the Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP).

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in Protecting Slopes from Rainfall-Induced Erosion</td>
<td>ASTM D 6459 - Test in one soil type. Soil tested shall be sandy loam as defined by the NRCS Soil Texture Triangle</td>
<td>C Factor = 0.01 maximum using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
</tbody>
</table>

9-14.4(2)B HECP Type 2 Mulch
Within 48 hours of application, the HECP Type 2 Mulch shall bond with the soil surface to create a continuous, absorbent, flexible erosion resistant blanket that allows for seed germination and plant growth and conform to the requirements in Table 2 HECP Type 2 Mulch Test Requirements.

The Contractor shall provide test results documenting the mulch meets the requirements in Table 2 HECP Type 2 Mulch Test Requirements.

Prior to January 1, 2012, the Contractor shall supply independent ASTM D 6459 test results from one of the following testing facilities:

- National Transportation Product Evaluation Program (NTPEP)
- Utah State University’s Utah Water Research Laboratory
- Texas Transportation Institute
Effective January 1, 2012, the Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP).

**Table 2** HECP Type 2 Mulch Test Requirements

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in Protecting Slopes from Rainfall-Induced Erosion</td>
<td>ASTM D 6459 - Test in one soil type. Soil tested shall be sandy loam as defined by the NRCS Soil Texture Triangle</td>
<td>C Factor = 0.05 maximum using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
</tbody>
</table>

**9-14.4(2)c HECP Type 3 Mulch**

The Contractor shall provide test results documenting the mulch meets the requirements in Table 3 HECP Type 3 Mulch Test Requirements.

Prior to January 1, 2012, the Contractor shall supply independent ASTM D 6459 test results from one of the following testing facilities:

- National Transportation Product Evaluation Program (NTPEP)
- Utah State University’s Utah Water Research Laboratory
- Texas Transportation Institute
- San Diego State University’s Soil Erosion Research Laboratory
- TRI Environmental, Inc

Effective January 1, 2012, the Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP).

**Table 3** HECP Type 3 Mulch Test Requirements

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in Protecting Slopes from Rainfall-Induced Erosion</td>
<td>ASTM D 6459 - Test in one soil type. Soil tested shall be sandy loam as defined by the National Resources Conservation Service (NRCS) Soil Texture Triangle</td>
<td>C Factor = 0.15 maximum using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
</tbody>
</table>

**9-14.4(3) Bark or Wood Chips**

Bark or wood chip mulch shall be derived from Douglas fir, pine, or hemlock species. It shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust shall not be used as mulch.

Bark or wood chips, when tested, shall be according to WSDOT Test Method T 123 prior to placement and shall meet the following loose volume gradation:
<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>2&quot;</td>
<td>95</td>
</tr>
<tr>
<td>No. 4</td>
<td>0</td>
</tr>
</tbody>
</table>

9-14.4(4) Wood Strand Mulch
Wood strand mulch shall be a blend of angular, loose, long, thin wood pieces that are frayed, with a high length-to-width ratio and shall be derived from native conifer or deciduous trees. A minimum of 95 percent of the wood strand shall have lengths between 2 and 10 inches. At least 50 percent of the length of each strand shall have a width and thickness between 1/16 and ½ inch. No single strand shall have a width or thickness greater than ½ inch.

The mulch shall not contain salt, preservatives, glue, resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust or wood chips or shavings will not be acceptable. Products shall be tested according to WSDOT Test Method 125 prior to acceptance.

9-14.4(5) Lime
Agriculture lime shall be of standard manufacture, flour grade or in pelletedized form, meeting the requirements of ASTM C 602.

9-14.4(6) Gypsum
Gypsum shall consist of Calcium Sulfate (CaSO42H2O) in a pelletedized or granular form. 100 percent shall pass through a No. 8 sieve.

9-14.4(7) Tackifier
Tackifiers are used as a tie-down for soil, compost, seed, and/or mulch. Tackifier shall contain no growth or germination inhibiting materials, and shall not reduce infiltration rates. Tackifier shall hydrate in water and readily blend with other slurry materials and conform to the requirements in Table 4 Tackifier Test Requirements.

The Contractor shall provide test results documenting the tackifier meets the requirements in Table 4 Tackifier Test Requirements.

Before January 1, 2012, the Contractor shall supply independent ASTM D 6459 test results from one of the following testing facilities:

- National Transportation Product Evaluation Program (NTPEP)
- Utah State University’s Utah Water Research Laboratory
- Texas Transportation Institute
- San Diego State University’s Soil Erosion Research Laboratory
- TRI Environmental, Inc

Effective January 1, 2012, the Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP).

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Requirements</th>
</tr>
</thead>
</table>

Table 4 Tackifier Test Requirements
<table>
<thead>
<tr>
<th>Heavy Metals Solvents Acute Toxicity</th>
<th>Test at manufacturer’s recommended application rate</th>
<th>See Table in Section 9-14.4(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in Protecting Slopes from Rainfall-Induced Erosion</td>
<td>Modified ASTM D 6459 on 3(H):1(V) slope with 2 inches of rainfall evenly distributed over a period of 100 minutes. Test in one soil type. Soil tested shall be sandy loam as defined by the National Resources Conservation Service (NRCS) Soil Texture Triangle</td>
<td>C Factor = 0.15 maximum using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
</tbody>
</table>

9-14.4(7)A Organic Tackifier
Organic tackifier shall be derived from natural plant sources and shall have an MSDS that demonstrates to the satisfaction of the Engineer that the product is not harmful to plants, animals, and aquatic life.

9-14.4(7)B Synthetic Tackifier
Synthetic tackifier shall have an MSDS that demonstrates to the satisfaction of the Engineer that the product is not harmful to plants, animals, and aquatic life.

9-14.4(8) Compost
Compost products shall be the result of the biological degradation and transformation of plant-derived materials under controlled conditions designed to promote aerobic decomposition. Compost shall be stable with regard to oxygen consumption and carbon dioxide generation. Compost shall be mature with regard to its suitability for serving as a soil amendment or an erosion control BMP as defined below. The compost shall have a moisture content that has no visible free water or dust produced when handling the material.

Compost production and quality shall comply with Chapter 173-350 WAC.

Compost products shall meet the following physical criteria:

1. Compost material shall be tested in accordance with U.S. Composting Council Testing Methods for the Examination of Compost and Composting (TMECC) 02.02-B, “Sample Sieving for Aggregate Size Classification”.

Fine compost shall meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>2”</td>
<td>100</td>
</tr>
<tr>
<td>1”</td>
<td>95</td>
</tr>
<tr>
<td>5/8”</td>
<td>90</td>
</tr>
<tr>
<td>1/4”</td>
<td>75</td>
</tr>
</tbody>
</table>

Maximum particle length of 6 inches.
Medium compost shall meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2”</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>1”</td>
<td></td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>5/8”</td>
<td></td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>1/4”</td>
<td></td>
<td>75</td>
<td>85</td>
</tr>
</tbody>
</table>

Maximum particle length of 6 inches.

Medium compost shall have a carbon to nitrogen ratio (C:N) between 18:1 and 30:1. The carbon to nitrogen ratio shall be calculated using the dry weight of “Organic Carbon” using TMECC 04.01A divided by the dry weight of “Total N” using TMECC 04.02D.

Coarse compost shall meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>1”</td>
<td></td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>3/4”</td>
<td></td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>1/4”</td>
<td></td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>

Maximum particle length of 6 inches.

2. The pH shall be between 6.0 and 8.5 when tested in accordance with U.S. Composting Council TMECC 04.11-A, “1:5 Slurry pH”.

3. Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 1.0 percent by weight as determined by U.S. Composting Council TMECC 03.08-A “Classification of Inerts by Sieve Size”.

4. Minimum organic matter shall be 40 percent by dry weight basis as determined by U.S. Composting Council TMECC 05.07A “Loss-On-Ignition Organic Matter Method (LOI)”.

5. Soluble salt contents shall be less than 4.0 mmhos/cm when tested in accordance with U.S. Composting Council TMECC 04.10 “Electrical Conductivity”.

6. Maturity shall be greater than 80 percent in accordance with U.S. Composting Council TMECC 05.05-A, “Germination and Root Elongation”.

7. Stability shall be 7 mg CO2–C/g OM/day or below in accordance with U.S. Composting Council TMECC 05.08-B “Carbon Dioxide Evolution Rate”.

8. The compost product shall originate a minimum of 65 percent by volume from recycled plant waste as defined in WAC 173-350 as “Type 1 Feedstocks.” A maximum of 35 percent by volume of “Type 2 Feedstocks,” source-separated food waste, and/or biosolids may be substituted for
recycled plant waste. The Contractor shall provide a list of feedstock sources by percentage in the final compost product.

9. The Engineer may evaluate compost for maturity using U.S. Composting Council TMECC 05.08-E “Solvita® Maturity Index”. Fine compost shall score a number 6 or above on the Solvita® Compost Maturity Test. Coarse compost shall score a 5 or above on the Solvita® Compost Maturity Test.

9-14.4(8)A Compost Submittal Requirements
The Contractor shall submit the following information to the Engineer for approval:

1. The Qualified Products List printed page or a Request for Approval of Material (DOT Form 350-071EF).

2. A copy of the Solid Waste Handling Permit issued to the manufacturer by the Jurisdictional Health Department in accordance with WAC 173-350 (Minimum Functional Standards for Solid Waste Handling).

3. The Contractor shall verify in writing, and provide lab analyses, that the material complies with the processes, testing, and standards specified in WAC 173-350 and these Specifications. An independent Seal of Testing Assurance (STA) Program certified laboratory shall perform the analysis.

4. A copy of the manufacturer’s Seal of Testing Assurance (STA) certification as issued by the U.S. Composting Council.

9-14.4(8)B Compost Acceptance
Fourteen days prior to application, the Contractor shall submit a sample of the compost approved for use, and a STA test report dated within 90 calendar days of the application, and the list of feed stocks by volume for each compost type to the Engineer for review.

The Contractor shall use only compost that has been tested within 90 calendar days of application and meets the requirements in Section 9-14.4(8). Compost not conforming to the above requirements or taken from a source other than those tested and accepted shall not be used.

9-14.4(9) Vacant

9-14.4(10) Vacant

9-14.5 Erosion Control Devices

9-14.5(1) Polyacrylamide (PAM)
Polyacrylamide (PAM) products shall meet ANSI/NSF Standard 60 for drinking water treatment with an AMD content not to exceed 0.05 percent. PAM shall be anionic, linear, and not cross-linked. The minimum average molecular weight shall be greater than 5 mg/mole and minimum 30 percent charge density. The product shall contain at least 80 percent active ingredients and have a moisture content not exceeding 10 percent by weight. PAM shall be delivered in a dry granular or powder form.
9-14.5(2) Erosion Control Blanket

Temporary erosion control blanket shall be made of natural plant fibers. The Contractor shall supply independent test results from the National Transportation Product Evaluation Program (NTPEP) meeting the requirements in the following table:

<table>
<thead>
<tr>
<th>Properties</th>
<th>ASTM Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protecting Slopes from Rainfall-Induced Erosion</td>
<td>D 6459</td>
<td>Maximum C factor of 0.15 using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
<tr>
<td>Dry Weight per Unit Area</td>
<td>D 6475</td>
<td>0.36 lb/sq. yd. minimum</td>
</tr>
<tr>
<td>Performance in Protecting Earthen Channels from Stormwater-Induced Erosion</td>
<td>D 6460</td>
<td>1.0 lb/sq. ft. minimum</td>
</tr>
<tr>
<td>Seed Germination Enhancement</td>
<td>D 7322</td>
<td>200 percent minimum</td>
</tr>
</tbody>
</table>

Netting, if present, shall be biodegradable with a life span not to exceed one year.

Permanent erosion control blanket shall meet the following requirements:

<table>
<thead>
<tr>
<th>Properties</th>
<th>ASTM Test Method</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV Stability</td>
<td>D 4355</td>
<td>Minimum 80 percent strength retained after 500 hours in a xenon arc device</td>
</tr>
<tr>
<td>Protecting Slopes from Rainfall-Induced Erosion</td>
<td>D 6459 with 0.12 inch average raindrop size.* Test in one soil type. Soil tested shall be loam as defined by the NRCS Soil Texture Triangle **</td>
<td>Maximum C factor of 0.15 using Revised Universal Soil Loss Equation (RUSLE)</td>
</tr>
<tr>
<td>Dry Weight per Unit Area</td>
<td>D 6475</td>
<td>0.50 lb/sq. yd. minimum</td>
</tr>
<tr>
<td>Performance in Protecting Earthen Channels from Stormwater-Induced Erosion</td>
<td>D 6460</td>
<td>2.0 lb/sq. ft. minimum</td>
</tr>
<tr>
<td>Seed Germination Enhancement</td>
<td>D 7322</td>
<td>200 percent minimum</td>
</tr>
</tbody>
</table>
9-14.5(2)A Erosion Control Blanket Approval
The Contractor shall select erosion control blanket products that bear the Quality and Data Oversight and Review (QDOR) seal from the Erosion Control and Technology Council (ECTC). All materials selected shall be currently listed on the QDOR products list available at www.ectc.org/qdor

9-14.5(3) Clear Plastic Covering
Clear plastic covering shall meet the requirements of ASTM D 4397 for polyethylene sheeting having a minimum thickness of 6 mils.

9-14.5(4) Geotextile-Encased Check Dam
The geotextile-encased check dam shall be a urethane foam core encased in geotextile material. The minimum length of the unit shall be 7 feet.

The foam core shall be a minimum of 8 inches in height, and have a minimum base width of 16 inches. The geotextile material shall overhang the foam by at least 6 inches at each end, and shall have apron type flaps that extend a minimum of 24 inches on each side of the check dam. The geotextile material shall meet the requirements in Section 9-33.

9-14.5(5) Wattles
Wattles shall consist of cylinders of biodegradable plant material such as weed-free straw, coir, compost, wood chips, excelsior, or wood fiber or shavings encased within biodegradable netting. Wattles shall be a minimum of 5 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 have a minimum lifespan of 6 months.

Compost filler shall be coarse compost and shall meet the material requirements as specified in Section 9-14.4(8). If wood chips are used they shall meet the material requirements as specified in Section 9-14.4(3). 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.

Wood stakes for wattles shall be made from untreated Douglas fir, hemlock, or pine species. Wood stakes shall be 2 inch by 2 inch nominal dimension and 36 inches in length.

9-14.5(6) Compost Socks
Compost socks shall consist of extra heavy weight biodegradable fabric, with a minimum strand thickness of 5 mils. The fabric shall be filled with Coarse Compost. Compost socks shall be at least 8 inches in diameter. The fabric shall be clean, evenly woven, and free of encrusted concrete or other contaminating materials and shall be free from cuts, tears, broken or missing yarns, and be free of thin, open, or weak areas and shall be free of any type of preservative.

Coarse compost filler shall meet the material requirements as specified in Section 9-14.4(8).

Wood stakes for compost socks shall be made from untreated Douglas fir, hemlock, or pine species. Wood stakes shall be 2 inch by 2 inch nominal dimension and 36 inches in length.

9-14.5(7) Coir Log
Coir logs shall be made of 100 percent durable coconut (coir) fiber uniformly compacted within woven netting made of bristle coir twine with minimum strength of 80 lbs tensile strength. The netting
shall have nominal 2 inch by 2 inch openings. Log segments shall have a maximum length of 20 feet, with a minimum diameter as shown in the Plans. Logs shall have a minimum density of 7 lbs/cf.

Stakes shall be untreated Douglas fir, hemlock, or pine species. Wood stakes shall have a notch to secure the rope ties. Rope ties shall be of 1/4 inch diameter commercially available hemp rope.  

9-14.5(8) High Visibility Fencing
High visibility fence shall be UV stabilized, orange, high-density polyethylene or polypropylene mesh, and shall be at least 4-feet in height.

Support posts shall be wood or steel in accordance with Standard Plan J-10.10-00. The posts shall have sufficient strength and durability to support the fence through the life of the project.

9-14.6 Plant Materials

9-14.6(1) Description
Bare-root plants are grown in the ground and harvested without soil or growing medium around their roots.

Container plants are grown in pots or flats that prevent root growth beyond the sides and bottom of the container.

Balled and burlapped plants are grown in the ground and harvested with soil around a core of undisturbed roots. This rootball is wrapped in burlap and tied or placed in a wire basket or other supportive structure.

Cuttings are live plant material without a previously developed root system. Source plants for cuttings shall be dormant when cuttings are taken and all cuttings shall be made with a sharp instrument. Cuttings may be collected. If cuttings are collected, the requirement to be nursery grown or held in nursery conditions does not apply. Written permission shall be obtained from property owners and provided to the Engineer before cuttings are collected. The Contractor shall collect cuttings in accordance with applicable sensitive area ordinances. Cuttings shall meet the following requirements:

A. Live branch cuttings shall have flexible top growth with terminal buds and may have side branches. The rooting end shall be cut at an approximate 45 degree angle.

B. Live stake cuttings shall have a straight top cut immediately above a bud. The lower, rooting end shall be cut at an approximate 45 degree angle. Live stakes are cut from one to two year old wood. Live stake cuttings shall be cut and installed with the bark intact with no branches or stems attached, and be ½ to 1½ inch in diameter.

C. Live pole cuttings shall have a minimum 2 inch diameter and no more than three branches which shall be pruned back to the first bud from the main stem.

Rhizomes shall be a prostrate or subterranean stem, usually rooting at the nodes and becoming erect at the apex. Rhizomes shall have a minimum of two growth points. Tubers shall be a thickened and short subterranean branch having numerous buds or eyes.
9-14.6(2) Quality

At the time of delivery all plant material furnished shall meet the grades established by the latest edition of the American Standard for Nursery Stock, (ASNS) ANSI Z60.1 and shall conform to the size and acceptable conditions as listed in the Contract, and shall be free of all foreign plant material.

All plant material shall comply with State and Federal laws with respect to inspection for plant diseases and insect infestation.

All plant material shall be purchased from a nursery licensed to sell plants in Washington State.

Live woody or herbaceous plant material, except cuttings, rhizomes, and tubers, shall be vigorous, well formed, with well developed fibrous root systems, free from dead branches, and from damage caused by an absence or an excess of heat or moisture, insects, disease, mechanical or other causes detrimental to good plant development. Evergreen plants shall be well foliated and of good color. Deciduous trees that have solitary leaders shall have only the lateral branches thinned by pruning. All conifer trees shall have only one leader (growing apex) and one terminal bud, and shall not be sheared or shaped. Trees having a damaged or missing leader, multiple leaders, or Y-crotches shall be rejected.

Root balls of plant materials shall be solidly held together by a fibrous root system and shall be composed only of the soil in which the plant has been actually growing. Balled and burlapped rootballs shall be securely wrapped with jute burlap or other packing material not injurious to the plant life. Root balls shall be free of weed or foreign plant growth.

Plant materials shall be nursery grown stock. Plant material, with the exception of cuttings, gathered from native stands shall be held under nursery conditions for a minimum of one full growing season, shall be free of all foreign plant material, and meet all of the requirements of these Specifications, the Plans, and the Special Provisions.

Container grown plants shall be plants transplanted into a container and grown in that container sufficiently long for new fibrous roots to have developed so that the root mass will retain its shape and hold together when removed from the container, without having roots that circle the pot. Plant material which is root bound, as determined by the Engineer, shall be rejected. Container plants shall be free of weed or foreign plant growth.

Container sizes for plant material of a larger grade than provided for in the container grown Specifications of the ASNS shall be determined by the volume of the root ball specified in the ASNS for the same size plant material.

All bare root plant materials shall have a heavy fibrous root system and be dormant at the time of planting.

Average height to spread proportions and branching shall be in accordance with the applicable sections, illustrations, and accompanying notes of the ASNS.

Plants specified or identified as "Street Tree Grade" shall be trees with straight trunks, full and symmetrical branching, central leader, and be developed, grown, and propagated with a full branching crown. A "Street Tree Grade" designation requires the highest grade of nursery shade or ornamental tree production which shall be supplied.
Street trees with improperly pruned, broken, or damaged branches, trunk, or root structure shall be rejected. In all cases, whether supplied bailed and burlapped or in a container, the root crown (top of root structure) of the tree shall be at the top of the finish soil level. Trees supplied and delivered in a nursery fabric bag will not be accepted.

Plants which have been determined by the Engineer to have suffered damage for the following reasons will be rejected:

1. Girdling of the roots, stem, or a major branch.
2. Deformities of the stem or major branches.
3. Lack of symmetry.
4. Dead or defoliated tops or branches.
5. Defects, injury, and condition which renders the plant unsuitable for its intended use.

Plants that are grafted shall have roots of the same genus as the specified plant.

9-14.6(3) Handling and Shipping
Handling and shipping shall be done in a manner that is not detrimental to the plants.
The nursery shall furnish a notice of shipment in triplicate at the time of shipment of each truck load or other lot of plant material. The original copy shall be delivered to the Project Engineer, the duplicate to the consignee and the triplicate shall accompany the shipment to be furnished to the Inspector at the job site. The notice shall contain the following information:

1. Name of shipper.
2. Date of shipment.
3. Name of commodity. (Including all names as specified in the Contract.)
4. Consignee and delivery point.
5. State Contract number.
6. Point from which shipped.
7. Quantity contained.
8. Size. (Height, runner length, caliper, etc. as required.)
9. Signature of shipper by authorized representative.
To acclimate plant materials to Northwest conditions, all plant materials used on a project shall be
grown continuously outdoors north of the 42nd Latitude (Oregon-California border) from not later
than August 1 of the year prior to the time of planting.

All container grown plants shall be handled by the container.

All balled and burlapped plants shall be handled by the ball.

Plant material shall be packed for shipment in accordance with prevailing practice for the type of plant
being shipped, and shall be protected at all times against drying, sun, wind, heat, freezing, and similar
detrimental conditions both during shipment and during related handling. Where necessary, plant
material shall be temporarily heeled in. When transported in closed vehicles, plants shall receive
adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected
by tarpaulins or other suitable cover material.

9-14.6(4) Tagging
Plants delivered as a single unit of 25 or less of the same size, species, and variety, shall be clearly
marked and tagged. Plants delivered in large quantities of more than 25 shall be segregated as to
variety, grade, and size; and one plant in each 25, or fraction thereof, of each variety, grade, and size
shall be tagged.

9-14.6(5) Inspection
The Contracting Agency will make an inspection of plant material at the source when requested by the
Engineer. However, such preliminary approval shall not be considered as final acceptance for payment.
Final inspection and approval (or rejection) will only occur when the plant material has been delivered
to the Project site. The Contractor shall notify the Engineer, not less than 48 hours in advance, of plant
material delivery to the project.

9-14.6(6) Substitution of Plants
No substitution of plant material, species or variety, will be permitted unless evidence is submitted in
writing to the Engineer that a specified plant cannot be obtained and has been unobtainable since the
Award of the Contract. If substitution is permitted, it can be made only with written approval by the
Engineer. The nearest variety, size, and grade, as approved by the Engineer, shall then be furnished.

Container or balled and burlapped plant material may be substituted for bare root plant material.
Container grown plant material may be substituted for balled and burlapped plant materials. When
substitution is allowed, use current ASNS standards to determine the correct rootball volume
(container or balled and burlapped) of the substituted material that corresponds to that of the specified
material. These substitutions shall be approved by the Engineer and be at no cost to the Contracting
Agency.

9-14.6(7) Temporary Storage
Plants stored under temporary conditions prior to installation shall be the responsibility of the
Contractor.

Plants stored on the project shall be protected at all times from extreme weather conditions by
insulating the roots, root balls, or containers with sawdust, soil, compost, bark or wood chips, or other
approved material and shall be kept moist at all times prior to planting.
Cuttings shall continually be shaded and protected from wind. Cuttings shall be protected from drying at all times and shall be heeled into moist soil or other insulating material or placed in water if not installed within eight hours of cutting. Cuttings to be stored for later installation shall be bundled, laid horizontally, and completely buried under 6 inches of water, moist soil or placed in cold storage at a temperature of 34°F and 90 percent humidity. Cuttings that are not planted within 24 hours of cutting shall be soaked in water for 24 hours prior to planting. Cuttings taken when the temperature is higher than 50°F shall not be stored for later use. Cuttings that already have developed roots shall not be used.

9-14.6(8) Sod
The available grass mixtures on the current market shall be submitted to the Engineer for selection and approval.

The sod shall be field grown one calendar year or older, have a well developed root structure, and be free of all weeds, disease, and insect damage.

Prior to cutting, the sod shall be green, in an active and vigorous state of growth, and mowed to a height not exceeding 1 inch.

The sod shall be cut with a minimum of 1 inch of soil adhering.

9-14.7 Stakes, Guys, and Wrapping
Stakes shall be installed as shown in the Plans.

Commercial plant ties may be used in lieu of hose and wire guying upon approval of the Engineer. The minimum size of wire used for guying shall be 12 gauge, soft drawn.

Hose for guying shall be nylon, rubber, or reinforced plastic and shall have an inside diameter of at least 1 inch.

Tree wrap shall be a crinkled waterproof paper weighing not less than 4.0 pounds per 100 square feet and shall be made up of two sheets cemented together with asphalt.

SECTION 9-22, MONUMENT CASES
January 4, 2010

9-22.1 Monument Cases, Covers, and Risers
In the first sentence, "Class 30B" is revised to read "Class 35B".

SECTION 9-35, TEMPORARY TRAFFIC CONTROL MATERIALS
January 4, 2010

9-35.0 General Requirements
In the first paragraph, the item "Truck Mounted Attenuator" is revised to read "Transportable Attenuator".

In the second paragraph, the third sentence is revised to read:
Unless otherwise noted, Requests for Approval of Material (RAM) and Qualified Products List (QPL) submittals are not required.

9-35.12 Truck-Mounted Attenuator
This section including title is revised to read:

9-35.12 Transportable Attenuator
Transportable attenuators are Truck-Mounted Attenuators (TMA) or Trailer-Mounted Attenuators (TMA-trailer). The transportable attenuator shall be mounted on, or attached to a host vehicle with a minimum weight of 15,000 pounds and a maximum weight in accordance with the manufacturer’s recommendations. Ballast used to obtain the minimum weight requirement, or any other object that is placed on the vehicle shall be securely anchored such that it will be retained on the vehicle during an impact. The Contractor shall provide certification that the transportable attenuator complies with NCHRP 350 Test level 3 requirements. Lighter host vehicles proposed by the Contractor are subject to the approval of the Engineer. The Contractor shall provide the Engineer with roll-ahead distance calculations and crash test reports illustrating that the proposed host vehicle is appropriate for the attenuator and the site conditions.

The transportable attenuator shall have a chevron pattern on the rear of the unit. The standard chevron pattern shall consist of 4-inch yellow stripes, alternating non-reflective black and retro-reflective yellow sheeting, slanted at 45 degrees in an inverted “V” with the “V” at the center of the unit.

This section is supplemented with the following new sub-sections:

9-35.12(1) Truck-Mounted Attenuator
The TMA may be selected from the approved units listed on the QPL or submitted using a RAM.

The TMA shall have an adjustable height so that it can be placed at the correct elevation during usage and to a safe height for transporting. If needed, the Contractor shall install additional lights to provide fully visible brake lights at all times.

9-35.12(2) Trailer-Mounted Attenuator
The TMA-trailer may be selected from the approved units listed on the QPL or submitted using a RAM.

If needed, the Contractor shall install additional lights to provide fully visible brake lights at all times.

9-35.12(3) Submittal Requirements
For transportable attenuators listed on the QPL, the Contractor shall submit the QPL printed page or a QPL Acceptance Code entered on the RAM (WSDOT Form 350-071EF) for the product proposed for use to the Engineer for approval. The Contractor shall submit a RAM for transportable attenuators not listed on the QPL.
Special Provisions
SPECIAL PROVISIONS

C 3388 - TERRACE HEIGHTS DRIVE OVERLAY

Yakima County, Washington

The English version of the 2010 Standard Specifications for Road, Bridge and Municipal
Construction as prepared by the Washington State Department of Transportation and the American
Public Works Association, Washington State Chapter are hereby incorporated into this contract as
Standard Specifications.

The following Special Provisions are made a part of this contract and supersede any conflicting
provisions of the 2010 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\ 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:

Regions\nER 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 improvement of a total of approximately 0.58 miles of Terrace Heights Drive between milepost 0.36 and milepost 0.94. The work consisting of grinding existing bituminous pavement, applying tack coat and overlaying with Hot Mix Asphalt. Also, the removal of one railroad crossing and the removal/ replacement of 3 bridge expansion joints, all in accordance with the attached Contract Plans, these Special Provisions, the Standard Specifications

FUNDS

(******)

Yakima County Road funds are involved in the construction of these improvements.

SECTION 1-01 DEFINITIONS AND TERMS

1-01.3 Definitions
(September 12, 2008 APWA GSP)

This Section is supplemented with the following:

All references in the Standard Specifications to the terms “State”, “Department of Transportation”, “Washington State Transportation Commission”, “Commission”, “Secretary of Transportation”, “Secretary”, “Headquarters”, and “State Treasurer” shall be revised to read “Contracting Agency”.

All references to “State Materials Laboratory” shall be revised to read “Contracting Agency designated location”.

The venue of all causes of action arising from the advertisement, award, execution, and performance of the contract shall be in the Superior Court of the County where the Contracting Agency’s headquarters are located.

Additive
A supplemental unit of work or group of bid items, identified separately in the proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

Alternate
One of two or more units of work or groups of bid items, identified separately in the proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Contract Documents
See definition for “Contract”.

Contract Time
The period of time established by the terms and conditions of the contract within which the work must be physically completed.

Dates

**Bid Opening Date**
The date on which the Contracting Agency publicly opens and reads the bids.

**Award Date**
The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive bidder for the work.

**Contract Execution Date**
The date the Contracting Agency officially binds the agency to the contract.

**Notice to Proceed Date**
The date stated in the Notice to Proceed on which the contract time begins.

**Substantial Completion Date**
The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, and only minor incidental work, replacement of temporary substitute facilities, or correction or repair remains for the physical completion of the total contract.

**Physical Completion Date**
The day all of the work is physically completed on the project. All documentation required by the contract and required by law does not necessarily need to be furnished by the Contractor by this date.

**Completion Date**
The day all the work specified in the contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the contract and required by law must be furnished by the Contractor before establishment of this date.

**Final Acceptance Date**
The date on which the Contracting Agency accepts the work as complete.

**Notice of Award**
The written notice from the Contracting Agency to the successful bidder signifying the Contracting Agency’s acceptance of the bid.

**Notice to Proceed**
The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the work and establishing the date on which the contract time begins.

**Traffic**
Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

SECTION 1-02 BID PROCEDURES AND CONDITIONS
1-02.1 Prequalification of Bidders

(******)

Section 1-02.1 is deleted for this project and replaced with the following:

Yakima County does not prequalify bidders. However, if the apparent low bidder has not already been determined qualified, the County shall afford 10 days after notification for the low bidder to provide evidence for evaluation as to capability to perform work. The evaluation may include consideration of experience, personnel, equipment, and financial resources as well as performance record and the information should be sufficient to enable the bidder to obtain the required qualification rating prior to award of contract.

Qualification must, as a minimum, consist of bonding capability to the amount of contract and meeting licensing requirements of State law.

1-02.2 Plans and Specifications
(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed will be found in the Call for Bids (Advertisement for Bids) for the work.

After award of the contract, plans and specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor No. of Sets Basis of Distribution

Reduced plans (8 1/2" x 11") 10 Furnished automatically
and Contract Provisions upon award.

Large plans (22" x 34") 0 Furnished only upon
and Contract Provisions request.

Additional plans and Contract Provisions may be purchased by the Contractor by payment of the cost stated in the Call for Bids.

1-02.5 Proposal Forms
(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

At the request of a bidder, the Contracting Agency will provide a proposal form for any project on which the bidder is eligible to bid.

The proposal form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where
applicable, retail sales taxes and acknowledgment of addenda; the bidder’s name, address, telephone number, and signature; the bidder’s D/M/WBE commitment, if applicable; a State of Washington Contractor’s Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the proposal form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the proposal forms unless otherwise specified.

Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signor of the bid. The bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any D/W/MBE requirements are to be satisfied through such an agreement.

1-02.6 Preparation of Proposal  
(October 10, 2008 APWA GSP)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

1-02.7 Bid Deposit  
(October 1, 2005 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder’s officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety’s officer empowered to sign the bond and the power of
attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract
Provisions.

1-02.9 Delivery of Proposal
(January 24, 2011 APWA GSP)

Delete this section and replace it with the following:

Each proposal shall be submitted in a sealed envelope, with the Project Name and Project Number
as stated in the Advertisement for Bids clearly marked on the outside of the envelope, or as
otherwise required in the Bid Documents, to ensure proper handling and delivery.

The Contracting Agency will not consider Proposals it receives after the time fixed for opening
Bids in the call for Bids.

1-02.12 Public Opening of Proposal

Section 1-02.12 is supplemented with the following:

(******)

Date of Opening Bids
Sealed bids will be received at the following location prior to the time specified:

Yakima County Public Services, Fourth Floor County Courthouse, 128 N. 2\textsuperscript{nd} Street, Yakima,
Washington 98901, until 2:00 P.M. of the bid opening date.

The bid opening date for this project is \textbf{August 10, 2011}. Bids received will be publicly opened
and read after 2:00 P.M. on this date.

1-02.13 Irregular Proposals
(March 25, 2009 APWA GSP)

Revise item 1 to read:

1. A proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified \textit{when so required};
   b. The authorized proposal form furnished by the Contracting Agency is not used or is
      altered;
   c. The completed proposal form contains any unauthorized additions, deletions, alternate
      Bids, or conditions;
   d. The Bidder adds provisions reserving the right to reject or accept the award, or enter
      into the Contract;
   e. A price per unit cannot be determined from the Bid Proposal;
   f. The Proposal form is not properly executed;
   g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as
      required in Section 1-02.6;
h. The Bidder fails to submit or properly complete a Disadvantaged, Minority or Women's Business Enterprise Certification, if applicable, as required in Section 1-02.6;

i. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or

j. More than one proposal is submitted for the same project from a Bidder under the same or different names.

1-02.14 Disqualification of Bidders
(March 25, 2009 APWA GSP, Option B)

Delete this Section and replace it with the following:

A Bidder will be deemed not responsible if:

1. the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or

2. evidence of collusion exists with any other Bidder or potential Bidder. Participants in collusion will be restricted from submitting further bids; or

3. the Bidder, in the opinion of the Contracting Agency, is not qualified for the work or to the full extent of the bid, or to the extent that the bid exceeds the authorized prequalification amount as may have been determined by a prequalification of the Bidder; or

4. an unsatisfactory performance record exists based on past or current Contracting Agency work or for work done for others, as judged from the standpoint of conduct of the work; workmanship; or progress; affirmative action; equal employment opportunity practices; termination for cause; or Disadvantaged Business Enterprise, Minority Business Enterprise, or Women's Business Enterprise utilization; or

5. there is uncompleted work (Contracting Agency or otherwise), which in the opinion of the Contracting Agency might hinder or prevent the prompt completion of the work bid upon; or

6. the Bidder failed to settle bills for labor or materials on past or current contracts, unless there are extenuating circumstances acceptable to the Contracting Agency; or

7. the Bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract, unless there are extenuating circumstances acceptable to the Contracting Agency; or

8. the Bidder is unable, financially or otherwise, to perform the work, in the opinion of the Contracting Agency; or

9. there are any other reasons deemed proper by the Contracting Agency.

As evidence that the Bidder meets the bidder responsibility criteria above, the apparent two lowest Bidders must submit to the Contracting Agency within 24 hours of the bid submittal deadline, documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with all applicable responsibility criteria, including all documentation specifically listed in the supplemental criteria. The Contracting Agency reserves the right to request such documentation from other Bidders as well, and to request further documentation as needed to assess bidder responsibility.

The basis for evaluation of Bidder compliance with these supplemental criteria shall be any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties)
which any reasonable owner would rely on for determining such compliance, including but not
limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained
directly by the Contracting Agency from owners for whom the Bidder has worked, or other
public agencies or private enterprises; and (iii) any additional information obtained by the
Contracting Agency which is believed to be relevant to the matter.

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria
above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder
in writing, with the reasons for its determination. If the Bidder disagrees with this
determination, it may appeal the determination within 24 hours of receipt of the Contracting
Agency’s determination by presenting its appeal to the Contracting Agency. The Contracting
Agency will consider the appeal before issuing its final determination. If the final determination
affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract
with any other Bidder until at least two business days after the Bidder determined to be not
responsible has received the final determination.

SECTION 1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids
(January 23, 2006 APWA GSP)

Revise the first paragraph to read:

After opening and reading proposals, the Contracting Agency will check them for correctness of
extensions of the prices per unit and the total price. If a discrepancy exists between the price per
unit and the extended amount of any bid item, the price per unit will control. If a minimum bid
amount has been established for any item and the bidder’s unit or lump sum price is less than the
minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum
price, to the minimum specified amount and recalculate the extension. The total of extensions,
corrected where necessary, including sales taxes where applicable and such additives and/or
alternates as selected by the Contracting Agency, will be used by the Contracting Agency for
award purposes and to fix the Awarded Contract Price amount and the amount of the contract
bond.

1-03.3 Execution of Contract
(October 1, 2005 APWA GSP)

Revise this section to read:

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available
for signature by the successful bidder on the first business day following award. The number
of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 10 calendar days after the award date, the successful bidder shall return the signed
Contracting Agency-prepared contract, an insurance certification as required by Section 1-
07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the
contract by the Contracting Agency, the successful bidder shall provide any pre-award
information the Contracting Agency may require under Section 1-02.15.
Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 10 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(October 1, 2005 APWA GSP)

Revise the first paragraph to read:

The successful bidder shall provide an executed contract bond for the full contract amount. This contract bond shall:

1. Be on a Contracting Agency-furnished form;
2. Be signed by an approved surety (or sureties) that:
   a. Is registered with the Washington State Insurance Commissioner, and
   b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Be conditioned upon the faithful performance of the contract by the Contractor within the prescribed time;
4. Guarantee that the surety shall indemnify, defend, and protect the Contracting Agency against any claim of direct or indirect loss resulting from the failure:
   a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform the contract, or
   b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, materialperson, or any other person who provides supplies or provisions for carrying out the work;
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond must be signed by the president or vice-president, unless accompanied by written proof of the authority of the individual signing the bond to bind the corporation (i.e., corporate resolution, power of attorney or a letter to such effect by the president or vice-president).

SECTION 1-04 SCOPE OF THE WORK

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

(October 1, 2005 APWA GSP)

Revise the second paragraph 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. Special Provisions, including APWA General Special Provisions, if they are included.
4. Contract Plans,
5. Amendments to the Standard Specifications,
6. WSDOT/APWA Standard Specifications for Road, Bridge and Municipal Construction,
7. Contracting Agency’s Standard Plans (if any), and
8. WSDOT/APWA Standard Plans for Road, Bridge, and Municipal Construction.

SECTION 1-05 CONTROL OF WORK

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer, or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remediing defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor’s unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency’s rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency’s right to pursue any other avenue for additional remedy or damages with respect to the Contractor’s failure to perform the work as required.
1-05.13 Superintendents, Labor and Equipment of Contractor
(March 25, 2009 APWA GSP)

Revise the seventh paragraph to read:
Whenever the Contracting Agency evaluates the Contractor's qualifications pursuant to Section 1-02.14, it will take these performance reports into account.

1-05.15 Method of Serving Notices
(March 25, 2009 APWA GSP)

Revise the second paragraph to read:
All correspondence from the Contractor shall be directed to the Project Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new section:

1-05.16 Water and Power
(October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

Add the following new section:

1-05.17 Oral Agreements
(October 1, 2005 AWPA GSP)

No oral agreement or conversation with any officer, agent, or employee of the Contracting Agency, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Contracting Agency, unless subsequently put in writing and signed by the Contracting Agency.

SECTION 1-06 CONTROL OF MATERIAL

1-06 Buy America
(August 2, 2010)

Section 1-06 is supplemented with the following:
The major quantities of steel and iron construction material that is permanently incorporated into the project shall consist of American-made materials only. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework.

Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the foreign material used does not exceed one-tenth of one percent of the total contract cost or $2,500.00, whichever is greater.

American-made material is defined as material having all manufacturing processes occurring domestically. To further define the coverage, a domestic product is a manufactured steel material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

If domestically produced steel billets or iron ingots are exported outside of the area of coverage, as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.

Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.

Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron or processed, pelletized, and reduced iron ore.

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:
   a. Open hearth furnace.
   b. Basic oxygen.
   c. Electric furnace.
   d. Direct reduction.

2. Rolling, heat treating, and any other similar processing.

3. Fabrication of the products.
   a. Spinning wire into cable or strand.
b. Corrugating and rolling into culverts.

c. Shop fabrication.

A certification of materials origin will be required for any items comprised of, or containing, steel or iron construction materials prior to such items being incorporated into the permanent work. The certification shall be on DOT Form 350-109EF provided by the Engineer, or such other form the Contractor chooses, provided it contains the same information as DOT Form 350-109EF.

1-06.2(2) Statistical Evaluation of Materials for Acceptance

(*****)

Section 1-06.2(2) of the Standard Specifications is deleted.

SECTION 1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor’s care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor’s care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor’s plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor’s performance does not, and shall not, be intended to include review and adequacy of the Contractor’s safety measures in, on, or near the project site.
1-07.2 Sales Tax

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2 Sales Tax
(January 24, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(4) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(3) describes this exception.

The Contracting Agency will pay the retained percentage only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this
sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(3) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.5 Fish and Wildlife and Ecology Regulations

1-07.5(4) Air Quality

(******)

Section 1-07.5(4) is supplemented with the following:

Prevention of Environmental Pollution and Preservation of Public Natural Resources

The Contractor shall comply with the following environmental provisions, which are made a part of the contract documents. A copy of the environmental provisions is available to the Contractor at the Project Engineer’s office.

If the Contractor’s operations involve work outside the areas covered by the following environmental provisions, the Contractor shall advise the Engineer and request a list of all additional provisions covering the area involved. A copy of all additional environmental provisions is also available to the Contractor at the Project Engineer’s office.

In addition to the requirements of Section 1-07.5(4) of the Standard Specifications, the Contractor shall comply with the following environmental provisions:

The Contractor is hereby notified that there are various Federal, State, and local statutes, ordinances and regulations such as, but not limited to, the Yakima County Clean Air Authority Regulations, dealing with the prevention of environmental pollution and the preservation of public natural resources that affect or are affected by this project.

The Contractor is further advised that the construction of this Project does not require construction operations that would have to be done in a fashion that would be in violation of Yakima County's Clean Air Ordinance, the State Shoreline Management Act or any other known statute, ordinance or regulation. To the extent that they are reasonably obtainable, these statutes, ordinances or regulations are on file in the office of the Director of Public Works of Yakima County, Room 408 County Courthouse, Yakima, Washington, for the inspection by prospective Bidders.
All Bidders are advised to acquaint themselves with the applicable sections of those statutes, ordinances, or regulations so that their Bid shall be based on a construction plan of operations that shall not be in violation of said statutes, ordinances or regulations. If the Contractor desires to so conduct his operations so that they fall within the applicable sections of those statutes, ordinances, or regulations, he shall take all measures to obtain all approvals necessary to be in full compliance with the environmental protection requirements applicable to his operations. By submitting a Bid, the Contractor is thereby acknowledging these referred to Federal, State, and local statutes, ordinances or regulations.

1-07.7 Load Limits
(******)

Section 1-07.7 is supplemented with the following:

If the sources of materials provided by the Contractor of the County require hauling over roads other than County Highways, the Contractor shall, at his own cost and expense, make all arrangements for the use of the haul routes.

1-07.7(1) General
(******)

Section 1-07.7(1) is supplemented with the following:

Yakima County has imposed load restrictions on bridges throughout the County. The Contractor shall become familiar with the locations and the load restriction on the bridges and schedule his haul routes to avoid all violations of the posted restrictions. The Engineer shall make available to the Contractor, a complete listing of the restricted bridges in Yakima County.

1-07.13 Contractor's Responsibility For Work

1-07.13(4) Repair of Damage
(August 6, 2001)

Repair of Damage

Section 1-07.13(4) is revised to read:

The Contractor shall promptly repair all damage to either temporary or permanent work as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2) or 1-07.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay or disruption of work.

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

Spill Prevention, Control and Countermeasures Plan
(August 3, 2009)

Section 1-07.15(1) is supplemented with the following:
The Contractor shall address the following items in the SPCC Plan in addition to the requirements of Section 1-07.15(1):

Mixing, Transfers, & Storage
1. All oil, fuel or chemical storage tanks or containers shall be diked and located on impervious surfaces so as to prevent spill from escaping.

2. All liquid products shall be stored and mixed on impervious surfaces in a secure water tight environment and provide containment to handle the maximum volume of liquid products on site at any given time.

3. Proper security shall be maintained to prevent vandalism.

4. Drip pans or other protective devices shall be required for all transfer operations.

Spills
Paint and solvent spills shall be treated as oil spills and shall be prevented from reaching storm drains or other discharges. No cleaning solvents or chemicals used for tool or equipment cleaning may be discharged to the ground or water.

Maintenance of Equipment
Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks and shall be maintained and stored properly to prevent spills into State waters.

Disposal
Spilled waste, chemicals or petroleum products shall be transported off site for disposal at a facility approved by the Department of Ecology. The materials shall not be discharged to any sanitary sewer without approval of the local sewer authority.

Reporting and Cleanup
The Contractor’s designated person for managing and implementing the SPCC Plan shall report hazardous material spills as follows:

Spills into State water (including ponds, ditches, seasonally dry streams, and wetlands) – Immediately call all of the following:
National Response Center 1-800-424-8802
WA State Div. of Emergency Management (24 hr) 1-800-258-5990
Ecology Central Regional Office 509 575-2490

Spill to Soil (Including encounters of pre-existing contamination):
Ecology Central Regional Office 509 575-2490
Report immediately if threatening to health or environment (i.e., explosive, flammable, toxic vapors, shallow groundwater, nearby creek), otherwise within 90 days

Underground Storage Tank (confirmed release of material)
Ecology Central Regional Office 509 575-2490
Report within 24 hours
1-07.17 Utilities and Similar Facilities
(April 2, 2007)

Section 1-07.17 is supplemented with the following:

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

Public and private utilities, or their Contractors, will furnish all work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the work for this project. It is anticipated that utility adjustment, relocation, replacement or construction within the project limits will be completed as follows:

Utility relocations are anticipated during construction of these improvements. The Contractor shall not disturb the fiber optic telecommunications cable on the existing Wenas Creek Bridge No. 1 until the new bridge is substantially complete and said fiber has been transferred onto the new structure.

The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer, all affected subcontractors, and all utility owners and their contractors prior to beginning onsite work.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor’s convenience:

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roza Irrigation District</td>
<td>P.O. Box 810, Sunnyside, WA 98944 509.837.5141</td>
<td></td>
</tr>
<tr>
<td>Qwest</td>
<td>8 S. 2nd Ave., Rm. 304, Yakima, WA 98944 509.457.7313</td>
<td></td>
</tr>
<tr>
<td>Cascade Natural Gas</td>
<td>701 S. 1st Ave., Yakima, WA 98902 509.457.5905</td>
<td></td>
</tr>
<tr>
<td>Pacific Power &amp; Light Co.</td>
<td>500 N. Keys Rd., Yakima, WA 98901 509.575.3158</td>
<td></td>
</tr>
<tr>
<td>Charter Communications</td>
<td>1005 N. 16th Ave., Yakima, WA 98902 509.728.2662</td>
<td></td>
</tr>
<tr>
<td>Terrace Heights Sewer Dist.</td>
<td>186 Iron Horse Court, Suite 100, Yakima, WA 98901 509.453.8702</td>
<td></td>
</tr>
<tr>
<td>AT&amp;T Fiber</td>
<td>4438 Hood Rd., Walla Walla, WA. 99362 509.735.7113</td>
<td></td>
</tr>
<tr>
<td>Yakima County Water</td>
<td>128 N. 2nd St., Yakima, WA. 98902 509.574.2300</td>
<td></td>
</tr>
<tr>
<td>Level 3 Communication</td>
<td>1025 Eldorado Blvd., Broomfield, CO 80021 720.888.3813</td>
<td></td>
</tr>
<tr>
<td>Selah Moxee Irrigation</td>
<td>P.O. Box 166, Moxee, WA. 98936 509.469.0449</td>
<td></td>
</tr>
<tr>
<td>BNSF Railway</td>
<td>111 University Parkway, Suite 200, Yakima, WA. 98901 509.934.2533</td>
<td></td>
</tr>
</tbody>
</table>
1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance
(January 24, 2011 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall obtain the insurance described in this section from insurers approved by the State Insurance Commissioner pursuant to RCW Title 48. The insurance must be provided by an insurer with a rating of A-: VII or higher in the A.M. Best’s Key Rating Guide, which is licensed to do business in the state of Washington (or issued as a surplus line by a Washington Surplus lines broker). The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer (including financial condition), terms and coverage, the Certificate of Insurance, and/or endorsements.

B. The Contractor shall keep this insurance in force during the term of the contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated (see C. below).

C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Final Completion or earlier termination of this contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period (“tail”) or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The insurance policies shall contain a “cross liability” provision.

E. The Contractor’s and all subcontractors’ insurance coverage shall be primary and non-contributory insurance as respects the Contracting Agency’s insurance, self-insurance, or insurance pool coverage.

F. The Contractor shall provide the Contracting Agency and all Additional Insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

G. Upon request, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s).

H. The Contractor shall not begin work under the contract until the required insurance has been obtained and approved by the Contracting Agency.

I. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five
business days notice to the Contractor to correct the breach, immediately terminate the
contract or, at its discretion, procure or renew such insurance and pay any and all premiums
in connection therewith, with any sums so expended to be repaid to the Contracting Agency
on demand, or at the sole discretion of the Contracting Agency, offset against funds due the
Contractor from the Contracting Agency.

J. All costs for insurance shall be incidental to and included in the unit or lump sum prices of
the contract and no additional payment will be made.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Professional Liability and Workers Compensation,
shall name the following listed entities as additional insured(s):

- the Contracting Agency and its officers, elected officials, employees, agents
  and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability
maintained by the Contractor, whether primary, excess, contingent or otherwise, irrespective of
whether such limits maintained by the Contractor are greater than those required by this
Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor
pursuant to 1-07.18(3) describes limits lower than those maintained by the Contractor.

1-07.18(3) Subcontractors

Contractor shall ensure that each subcontractor of every tier obtains and maintains at a minimum
the insurance coverages listed in 1-07.18(5)A and 1-07.18(5)B. Upon request of the Contracting
Agency, the Contractor shall provide evidence of such insurance.

1-07.18(4) Evidence of Insurance

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and
endorsements for each policy of insurance meeting the requirements set forth herein when the
Contractor delivers the signed Contract for the work. The certificate and endorsements must
conform to the following requirements:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.

2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-
07.18(2) as Additional Insured(s), showing the policy number. The Contractor may submit a
copy of any blanket additional insured clause from its policies instead of a separate endorsement.
A statement of additional insured status on an ACORD Certificate of Insurance shall not satisfy
this requirement.

3. Any other amendatory endorsements to show the coverage required herein.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Providing
coverage in these stated minimum limits shall not be construed to relieve the Contractor from
liability in excess of such limits. All deductibles and self-insured retentions must be disclosed
and are subject to approval by the Contracting Agency. The cost of any claim payments falling
within the deductible shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

A policy of Commercial General Liability Insurance, including:

Per project aggregate
Premises/Operations Liability
Products/Completed Operations – for a period of one year following final acceptance of the work.
Personal/Advertising Injury
Contractual Liability
Independent Contractors Liability
Stop Gap / Employers’ Liability
Explosion, Collapse, or Underground Property Damage (XCU)
Blasting (only required when the Contractor’s work under this Contract includes exposures to
which this specified coverage responds)

Such policy must provide the following minimum limits:

$1,000,000 Each Occurrence
$2,000,000 General Aggregate
$1,000,000 Products & Completed Operations Aggregate
$1,000,000 Personal & Advertising Injury, each offence

Stop Gap / Employers’ Liability
$1,000,000 Each Accident
$1,000,000 Disease - Policy Limit
$1,000,000 Disease - Each Employee

1-07.18(5)B Automobile Liability

Automobile Liability for owned, non-owned, hired, and leased vehicles, with an MCS 90
endorsement and a CA 9948 endorsement attached if “pollutants” are to be transported. Such
policy(ies) must provide the following minimum limit:

$1,000,000 combined single limit

1-07.18(5)C Workers’ Compensation

The Contractor shall comply with Workers’ Compensation coverage as required by the
Industrial Insurance laws of the state of Washington

1-07.23 Public Convenience and Safety
1-07.23 Public Convenience And Safety

(******)

Section 1-07.23 is supplemented with the following:

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:

<table>
<thead>
<tr>
<th>Posted Speed</th>
<th>Distance From Traveled Way (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 mph or less</td>
<td>10 *</td>
</tr>
<tr>
<td>40 mph</td>
<td>15</td>
</tr>
<tr>
<td>45 to 55 mph</td>
<td>20</td>
</tr>
<tr>
<td>60 mph or greater</td>
<td>30</td>
</tr>
</tbody>
</table>

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

SECTION 1-08 PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 Preliminary Matters
(May 25, 2006 APWA GSP)
Add the following new section:

1-08.0(1) Preconstruction Conference
(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer 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.

1-08.4 Prosecution of Work
(October 1, 2005 APWA GSP)

Revise this section to read:

Notice to proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

1-08.5 Time for Completion
(March 13, 1995)

Section 1-08.5 is supplemented with the following:

This project shall be physically completed within **25 working days**.

1-08.5 Time for Completion
(June 28, 2007 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:
Contract time shall begin on the first working day following the notice to proceed date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the engineer will provide the contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the engineer declares as unworkable. Within 10 calendar days after the date of each statement, the contractor shall file a written protest of any alleged discrepancies in it. To be considered by the engineer, the protest shall be in sufficient detail to enable the engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, the contractor shall be deemed as having accepted the statement as correct. If the contractor elects to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the contractor works on that day.

Revise the sixth paragraph to read:

The engineer will give the contractor written notice of the completion date of the contract after all the contractor's obligations under the contract have been performed by the contractor. The following events must occur before the completion date can be established:

1. The physical work on the project must be complete; and
2. The contractor must furnish all documentation required by the contract and required by law, to allow the contracting agency to process final acceptance of the contract. The following documents must be received by the project engineer prior to establishing a completion date:
   a. Certified Payrolls (Federal-aid Projects)
   b. Material Acceptance Certification Documents
   d. Final Contract Voucher Certification
   e. Property owner releases per Section 1-07.24

SECTION 1-10 TEMPORARY TRAFFIC CONTROL

1-10.2 Traffic Control Management

1-10.2(1) General

(December 1, 2008)

Section 1-10.2(1) is supplemented with the following:

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:
The Northwest Laborers-Employers Training Trust  
27055 Ohio Ave.  
Kingston, WA 98346  
(360) 297-3035

Evergreen Safety Council  
401 Pontius Ave. N.  
Seattle, WA 98109  
1-800-521-0778 or  
(206) 382-4090

The American Traffic Safety Services Association  
15 Riverside Parkway, Suite 100  
Fredericksburg, Virginia 22406-1022  
Training Dept. Toll Free (877) 642-4637  
Phone: (540) 368-1701

1-10.2(2) Traffic Control Plans  
(******)

Section 1-10.4(3) is supplemented with the following:

The Contract includes a General traffic Control Plan only. The Contractor is responsible for submitting site specific traffic control plans for each phase of the Contractor’s operation to the Engineer for approval.

A minimum of 10 working days are required for review and approval by the Engineer for each specific traffic control plan. If the traffic control plan is incomplete and more information is required, additional time will be required to review and approve each resubmitted traffic control plan.

No work shall be performed by the Contractor without an approved traffic control plan.

1-10.4 Measurement  
(August 2, 2004)

1-10.4(2) Item Bids with Lump Sum for Incidentals

Paragraph three of Section 1-10.4(2) is supplemented with the following:

(******)  
Flaggers and Spotters will be by the hour for each person actually performing the work described in Section 1-10.3(1)A. Portions of an hour will be rounded up to the one half hour.

1-10.4(3) Reinstating Unit Items With Lump Sum Traffic Control

Section 1-10.4(3) is supplemented with the following:

(******)
The bid proposal contains the item “Project Temporary Traffic Control,” per lump sum and the additional temporary traffic control items listed below. The provisions of Section 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.

Traffic Control Supervisor, Flaggers and Spotters, Construction Signs Class A and Sequential Arrow Sign.

DIVISION 2
EARTHWORK

SECTION 2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.3 Construction Requirements

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

The provisions of Section 2-03.3(7)C is supplemented with the following:

The Contractor shall provide a disposal site for all materials from the project.

DIVISION 4
BASES

SECTION 4-04 BALLAST AND CRUSHED SURFACING

4-04.3 Construction Requirements
(******)

The following section is added to this section:

4-04.3(12) Gravel Approaches

Where unpaved approaches are shown on the Plans or where encountered in the field, the Contractor shall furnish and install Crushed Surfacing Top Course, as directed by the Engineer. Crushed Surfacing Top Course shall be placed and compacted at the edge of the new overlay to the limits shown on the plans or as staked in the field. Unless directed otherwise, all approaches shall be constructed at a constant slope.

DIVISION 5
SURFACE TREATMENTS AND PAVEMENTS

SECTION 5-04 HOT MIX ASPHALT
5-04.3(3) Hot Mix Asphalt Pavers
(April 2, 2007)

Section 5-04.3(3) is supplemented with the following:

HMA Paver Segregation
The hot-mix asphalt (HMA) paver shall be equipped with a means of preventing the segregation of the coarse aggregate particles from the remainder of the mix when the mix is carried from the paver hopper back to the paver augers. The means and methods used shall be approved by the paver manufacturer and may consist of chain curtains, deflector plates, or other such devices and any combination of these.

The following specific requirements shall apply to the identified HMA pavers:

1. Blaw-Knox pavers shall be equipped with the Blaw-Knox Materials Management Kit (MMK).

2. Cedarapids pavers shall be those that were manufactured in 1989 or later.

3. Caterpillar pavers shall be equipped with deflector plates as identified in the December 2000 Service Magazine entitled "New Asphalt Deflector Kit {6630, 6631, 6640}".

Prior to the start of using the paver for placing plant mix, the Contractor shall submit for approval a full description in writing of the means and methodologies that will be used to prevent HMA paver segregation. Use of the paver shall not commence prior to receiving approval from the Engineer.

The Contractor shall supply a Certificate of Compliance that verifies that the approved means and methods used to prevent bituminous paver segregation have been implemented on all pavers used on the project.

5-04.3(7) A Mix Design
(March 10, 2010 APWA GSP)

Delete this section and replace it with the following;

1. **General.** Prior to the production of HMA, the Contractor shall determine a design aggregate structure and asphalt binder content in accordance with WSDOT Standard Operating Procedure 732. Once the design aggregate structure and asphalt binder content have been determined, the Contractor shall submit the HMA mix design on DOT form 350-042 demonstrating the design meets the requirements of Sections 9-03.8(2) and 9-03.8(6). HMA accepted by nonstatistical evaluation requires a mix design verification. For HMA accepted by commercial evaluation only the first page of DOT form 350-042 and the percent of asphalt binder is required. In no case shall the paving begin before the determination of anti-strip requirements has been made. Anti-strip requirements will be determined by:

   a. Testing by WSDOT in accordance with TM 718.
   b. Testing by Contractor in accordance with WSDOT TM 718.
2. **Mix Design Verification.** Verification shall be accomplished by one of the following processes:

   a. Submit samples to WSDOT State Materials Lab for WSDOT verification testing in accordance with WSDOT Standard Specifications.
   
   b. The contracting agency will perform tests to verify the mix design in accordance with the Field Verification Testing Process.
   
   c. Reference a mix design that has been previously verified by the Field Verification Testing Process or verified by WSDOT State Materials Lab on a previous project.
   
   d. Perform Field Verification Testing on a sample of HMA provided by the Contractor prior to paving.

Mix design verification is valid for one year from the date of verification. At the discretion of the Engineer, agencies may accept mix designs verified beyond the verification year with certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

3. **Field Verification Testing Process.** The Contracting agency will collect three Production Samples of HMA on the first day of paving per AASHTO T 168 sampling procedures.

   a. The Contracting agency will test one Production Sample in accordance with section 5-04.3(8)A for field verification per the requirements of Section 9-03.8(7).
   
   b. If the test results from the first Production Sample are within the tolerances of section 9-03.8(7), the mix design will be considered verified and the test results will be used as acceptance sample number one.
   
   c. If the test results from the first Production Sample are outside the tolerances of section 9-03.8(7), the other two samples will be tested and the results of all three tests will be used for acceptance in accordance with Section 5-04.5(1) and will be used in the calculation of the CPF the maximum CPF shall be 1.00.

4. Prior to the first day of paving, six Ignition Furnace Calibration Samples shall be obtained to calibrate the Ignition Furnaces used for acceptance testing of the HMA. Calibration samples shall be provided by the Contractor when directed by the Engineer. Calibration samples shall be prepared in accordance with WSDOT SOP 728.

5-04.3(8)A Acceptance Sampling and Testing

Section 5-04.3(8) A shall be deleted

5-04.3(9) Spreading and Finishing

(******)
Section 5-04.3(9) shall be supplemented with the following:

Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of HMA Cl. ½" PG 64-28 shall not exceed 0.20 feet at centerline.

**5-04.3(9)A Materials Transfer Device**

A materials transfer device (MTD) shall be required to deliver the hot mix asphalt from the hauling conveyance to the paving machine.

Material transfer devices may be self-propelled vehicles, pickup machines, or other devices that provide additional mixing and holding capacity of hot mix asphalt. Other that pickup machines, transfer devices shall have a minimum 18 ton holding and mixing capacity either on the paver, the device itself, or a combination of both.

Prior to use, the manufacturer and model number of the transfer equipment shall be submitted to the Engineer for review and approval. All costs to incorporate the MTD into the paving train shall be included in the unit contract prices for the associated bid items.

**5-04.3(10)B Control**

(******)

The first paragraph of Section 5-04.3(10)B of the Standard Specifications shall be deleted and replaced with the following:

HMA used in traffic lanes, including lanes for ramps, truck climbing, weaving, and speed change, and having specified compacted course thickness greater than 0.10 foot, shall be compacted to a specified level relative density. The specified level of relative density shall be a minimum of 91.0 percent of the reference maximum density as determined by WSDOT for AASHTO T 209. The reference maximum density shall be determined as the moving average of the most recent five determinations for the lot of asphalt concrete being placed. The specified level of density attained will be determined by five nuclear gauge tests taken in accordance with WAQTC FOP TM8 and WSDOT SOP T 729 on the day the mix is placed (after completion of the finish rolling) at locations determined by the stratified random sampling procedure conforming to WSDOT Test Method 716 within each density lot. The quantity represented by each density lot will be no greater than a single day’s production or approximately 400 tons, whichever is less. The Engineer will furnish the Contractor with a copy of the results of all acceptance testing performed in the field by 7:00 a.m. the morning of the next workday after testing, or for nighttime work within four hours after the beginning of the next paving shift.

(******)

The last paragraph of Section 5-04.3(10)B of the Standard Specifications is deleted and replaced with the following:
In addition to the randomly selected locations for tests of density, the Engineer may also isolate from a normal lot any area that is suspected of being defective in relative density. Such isolated material will not include an original sample location. A minimum of 5 randomly located density tests will be taken. The isolated are then will be evaluated for price adjustment in accordance with the price reduction formula in the Special Provisions, considering it as a separate lot.

Control lots not meeting the minimum density standard shall be removed and replaced with satisfactory material. At the option of the Engineer, noncomplying material may be accepted at reduced price as computed below.

**FACTORS INVOLVED:**

- **Quantity of HMA involved** (from Compaction Control Report)
- **Percent compaction** (from Compaction Control Report)
- **Pay adjustment factor** (see table below)
- **Liquid asphalt used** = Percent liquid asphalt from "Amount Ordered" or "Calculated from Production" (whichever is less) from Daily Report of Asphalt Plant Operations (when producing from a commercial plant, always use the "Amount Ordered")
- **Price liquid asphalt** = Invoice price f.o.b. job site (if invoice unavailable then use average monthly refinery price.)
- **Unit Contract Price** (from Contract Proposal)

**CALCULATION PROCEDURE:**

Equations:  
\[ PA = Q \times AUCP \times PAF \]
\[ AUCP = UCP - VLA \]
\[ VLA = PLA \times RLAU \]
\[ RLAU = LAU/100 \]

- **PA** = Price adjustment
- **UCPA** = Unit contract price adjustment
- **Q** = Quantity HMA involved
- **AUCP** = Adjusted unit contract price
- **PAF** = Pay adjustment factor
- **UCP** = Unit contract price
- **VLA** = Value liquid asphalt
- **PLA** = Price liquid asphalt
- **RLAU** = Rate liquid asphalt used
- **LAU** = Liquid asphalt used

**EXAMPLE:**

\[ Q = 200 \text{ tons} \]
\[ \text{Percent compaction} = 90.5 \]
LAU = 5.0%
UCP = $25.00/ton
PLA = $200.00/ton f.o.b. job site
PAF = 0.05
RLAU = LAU/100
  = 5.0/100
RLAU = 0.05 ton/ton
VLA = PLA x RLAU
  = $200.00/ton x 0.05 ton/ton
VLA = $10.00/ton

AUCP = UCP - VLA
  = $25.00/ton - $10.00/ton
AUCP = $15.00/ton

PA = Q x AUCP x PAF
PA = 200 ton x $15.00/ton x 0.05
PA = $150.00

UCPA = PA/Q
  = $150.00/200 ton
UCPA = $0.75/ton

**PAY ADJUSTMENT FACTOR**

<table>
<thead>
<tr>
<th>% RICE</th>
<th>FACTOR</th>
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<tr>
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<td>0.05</td>
</tr>
<tr>
<td>89.0 - 89.9</td>
<td>0.10</td>
</tr>
<tr>
<td>88.0 - 88.9</td>
<td>0.20</td>
</tr>
<tr>
<td>BELOW 88.0</td>
<td>0.50 (IF ACCEPTED)</td>
</tr>
</tbody>
</table>

5-04.3(14) Planing Bituminous Pavement
(October 23, 2000)

Section 5-04.3(14) is supplemented with the following:

The Contractor shall perform the planing operations no more than 10 calendar days ahead of the time the planed area is to be paved with Hot Mix Asphalt, unless otherwise allowed by the Engineer in writing.

5-04.3(15) HMA Road Approaches
(******)

Section 5-04.3(15) is supplemented with the following:
Road approaches and driveway grades shall be constructed to provide a smooth transition to
the new roadway. The Contractor may “extend” screed to provide the desired transitioning as
approved by the Engineer.

5-04.5 Payment

(*****)
Section 5-04.4 is supplemented with the following:

HMA pavement repairs, if required, behind sidewalk replacements, and street repairs adjacent
to curb and gutter and sidewalk replacements shall be paid for per Bid Item “HMA Cl. ½ In.
PG 64-28”, per Ton.

5-04.5(1) Quality Assurance Price Adjustments
Section 5-04.5(1) shall be deleted.

5-04.5(1A Price Adjustment For Quality of HMA
Section 5-04.5(1A shall be deleted.

5-04.5(1B Price Adjustments for Quality of HMA Compaction
Section 5-04.5(1B shall be deleted.

DIVISION 8
MISCELLANEOUS CONSTRUCTION

SECTION 8-13 MONUMENT CASES

8-13.1 Description
(*****)
Section 8-13.1 is replaced with the following:

This work consists of placing monument cases and covers, including pavement repair, in
accordance with the Standard Plans and these Specifications, in conformity with the lines and
locations shown in the Plans or as staked. Monument cases and covers will be furnished to the
Contractor by the County.

8-13.4 Measurement
(*****)
Section 8-13.4 is replaced with the following:

Measurement of monument case and cover will be by the unit for each monument case and cover
set.

8-13.5 Payment
(*****)
Section 8-13.5 is replaced with the following:
Payment will be made in accordance with Section 1-04.1, for the following Bid item when included in the Proposal:

“Monument Case and Cover (County Furnished)”, per Each.

SECTION 8-22 PAVEMENT MARKINGS

Section 8-22.1 is supplemented with the following:

(******)

Longitudinal Line Markings shall be applied with a highway striper truck whenever possible. Any other method shall be approved by the Engineer two weeks prior to the use of the proposed application.

Section 8-22.3(1) is deleted and replaced with the following:

(******)

The Engineer will provide spotting of the lines to be marked. Spotting shall be provided at a spacing of 100 feet maximum on tangents and 25 feet maximum on curves. The color of all spotting will be white.

DIVISION 9
MATERIALS

SECTION 9-03 AGGREGATES

9-03.8(3)C Gradation – Recycled Asphalt Pavement and Mineral Aggregate

(******)

The first sentence of the second paragraph of Section 9-03.8(3)C is revised as follows:

Reference to Section 9-03.8(6)A in the first sentence of the second paragraph of Section 9-03.8(3)C shall be deleted.

9-03.8(6)A Basis of Acceptance

(******)

Section 9-03.8(6)A is deleted.

SECTION 9-28 SIGNING MATERIALS AND FABRICATION

9-28.8 Sheet Aluminum Signs

(******)

The second paragraph of Section 9-28.8 is supplemented with the following:
Sheet thickness over 36 inches shall be 0.125 inch.

SECTION 9-34 PAVEMENT MARKING MATERIAL

9-34.2(3) Low VOC Waterborne Paint
(*****)

Section 9-34.2(3) is supplemented with the following:

Pavement marking materials shall be Low VOC Solvent Based Paint or Low VOC Waterborne Paint.

SECTION 9-36 RAILROAD CROSSING REMOVAL

This section is supplemented with the following:

9-36.1 Description
(*****)

The rail work consists of the removal of the NC Machinery industrial spur crossing with Terrace Heights Drive. This includes, but is not limited to, saw cutting the HMA six (6) feet either side of the center of the tracks, or as marked by the engineer, removal of the HMA, the removal the rails, ties and other track materials located within the right-of-way of Terrace Height Drive. This also includes, but is not limited to, saw cutting the HMA to facilitate the forming of the concrete curb and sidewalk that is to be replaced. The areas shall be backfilled with CSTC and patched with 0.4’ HMA, prior to the milling and overlaying of Terrace Heights Drive.

9-36.3 Rail Removal
(*****)

All rail within the right-of-way limits shall be removed. The rail shall be unbolted and the joint bars undamaged. No torch cutting or other means of cutting shall be allowed. All rail sections that are removed shall be neatly stacked on the south right-of-way line at the spur crossing for removal by N C Machinery. The contractor shall also neatly stack the joint bars and all other track materials next to the rails.

9-36.5 Crosstie Removal
(*****)

All crossties within the right-of-way limits shall be removed. All intact ties shall be neatly stacked on the south right-of-way line at the spur crossing for removal by N C Machinery. All damaged, broken or unusable ties shall become the property of the contractor and shall be disposed of in accordance with all Local, State and Federal regulations.

9-36.7 Measurement and Payment
(*****)

C 3388
Terrace Heights Drive Overlay

Page 115
Special Provisions
The Contract Unit Price for "Rail Spur Crossing Removal" per Lump Sum, shall be full compensation for furnishing all materials, labor, tools and equipment necessary to complete the work as specified and no further payment shall be made.

SECTION 9-37 BRIDGE EXPANSION JOINT REPLACEMENT

This section is supplemented with the following:

9-37.1 Description

(******)

The Bridge Expansion Joint Replacement work consists of the removal of three (3) damaged sections of WaboFlex expansion joints and the replacement with three (3) new expansion joints, that are to be supplied by Yakima County.

9-37.3 Measurement and Payment

(******)

The Contract Unit Price for "Bridge Expansion Joint Replacement" per Lump Sum, shall be full compensation for furnishing all materials, labor, tools and equipment necessary to complete the work as specified and no further payment shall be made.
Prevailing Wage Rates
For Applicable Prevailing Wage Rates please download or print from the Washington State Department of Labor & Industries web site link on the Bid Date as stated below:

http://www.Ini.wa.gov/TradesLicensing/PrevWage/WageRates/default.asp
Standard Plans
STANDARD PLANS
January 3, 2011

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 09-013, effective January 3, 2011 is made a part of this contract.

The Standard Plans are revised as follows:

B-10.20 and B10.40
Substitute "step" in lieu of "handhold" on plan

C-1
Note 6 is revised as follows: Type 1-__ is replaced with a blank (fill-in) following Type __-

C-1b
Note 5 is revised as follows: Type 1-__ is replaced with a blank (fill-in) following Type __-

C-3, C-3B, C-3C
Note 1 is revised as follows: replace reference F-2b with F-10.42

C-5
Note 1. Attach guardrail to bridge rail or concrete barrier with 7/8" diameter high strength bolts Standard Spec. 9-06.5(4), with thin slab ferrule inserts or resin bonded anchors. See Contract Plans.

Is revised as follows:
Attach guardrail to bridge rail or concrete barrier with 7/8" diameter bolts per Standard Spec. 9-06.5(4), with thin slab ferrule inserts or resin bonded anchors. See Contract Plans.

C-7
Note 2. Attach guardrail to bridge rail or concrete barrier with 7/8" diameter high strength bolts (Standard Spec. 9-06.5(4)), with thin slab ferrule inserts or resin bonded anchors. See Contract Plans.

Is revised as follows:
Attach guardrail to bridge rail or concrete barrier with 7/8" diameter bolts (5 MIN.) per Standard Spec. 9-06.5(4), with thin slab ferrule inserts or resin bonded anchors. See Contract Plans.

C-7a
Note 1. Attach guardrail to bridge rail or concrete barrier with 7/8" diameter high strength bolts (Standard Spec. 9-06.5(4)), with thin slab ferrule inserts or resin bonded anchors. See Contract Plans.

Is revised as follows:
Attach guardrail to bridge rail or concrete barrier with 7/8" diameter bolts (5 MIN.) per Standard Spec. 9-06.5(4), with thin slab ferrule inserts or resin bonded anchors. See Contract Plans.

C-14a
SECTION B, callout – 1½” PVC CONDUIT (TYP.) is revised to read: 1¼” PVC CONDUIT (TYP.) callout (mark) 8 #9 ~ 36” (TYP.) is revised to read: callout (mark) 8 #8 ~ 36” (TYP.) EPOXY BAR EXPANSION JOINT DETAIL, callout (mark) W #9 (epoxy coated symbol) ~ 36” (TYP.) is revised to read: callout (mark) W #8 (epoxy coated symbol) ~ 36” (TYP.)

C20.40
Plan View, Remove (Cases 19A & B-31) (Case 20-31) (case 21-31) from the span dimension

D-3
Sheet 1, Key Note 1, the term “Low Survivability” is revised to “Moderate Survivability”

D-3b
Key Note 7, reference D-3a is revised to D-3.10
TYPICAL SECTION, lower left corner, reference D-3a is revised to D-3.10

D-3c
Key Note 7, reference D-3a is revised to D-3.10
TYPICAL SECTION, lower left corner, references (2x) D-3a are revised to D-3.10

G-24.40
Existing callout - CORNER BOLT (TYP.)
New callout - CORNER BOLT OR SHOULDER BOLT (TYP.)

G-24.60
ELEVATION, upper left corner, callout W6x12 STEEL SIGN POST (TYP.) is revised to read: STEEL SIGN POST (TYP.)-(See Contract Plans for Post Sizes) ELEVATION, upper center, callout Steel Sign Post~ (W6x12 through W10x26~See Contract) is revised to read:
Steel Sign Post (Typ.)-(See Contract Plans for Post Sizes)
Both Elevations, dimension for “post height” should be to the top of the post not the sign

J-1f
Note 2, reference to J-7d is revised to J-15.15

J-3b
Sheet 2 of 2, Plan View of Service Cabinet, Boxed Note, “SEE STANDARD PLAN J-6C...” is revised to read:
“SEE STANDARD PLAN J-10.10...”

J-7c
Note 3, reference to J-7d is revised to J-15.15

J-10.10
Sheet 1, Plan Note 11. If the slope is 3H:1V or steeper, special considerations may be necessary for safety reasons. Easier access using a stairway may be used. See Plan Sheet Library RD-15 for details. Coordinate with Maintenance and Project Engineer.

Is revised to read as follows:
If the slope is 3H:1V or steeper, special considerations may be necessary for safety reasons. Easier access using a stairway may be prudent. Contact WSDOT Bridge and Structures office for stairway design.

J-16b
Key Note 1, reference to J-16a is revised to J-40.36

J-16c
Key Note 1, reference to J-16a is revised to J-40.36

J-20.10
Sheet 2, 2-Way Mounting Angle Detail,
Dimension 1.625" is revised to 1.8125"
Dimension 2.375" is revised to 2.1875"

J-21.10
Sheet 1, Detail C, callout 4-3/4" x 2'-6" Anchor Bolt (Typ.)~ASTM A-307 or F 1554 GR 36
(See Note 4) is revised to 3/4" x 2'-6" Anchor Bolt (Typ. of 4)~ASTM A-307 or F 1554 GR 36 (See Note 4)

Sheet 2, Detail F, callout 3-3/4" x 2'-6"x4" Anchor Bolt (Typ.)~ASTM A-307 or F 1554 GR 36 (See Note 4) is revised to 3/4" x 2'-6" Anchor Bolt (Typ. of 3)~ASTM A-307 or F 1554 GR 36 (See Note 4)

K-80.30
In the NARROW BASE, END view, the reference to Std. Plan C-8e is revised to Std. Plan K-80.35

L-20.10, Sheet 1
Delete all references to tension cable and substitute tension wire.
Add knuckled selavage is required on the top edge of the fence fabric.

L-20.10, Sheet 2
Delete all references to tension cable and substitute tension wire.
All rope thimbles, wire rope clips and seizing are not required.

L-30.10, Sheet 1
Delete all references to tension cable and substitute tension wire.

L-30.10, Sheet 2
Delete all references to tension cable and substitute tension wire.
All rope thimbles, wire rope clips and seizing are not required.

M-1.60
COLLECTOR DISTRIBUTOR ROAD OFF- CONNECTION, taper dimensions of 225' MIN.
is changed to 300' MIN.

M-65.10
PERSPECTIVE VIEW, add dim. “SEE NOTE 1” to right side of PERSPECTIVE VIEW.
To clarify that the requirement must be met on both sides of the roadway
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........8/07/07  A-30.35-00........10/12/07  A-50.20-01........9/22/09
A-10.20-00........10/05/07  A-40.00-00........8/11/09  A-50.30-00........11/17/08
A-10.30-00........10/05/07  A-40.10-01........8/11/09  A-50.40-00........11/17/08
A-20.10-00........8/31/07  A-40.15-00........8/11/09  A-60.10-01........10/14/09
A-30.10-00........11/08/07  A-40.20-00........9/20/07  A-60.20-01........8/11/09
A-30.15-00........11/08/07  A-40.50-00........11/08/07  A-60.30-00........11/08/07
A-30.30-00........11/17/08  A-50.10-00........11/17/08  A-60.40-00........8/31/07

B-5.20-00........6/01/06  B-30.50-00........6/01/06  B-75.20-01........6/10/08
B-5.40-00........6/01/06  B-30.70-01........8/31/07  B-75.50-01........6/10/08
B-5.60-00........6/01/06  B-30.80-00........6/08/06  B-75.60-00........6/08/06
B-10.20-00........6/01/06  B-30.90-01........9/20/07  B-80.20-00........6/08/06
B-10.40-00........6/01/06  B-35.20-00........6/08/06  B-80.40-00........6/01/06
B-10.60-00........6/08/06  B-35.40-00........6/08/06  B-82.20-00........6/01/06
B-15.20-00........6/01/06  B-40.20-00........6/01/06  B-85.10-01........6/10/08
B-15.40-00........6/01/06  B-40.40-01........6/16/10  B-85.20-00........6/01/06
B-15.60-00........6/01/06  B-45.20-00........6/01/06  B-85.30-00........6/01/06
B-20.20-01........11/21/06  B-45.40-00........6/01/06  B-85.40-00........6/08/06
B-20.40-02........6/10/08  B-50.20-00........6/01/06  B-85.50-01........6/10/08
B-20.60-02........6/10/08  B-55.20-00........6/01/06  B-90.10-00........6/08/06
B-25.20-00........6/08/06  B-60.20-00........6/08/06  B-90.20-00........6/08/06
B-25.60-00........6/01/06  B-60.40-00........6/01/06  B-90.30-00........6/08/06
B-30.10-00........6/08/06  B-65.20-00........6/01/06  B-90.40-00........6/08/06
B-30.20-01........11/21/06  B-65.40-00........6/01/06  B-90.50-00........6/08/06
B-30.30-00........6/01/06  B-70.20-00........6/01/06  B-95.20-01........2/30/09
B-30.40-00........6/01/06  B-70.60-00........6/01/06  B-95.40-00........6/08/06

C-1..................2/10/09  C-4e..................2/20/03  C-14i..................2/10/09
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C-1b..............6/3/10  C-5..................10/14/09  C-14k..................2/10/09
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</table>
Improvement Plans

Traffic Control Plans
TERRACE HEIGHTS DRIVE
OVERLAY PROJECT
C 3388

INDEX

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<td>SIGN REMOVAL SPECIFICATIONS</td>
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<tr>
<td>SHEET 16</td>
<td>PAVEMENT MARKING DETAILS</td>
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</table>

VICINITY MAP

** TYPICAL ROAD SECTION **

** GRADE 0.20' FOR AREAS IDENTIFIED AT INTERSECTIONS **

TYPICAL ROAD SECTION

NTS

PREPARED UNDER THE DIRECTION OF:

COUNTRY ENGINEER
DATE: 7/26/01

PROJECT ENGINEER: KARY S. SCHMIDT

CHECKED BY: K. SCHMIDT

REVISION

VICINITY MAP, INDEX, & TYPICAL ROAD SECTION

C 3388 TERRACE HEIGHTS OVERLAY
FROM 2+54.76 TO 33+03.24 EOP
C 3388
TERRACE HEIGHTS
OVERLAY
FROM 24+54.76
TO 33+03.24 E0P

PREPARED UNDER
THE DIRECTION OF:

COUNTY ENGINEER
DATE: 7/24/11

PLAN VIEWS:
STA. 15+50
TO
STA. 20+00

SHEET 5 OF 16

SAWCUT 6'-0" ON BOTH SIDES OF CENTERLINE OF TRACK
REMOVE EAILS AND CROSS TIES
BACKFILL WITH CSTC AND PATCH WITH 0.4" HMA
PRIOR TO MILLING AND OVERLAY
RR CROSSING DETAIL

STA 31+55.09 NTB
### Grind Areas

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<td>South Lane Terrace Heights</td>
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<td>Butterfield</td>
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<td>North Keys</td>
<td>486</td>
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<td>Keys</td>
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<td>8+86.92</td>
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<td>9+47.05</td>
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<td>23+82.88</td>
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<td>3+20.74</td>
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<td>4+96.81</td>
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<td>6+74.24</td>
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<td>8+53.30</td>
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<td>10+24.71</td>
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<td>12+10.70</td>
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<td>15+70.60</td>
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<td>19+18.76</td>
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<td>21+07.17</td>
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### Water Valves

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<td>2+39.68</td>
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<td>2+42.32</td>
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<td>3+42.66</td>
<td>53.38 LT</td>
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<td>5+90.12</td>
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<td>7+90.93</td>
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<td>9+93.25</td>
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<td>27+40.34</td>
<td>62.66 LT</td>
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### Overlay Areas

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<td>Terrace Heights West of RR</td>
<td>14552</td>
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<tr>
<td>Terrace Heights East of RR</td>
<td>893</td>
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<tr>
<td>Butterfield</td>
<td>492</td>
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<tr>
<td>North Keys</td>
<td>486</td>
</tr>
<tr>
<td>Keys</td>
<td>804</td>
</tr>
</tbody>
</table>

### Legend

- 🛠 Sanitary Sewer Manhole
- 🛠 Monument Case and Cover
- 🛠 Water Valve
- 🛠 Catch Basin

PREPARED UNDER THE DIRECTION OF:

COUNTY ENGINEER

DATE: 7/24/11

PROJECT ENGINEER

CHECKED BY:

AREA5/ VOLUMES SURVEY DATA

SHEET 9 OF 16
NOTE: THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SITE SPECIFIC TRAFFIC CONTROL PLANS TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL. ROAD CLOSURES WILL NOT BE ALLOWED UNLESS OTHERWISE APPROVED BY THE ENGINEER. SEE SPECIAL PROVISIONS.
### General Traffic Control Sign Specifications

<table>
<thead>
<tr>
<th>SIGN NO.</th>
<th>MUTCD SIGN #</th>
<th>LOCATION</th>
<th>SIGN SIZE</th>
<th>SHEETING TYPE</th>
<th>MATERIAL</th>
<th>POST MATERIAL</th>
<th>POST SIZE</th>
<th>POST # LENGTH</th>
<th>CLEARANCE</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>1</td>
<td>W02-1</td>
<td>TERRACE HAVS DR., 145 FT EAST OF S. 11TH ST.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
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<tr>
<td>2</td>
<td>W02-2</td>
<td>TERRACE HAVS DR., 145 FT EAST OF S. 11TH ST.</td>
<td>30&quot; x 10&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>11' 7&quot;</td>
<td>10'</td>
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</tr>
<tr>
<td>3</td>
<td>W02-1</td>
<td>TERRACE HAVS DR., 85 FT EAST OF S. 11TH ST.</td>
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<td>WOOD</td>
<td>4&quot;x4&quot;</td>
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<td>13' 7&quot;</td>
<td>10'</td>
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</tr>
<tr>
<td>4</td>
<td>W02-1</td>
<td>BUTTERFIELD RD., 500 FT NORTH OF TERRACE HAVS DR.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>W02-2</td>
<td>BUTTERFIELD RD., 500 FT NORTH OF TERRACE HAVS DR.</td>
<td>30&quot; x 10&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>11' 7&quot;</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>W02-1</td>
<td>N. KEYS RD., 425 FT SOUTH OF TERRACE HAVS DR.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
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<tr>
<td>7</td>
<td>W02-2</td>
<td>N. KEYS RD., 425 FT NORTH OF TERRACE HAVS DR.</td>
<td>30&quot; x 10&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>11' 7&quot;</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>W02-2</td>
<td>KETS RD., 500 FT SOUTH OF TERRACE HAVS DR.</td>
<td>30&quot; x 10&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>11' 7&quot;</td>
<td>10'</td>
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<tr>
<td>9</td>
<td>W02-1</td>
<td>KETS RD., 500 FT SOUTH OF TERRACE HAVS DR.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
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<tr>
<td>10</td>
<td>W02-1</td>
<td>TERRACE HAVS DR., 300 FT EAST OF E.O.P.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
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<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>W02-2</td>
<td>TERRACE HAVS DR., 300 FT EAST OF E.O.P.</td>
<td>30&quot; x 10&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>11' 7&quot;</td>
<td>10'</td>
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<td>12</td>
<td>W02-1</td>
<td>TERRACE HAVS DR., 1,000 FT EAST OF E.O.P.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>W02-1</td>
<td>TERRACE HAVS DR., 1,500 FT EAST OF E.O.P.</td>
<td>40&quot; x 40&quot;</td>
<td>X</td>
<td>WOOD</td>
<td>4&quot;x4&quot;</td>
<td>6&quot;</td>
<td>13' 7&quot;</td>
<td>10'</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Post lengths shown are approximate. Final values shall be determined in the field by the contractor.

**NOTE:** The contractor is responsible for submitting site-specific traffic control plans to the project engineer for review and approval. Road closures will not be allowed unless otherwise approved by the engineer. See special provisions.

**NOTES:**
1. MUTCD (Manual on Uniform Traffic Control Devices).
2. For structure and mounting details, see standard plans for road and bridge construction, series 6.
3. For code references and standard sign layout details, see standard highway signs manual.
4. OD-distance from the existing shoulder, or face of curb, to the sign post.
5. All signs, posts, and any other traffic control devices shall be supplied, erected, and maintained by the contractor.
6. The posts shall not protrude above the signs.

---

![Typical Sign Installation Diagram](image_url)

**Typical Sign Installation**

**HNTS**
PERMANENT SIGNING SPECIFICATIONS

<table>
<thead>
<tr>
<th>SIGN NO.</th>
<th>MUTCD SIGN NO.</th>
<th>LOCATION PT 3</th>
<th>SIGN SIZE (IN)</th>
<th>SHEET MATERIAL</th>
<th>POST SIZE (IN)</th>
<th>POST # SHEL (FT)</th>
<th>CLEARANCE PT 3</th>
<th>REMARKS</th>
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<tr>
<td>(1) IMO-1</td>
<td>TERRACE HINTS DR. 24 FT EAST OF KEYS RD.</td>
<td>26&quot; 26&quot;</td>
<td>II</td>
<td>METAL</td>
<td>2&quot;x2&quot;</td>
<td>1'12&quot;</td>
<td>7</td>
<td>10'</td>
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<tr>
<td>(2) IMO-1</td>
<td>TERRACE HINTS DR. 53 FT EAST OF KEYS RD.</td>
<td>26&quot; 26&quot;</td>
<td>II</td>
<td>METAL</td>
<td>2&quot;x2&quot;</td>
<td>1'12&quot;</td>
<td>7</td>
<td>10'</td>
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</tbody>
</table>

*NOTE: POST LENGTHS SHOWN ARE APPROXIMATE. FINAL VALUES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.*

NOTES:
1. MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
2. FOR STRUCTURE AND MOUNTING DETAILS, SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, SERIES 8.
3. FOR CODE REFERENCES AND STANDARD SIGN LAYOUT DETAILS, SEE CURRENT STANDARD HIGHWAY SIGNS MANUAL.
4. ALL SIGNS, POSTS AND ANY OTHER TRAFFIC CONTROL DEVICES SHALL BE SUPPLIED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
5. THE POSTS SHALL NOT PROTRUDE ABOVE THE SIGNS.
# SIGN REMOVAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>SIGN NO.</th>
<th>MUTCD SIGN #</th>
<th>LOCATION</th>
<th>SIGN SIZE</th>
<th>POST MATERIAL</th>
<th>POST SIZE</th>
<th>REMARKS</th>
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<td>MOUNTED BELOW SIGN NO. 1</td>
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<td>W1</td>
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<td>R7-1</td>
<td>TERRACE HOTS DR, 470 FT EAST OF BUTTERFIELD RD.</td>
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<td>W1-2W</td>
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<td>30&quot; x 30&quot;</td>
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<tr>
<td>W1-REM01</td>
<td>SAME AS ABOVE</td>
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<td>MOUNTED BELOW SIGN NO. 5 &quot;BUTTERFIELD RD&quot;</td>
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<td>W10-1</td>
<td>TERRACE HOTS DR, 890 FT EAST OF BARTLETT RD.</td>
<td>36&quot; x 36&quot;</td>
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<td>W1</td>
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<td>12&quot; x 10&quot;</td>
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**NOTES:**

1. MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
2. FOR CODE REFERENCES AND STANDARD SIGN LAYOUT DETAILS, SEE STANDARD HIGHWAY SIGN BOOK.
3. THE SIGNS AND POSTS SHALL BE DISASSEMBLED AND DELIVERED TO THE YAKIMA COUNTY PUBLIC WORKS DEPARTMENT MAINTENANCE SHOP AT 1216 S. 16TH ST., YAKIMA, WA. 98901. CONTACT CRAIG BLANKENSHIP AT (509) 574-2594.
*RAILROAD TRACK CROSSING SYMBOLS DETAIL

*RAILROAD CROSSING SYMBOLS DETAIL

*TRAFFIC ARROW DETAIL

*NOTE:
ARROW SYMBOLS AND RAILROAD CROSSING SYMBOLS TO BE PAINTED USING YAKIMA COUNTY SUPPLIED TEMPLATES, AVAILABLE AT YAKIMA COUNTY ROADS MAINTENANCE SHOP 1216 S. 18TH ST., YAKIMA, WA.
98901. CONTACT CRAIG BLANKENSHIP,
TEL. 509-574-2596.