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
July 11, 2011

1-02.5 Proposal Forms
The first paragraph is revised to read:

At the request of a prequalified Bidder, the Contracting Agency will provide a physical Proposal Form for any project on which the Bidder is eligible to Bid. For certain projects selected at the sole discretion of the Contracting Agency, the Bidder may also be authorized to access an electronic Proposal Form for submittal via Trns·Port Expedite® software and BidExpress®.

1-02.6 Preparation of Proposal
The first paragraph is revised to read:

The Contracting Agency will accept only those Proposals properly executed on physical forms it provides, or electronic forms that the bidder has been authorized to access. Unless it approves in writing, the Contracting Agency will not accept Proposals on forms attached to the Plans and stamped "Informational".

The second paragraph is revised to read:

All prices shall be in legible figures (not words) written in ink or typed, and expressed in U.S. dollars and cents. The Proposal shall include:

1. A unit price for each item (omitting digits more than four places to the right of the decimal point),

2. An extension for each unit price (omitting digits more than two places to the right of the decimal point), and

3. The total Contract price (the sum of all extensions).

In the space provided on the signature sheet, the Bidder shall confirm that all Addenda have been received.

The third paragraph is revised to read:

The Bidder shall submit with the Bid a completed Disadvantaged Business Enterprises (DBE) Utilization Certification, when required by the Special Provisions. For each and every DBE firm listed on the Bidder's completed DBE Utilization Certification, the Bidder shall submit written confirmation from that DBE firm that the DBE is in agreement with the DBE participation commitment that the Bidder has made in the Bidders completed DBE Utilization Certification. WSDOT Form 422-031 EF (DBE Written Confirmation Document) is available for this purpose. Bidder must submit good faith effort documentation with the DBE Utilization Certification **ONLY In The Event** the bidder's efforts to solicit sufficient DBE participation have been unsuccessful. Directions for delivery of the DBE Written Confirmation Documents and DBE Good Faith Effort documentation are included in Section 1-02.9 Delivery of Proposal and Section 1-02.10 Withdrawing, Revising or Supplementing Proposal.

1-02.7 Bid Deposit
This section is revised to read:

A deposit of at least 5-percent of the total Bid shall accompany each Bid. This deposit may be cash, certified check, cashier's check, or a proposal bond (Surety bond). For projects that are selected by the Contracting Agency to be bid electronically, the proposal bond may be in either a physical format, or an electronic format via Surety2000.com or Insurevision.com and BidExpress®. When a physical bid deposit or proposal bond is furnished to accompany an electronic Proposal Form, the Bid deposit shall be received by the Contracting Agency at the location specified for receipt of bids prior to the time set for receipt of Bids. Any proposal bond shall be on a form acceptable to the Contracting Agency and shall be signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any way to modify the minimum 5-percent required. The Surety shall: (1) be registered with the Washington State Insurance Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of 5-percent with the Bid or as a physical supplement to the electronic Proposal Form shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

1-02.8(2) Lobbying Certification
The last paragraph is revised to read:

The Certification for Federal-Aid Contracts (Form DOT 272-040) may be reproduced from the Proposal form. The disclosure form is available from the Washington State Department of Transportation's Contract Ad & Award Office, Transportation Building, Olympia, Washington 98504.

1-02.9 Delivery of Proposal
This section 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 Trns·Port Expedite® software and BidExpress® 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.

For projects scheduled for bid opening in other locations, 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.

The Contracting Agency will not open or consider any Proposal or any supplement to a Proposal that is received after the time specified for receipt of Proposals, or received in a location other than that specified for receipt of Proposals.

NOTE: Certain documents that are required for an electronic Bid Proposal to be responsive CANNOT be submitted electronically via Trns·Port Expedite® software and BidExpress®. These documents include:

1. DBE Written Confirmation Documents; and,

2. Good Faith Effort Documentation; and,

3. Cash, certified checks, cashier's checks, or a proposal bond (Surety bond) in formats other than via Surety2000.com or Insurevision.com.

The Bidder shall provide all documents that are required for an electronic Bid Proposal to be responsive (but cannot be submitted electronically via Trns·Port Expedite® software and BidExpress®) as a supplement to their electronic Bid Proposal in one of the following methods:

1. Physically in a sealed envelope marked as "BID SUPPLEMENT" and bearing the Bidders company name, project title, Bid date, and description of contents (for example: DBE Written Confirmation, DBE Good Faith Efforts, Proposal Deposit, etc.); or,

2. Except for Item #3 above, by facsimile to the following FAX number: (360) 705-6966.

E-mailed submittals are not acceptable. The Contracting Agency is not responsible for delayed, partial, failed, illegible or partially legible FAX document transmissions, and such documents may be rejected as incomplete at the Bidder's risk.

1-02.10 Withdrawal or Revision of Proposal
This section including title is revised to read:

Withdrawing, Revising, or Supplementing Proposal
After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person, and

2. The Contracting Agency receives the request before the time set for receipt of Proposals.

The original physical Bid Proposal may be supplemented, or revised and resubmitted as the official Bid Proposal if the Contracting Agency receives it before the time set for receipt of Proposals. Faxed Bid revisions and supplements will be accepted only if they are submitted in accordance with the "Example Format for Facsimile Bid Changes" instructions posted on the WSDOT website at http://www.wsdot.wa.gov/biz/contaa/bulletin/.

E-mailed requests to withdraw, revise or supplement a Proposal are not acceptable. The contracting Agency is not responsible for delayed, partial, failed, illegible or partially legible FAX document transmissions, and such documents may be rejected as incomplete at the Bidders risk.

The Contracting Agency will not accept requests to revise or withdraw electronic **Bid Proposals**. Such requests shall be furnished directly to BidExpress® and in accordance with their terms and conditions.

1-02.13 Irregular Proposals
In the first paragraph, Item h beneath item number 1 is revised to read:

h. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Utilization Certification, if applicable, as required in Section 1-02.6;

In the first paragraph, item I beneath item number 1 is revised to read:

i. The Bidder fails to submit written confirmation from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidders DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;

Item 1 in the first paragraph is supplemented with the following:

j. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made; or

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

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.

Zone	Place of Fabrication	Reduction in Payment
1	Within 300 airline miles from Seattle	None
2	Between 300 and 3,000 airline miles from Seattle	$700.00 per *inspection day
3	Over 3,000 airline miles from Seattle	$1,000 per *inspection day, but not less than $2,500 per trip

*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 2
Pay Factors

PAY FACTOR	Minimum Required Percent of Work Within Specification Limits for a Given Factor (PU + PL) – 100														
Category	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
1.05						100	100	100	100	100	100	100	100	100	100
1.04					100	99	97	95	96	96	96	97	97	97	97
1.03				100	98	96	94	92	93	93	94	95	95	96	96
1.02				99	97	94	91	89	90	91	92	93	93	94	94
1.01	100	100	100	98	95	92	89	87	88	89	90	91	92	92	93
1.00	69	75	78	80	82	83	84	85	86	87	88	89	90	91	92
0.99	66	72	76	78	80	81	82	83	84	85	86	87	89	90	91
0.98	64	70	74	76	78	79	80	81	82	84	85	86	87	88	90
0.97	63	68	72	74	76	77	78	79	81	82	83	84	86	87	88
0.96	61	67	70	72	74	75	76	78	79	81	82	83	84	86	87
0.95	59	65	68	71	72	74	75	76	78	79	80	82	83	84	86
0.94	58	63	67	69	71	72	73	75	76	78	79	80	82	83	85
0.93	57	62	65	67	69	71	72	73	75	76	78	79	80	82	84
0.92	55	60	63	66	68	69	70	72	73	75	76	78	79	81	82
0.91	54	59	62	64	66	68	69	70	72	74	75	76	78	79	81
0.90	53	57	61	63	65	66	67	69	71	72	74	75	77	78	80
0.89	51	56	59	62	63	65	66	68	69	71	72	74	75	77	79
0.88	50	55	58	60	62	64	65	66	68	70	71	73	74	76	78
0.87	49	53	57	59	61	62	63	65	67	68	70	71	73	75	77
0.86	48	52	55	58	59	61	62	64	66	67	69	70	72	74	76

(Continued)

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

Table 2

Pay Factors (continued)

PAY FACTOR	Minimum Required Percent of Work Within Specification Limits for a Given Factor ($P_U + P_L$) – 100														
Category	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
0.85	46	51	54	56	58	60	61	62	64	66	67	69	71	72	75
0.84	45	49	53	55	57	58	60	61	63	65	66	68	70	71	73
0.83	44	48	51	54	56	57	58	60	62	64	65	67	69	70	72
0.82	43	47	50	53	54	56	57	59	61	62	64	66	67	69	71
0.81	41	46	49	51	53	55	56	58	59	61	63	64	66	68	70
0.80	40	44	48	50	52	54	55	56	58	60	62	63	65	67	69
0.79	39	43	46	49	51	52	54	55	57	59	61	62	64	66	68
0.78	38	42	45	48	50	51	52	54	56	58	59	61	63	65	67
0.77	36	41	44	46	48	50	51	53	55	57	58	60	62	64	66
0.76	35	39	43	45	47	49	50	52	54	56	57	59	61	63	65
0.75	33	38	42	44	46	48	49	51	53	54	56	58	60	62	64
REJECT	Values Less Than Those Shown Above														

Reject Quality Levels Less Than Those Specified for a 0.75 Pay Factor

Note: If the value of ($P_U + P_L$) - 100 does not correspond to a ($P_U + P_L$) - 100 value in this table, use the next smaller ($P_U + P_L$) - 100 value.

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

1-07.5(3) State Department of Ecology

Item No. 4. in the first paragraph is revised to read:

4. Perform Work in such a manner that all materials and substances not specifically identified in the Contract documents to be placed in the water do not enter waters of the State, including wetlands. These include, but are not limited to, petroleum products, hydraulic fluid, fresh concrete, concrete wastewater, process wastewater, slurry materials and waste from shaft drilling, sediments, sediment-laden water, chemicals, paint, solvents, or other toxic or deleterious materials.

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: http://www.wsdot.wa.gov/Environment/HazMat/SpillPrevention.htm.

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 Storm water 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
August 1, 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 and the scale has been over weighing, the Contractor shall immediately stop weighing and the scale shall be recertified at the Contractor's expense. If the weight difference of both comparison checks exceed the 0.5-percent limit and the scale is under weighing, it shall be adjusted immediately. The Contractor will not be compensated for any loss from under weighing.

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. The Contractor will not be compensated for any loss from under weighing.

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:

Flagging, signs, and all other traffic control devices and procedures 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 and the most current edition of the Public Rights-Of-Way Accessibility Guidelines (PROWAG). Judgment of the quality of devices furnished will be based upon Quality Guidelines for Temporary Traffic Control Devices, published by the American Traffic Safety Services Association. Copies of the MUTCD and Quality Guidelines for Temporary Control Devices may be purchased from the American Traffic Safety Services Association, 15 Riverside Parkway, Suite 100, Fredericksburg, Virginia 22406-1022. The Washington State Modifications to the MUTCD may be obtained from the Department of Transportation, Olympia, Washington 98504. The most current edition of the Public Rights-Of-Way Accessibility Guidelines (PROWAG) can be downloaded from the United States Access Board web site (www. access-board.gov).

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".

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 2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS
January 4, 2010

2-02.3 Construction Requirements
The fourth paragraph is revised to read:

The Contractor may dispose of waste material in Contracting Agency owned sites if the Special Provisions or the Engineer permits it. Otherwise, the Contractor shall arrange to dispose of waste at no expense to the Contracting Agency and the disposal shall meet the requirements of Section 2-03.3(7)C.

SECTION 2-09, STRUCTURE EXCAVATION
January 3, 2011

2-09.3(1)E Backfilling
The sixth paragraph is revised to read:

The water/cement ratio shall be calculated on the total weight of cementitious material. Cementitious materials are those listed in Section 5-05.2.
2-09.3(2) Classification of Structure Excavation
Item number 1 is revised to read:

1. **Class A.** Structure excavation required for bridge and retaining wall footings, geosynthetic retaining wall footings, structural earth walls and sign structure footings, pile or drilled shaft caps, seals, wingwall footings, detention vaults, and noise barrier wall footings shall be classified as Structure excavation Class A. If the excavation requires a cofferdam, structural shoring, or extra excavation, the work outside the neat lines of the Structure excavation Class A shall be classified as shoring or extra excavation Class A.

2-09.3(3)D Shoring and Cofferdams
The 14th paragraph is revised to read:

If soldier piles are placed in drilled holes, and lagging is installed concurrently with the excavation, all backfill above the bottom of the lagging shall consist of controlled density fill or lean concrete. Backfill below the bottom of the lagging may consist of pea gravel. If full-height steel sheet lagging is installed prior to excavation, soldier pile holes may be backfilled with pea gravel.

2-09.4 Measurement
The second sentence in the second paragraph, "**Horizontal Limits**", is supplemented with the following:

(4) more than 1-foot outside the perimeter of the soil reinforcement area for geosynthetic and structural earth walls.

Gravel base will be measured in the same manner prescribed for the measurement of crushed surfacing materials as set forth in Section 4-04.4.

SECTION 6-01, GENERAL REQUIREMENTS FOR STRUCTURES
August 1, 2011

6-01.14 Premolded Joint Filler
The last sentence in the second paragraph is revised to read:

This adhesive, however, shall be compatible with the material specified in Section 9-04.1(2) and capable of bonding the filler to Portland cement concrete.

SECTION 6-02, CONCRETE STRUCTURES
August 1, 2011

In Division 6-02, all references to "roadway slab", "roadway deck" and "deck slab" are deleted and replaced with "bridge deck".

6-02.2 Materials
In the first paragraph, the following item is inserted after the item "Microsilica Fume":

Metakaolin 9-23.12

6-02.3(1) Classification of Structural Concrete
The first paragraph is deleted and replaced with the following two new paragraphs:

The class of concrete to be used shall be as noted in the Plans and these Specifications. The Class includes the specified minimum compressive strength in psi at 28 days (numerical class) and may include a letter suffix to denote structural concrete for a specific use. Letter suffixes include A for bridge approach slabs, D for bridge decks, P for piling and shafts, and W for underwater. The numerical class without a letter suffix denotes structural concrete for general purposes.

Concrete of a numerical class greater than 4000 shall conform to the requirements specified for either Class 4000 (if general purpose) or for the appropriate Class 4000 with a letter suffix, as follows:

1. Mix ingredients and proportioning specified in Section 6-02.3(2) and Section 6-02.3(2)A.

2. Consistency requirements specified in Section 6-02.3(4)C.

3. Curing requirements specified in 6-02.3(11).

6-02.3(2) Proportioning Materials
The table following the third paragraph is revised to read:

Table 2 Cementitious Requirement for Concrete

Class of Concrete	Minimum Cementitious Content (lbs)	Minimum % replacement of fly as for portland cement	Maximum % replacement of fly ash for portland cement	Maximum % replacement of ground granulated blast furnace slag for portland cement
4000	564	*	35	40
4000A	564	*	20	30
4000D	660	10	20	30
4000P	600	15	35	40
4000W	564	*	35	40
3000	564	*	35	40
Commercial Concrete	**564	*	35	40
Pumpable Lean Concrete	*	*	***	***
Lean Concrete	140 - 200	*	35	40

* No minimum specified
** For Commercial Concrete the minimum cementitious content is only required for sidewalks, curbs and gutters
*** No maximum specified

The fifth paragraph is revised to read:

The water/cement ratio shall be calculated on the total weight of cementitious material. Cementitious materials are those listed in Section 5-05.2. With the Engineers written approval microsilica fume and metakaolin can be used in all classifications of Class 4000, Class 3000 and commercial concrete and is limited to a maximum of 10% of the cementitious material.

6-02.3(2)A Contractor Mix Design
The fourth, fifth and sixth sentences of the first paragraph are deleted and replaced with the following sentence:

All proposed concrete mix shall meet the requirements of Table 2 Cementitious Requirement for Concrete in Section 6-02.3(2).

6-02.3(2)D Lean Concrete
This section is revised to read:

Lean concrete shall have a minimum cementitious material content of between 145 and 200-pounds per cubic yard and have a maximum water/cement ratio of 2.

6-02.3(5)E Point of Acceptance
The first paragraph is revised to read:

Determination of concrete properties for acceptance will be made based on samples taken as follows:

Bridge decks, overlays, bridge approach slabs, and barriers at the discharge of the placement system. All other placements at the truck discharge.

6-02.3(6) Placing Concrete
The third paragraph is revised to read:

All foundations, forms, and contacting concrete surfaces shall be moistened with water just before the concrete is placed. Any standing water on the foundation, on the concrete surface, or in the form shall be removed.

The following new sentence is added after the fourth sentence in the fourth paragraph:

The submittal to the Engineer shall include justification that the concrete mix design will remain fluid for interruptions longer than 30-minutes between placements.

6-02.3(6)D Protection Against Vibration
The first paragraph is revised to read:

Freshly placed concrete shall not be subjected to excessive vibration and shock waves during the curing period until it has reached a 2000-psi minimum compressive strength for structural concrete and lower strength classes of concrete.

6-02.3(10)D Concrete Placement, Finishing, and Texturing
The following paragraph is inserted at the beginning of this section:

Before placing bridge approach slab concrete, the subgrade shall be constructed in accordance with Sections 2-06 and 5-05.3(6).

6-02.3(10)F Bridge Approach Slab Orientation and Anchors
The third sentence in the second paragraph is revised to read:

All metal parts of the approach expansion anchor shall receive one coat of paint conforming to Section 9-08.1(2)F or be galvanized in accordance with AASHTO M 232.

6-02.3(11) Curing Concrete
In the fifth paragraph "Type 1D" is revised to read "Type 1D, Class B".

6-02.3(17)B Allowable Design Stresses and Deflections
Under the heading **"Timber"**, the second sentence is revised to read:

The allowable stresses and loads shall not exceed the lesser of stresses and loads given in the table below or factored stresses for designated species and grade in Table 7.3 of the Timber Construction Manual, latest Edition by the American Institute of Timber Construction

Under the heading **"Steel"**, the first sentence is revised to read:

For identified grades of steel, design stresses shall not exceed those specified in the Steel Construction Manual, latest Edition by the American Institute of Steel Construction, except as follows:

6-02.3(17)F Bracing
Under the heading "**Temporary Bracing for Bridge Girders**", the table is revised to read:

Girder Series	Distance in Inches
W42G	30
W50G	42
W58G	63
W74G	66
Prestressed concrete tub girders with webs with flanges	30
WF36G, WF42G, WF50G, WF58G, WF66G, WF74G, WF83G, WF95G, and WF100G	70
W32BTG, W38BTG, and W62BTG	70
WF74PTG, WF83PTG, WF95PTG, and WF100PTG	70

6-02.3(17)K Concrete Forms on Steel Spans
The second and third paragraphs are revised to read:

The Contractor shall not weld any part of the form to any steel member.

The compression member or bottom connection of cantilever formwork support brackets shall bear either within six inches maximum vertically of the bottom flange or within six inches maximum horizontally of a vertical web stiffener. The Contractor's bridge deck form system

shall be designed to prevent rotation of the steel girder. This can be achieved by temporary struts and ties or other methods the Contractor shows to be effective. Partial depth cantilever formwork support brackets that do not conform to the above requirements shall not be used, unless the Contractor submits details showing the additional formwork struts and ties used to brace the steel girder against web distortion caused by the partial depth bracket, and receives the Engineer's approval of the submittal.

6-02.3(17)N Removal of Falsework and Forms
The first paragraph including table is revised to read:

If the Engineer does not specify otherwise, the Contractor may request to remove forms based on the criteria in the table below. Both compressive strength and minimum time criteria shall be met if both are listed in the applicable row. The minimum time shall be from the time of the last concrete placement in the forms. In no case shall the Contractor remove forms or falsework without the Engineer's approval.

Concrete Placed In	Percent of Specified Minimum Compressive Strength[1]	Minimum Compressive Strength[1]	Minimum Time
Side forms not supporting the concrete weight, including columns, walls, crossbeams, non-sloping box girder webs, abutments, traffic and pedestrian barriers.	—	—	3 days
	or		
	—	1400 psi	18 hours
Side forms of footings, pile caps, and shaft caps.[2]	—	—	18 hours
Crossbeams, sloping box girder webs, struts, inclined columns, inclined walls and other forms that support the concrete weight.	80	—	5 days
Bridge decks supported on stringers, beam, or girders.[3]	80	—	10 days
Box girders, T-beam girders, and flat-slab Superstructure.[3]	80	—	14 days
Arches.[3]	80	—	21 days

1 Strength shall be proved by test cylinders made from the last concrete placed into the form. The cylinders shall be cured according to WSDOT FOP for AASHTO T 23.
2 Curing compound shall be immediately applied to the sides when forms are removed.
3 Where continuous spans are involved, the time for all spans will be determined by the last concrete placed affecting any span.

The third and fourth paragraphs are deleted.

The fifth paragraph is revised to read:

Curing shall comply as required in Section 6-02.3(11). The concrete surface shall not become dry during form removal if removed during the cure period.

6-02.3(20) Grout for Anchor Bolts and Bridge Bearings
In the fourth paragraph "9-20.3(4)" is revised to read "Section 9-20.3(4)".

6-02.3(24) Reinforcement
This first paragraph is revised to read:

Although a bar list is normally included in the Plans, the Contracting Agency does not guarantee its accuracy and it shall be used at the Contractor's risk. Reinforcement fabrication details shall be determined from the information provided in the Plans.

The third paragraph is deleted.

6-02.3(24)C Placing and Fastening
The eighth paragraph is revised to read:

Mortar blocks may be accepted based on a Manufacturer's Certificate of Compliance.

The 14th paragraph is revised to read:

Clearances for main bars shall be at least:

4-inches between: Bars and the surface of any concrete masonry exposed to the action of salt or alkaline water.

3-inches between: Bars and the surface of any concrete deposited against earth without intervening forms.

2-½-inches between: Adjacent bars in a layer. Bridge deck bars and the top of the bridge deck.

2-inches between: Adjacent layers. Bars and the surface of concrete exposed to earth. Reinforcing bars and the faces of forms for exposed aggregate finish.

1-½-inches between: Bars and the surface of concrete when not specified otherwise in this Section or in the Plans. Barrier and curb bars and the surface of concrete.

1-inch between: Slab bars and the bottom of the slab. Slab bars and the top surface of the bottom slab of a cast-in-place concrete box girder.

The following new paragraph is inserted after the 14th paragraph:

Cover to ties and stirrups may be ½-inch less than the values specified for main bars but shall not be less than 1-inch.

6-02.3(27) Concrete for Precast Units
The first paragraph is supplemented with the following:

Type III portland cement is permitted to be used in precast concrete units.

The third paragraph is deleted.

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

6-02.3(27)A Use of Self Consolidating Concrete for Precast Units
Self Consolidating Concrete (SCC) is concrete that is able to flow under its own weight and completely fill the formwork without the need of any vibration while maintaining homogeneity, even in the presence of dense reinforcement. SCC shall be capable of flowing through the steel reinforcing bar cage without segregation or buildup of differential head inside or outside of the steel reinforcing bar cage.

SCC may be used for the following precast concrete structure elements:

1. Precast roof, wall and floor panels, and retaining wall panels in accordance with Section 6-02.3(28).

2. Precast reinforced concrete three sided structures in accordance with Section 6-02.3(28) as supplemented in the Special Provisions.

3. Precast concrete barrier in accordance with Section 6-10.3(1).

4. Precast concrete wall stem panels in accordance with Section 6-11.3(3).

5. Precast concrete noise barrier wall panels in accordance with Section 6-12.3(6).

6. Structural earth wall precast concrete facing panels in accordance with Section 6-13.3(4).

7. Precast drainage structure elements in accordance with Section 9-05.50.

8. Precast junction boxes, cable vaults, and pull boxes in accordance with Section 9-29.2.

6-02.3(27)B Submittals for Self Consolidating Concrete for Precast Units
With the exception of items 3, 7, and 8 in Section 6-02.3(27)A, the Contractor shall submit the mix design for SCC to the Engineer for annual approval in accordance with Section 6-02.3(28)B . The mix design submittal shall include items specified in Section 6-02.3(2)A and results of the following tests conducted on concrete that has slump flow within the slump flow range defined below:

1. Slump Flow.

a. The mix design shall specify the target slump flow in inches, in accordance with WSDOT FOP for ASTM C 1611. The slump flow range is defined as the target slump flow plus or minus 2-inches.

b. The visual stability index (VSI) shall be less than or equal to 1, in accordance with ASTM C 1611, Appendix X1, using Filling Procedure B.

c. The T_{50} flow rate results shall be less than 6-seconds in accordance with ASTM C 1611, Appendix X1, using Filling Procedure B.

2. Column Segregation.

a. The maximum static segregation shall be 10-percent in accordance with ASTM C 1610.

b. The Maximum Hardened Visual Stability Index (HVSI) shall be 1 in accordance with AASHTO PP 58.

3. J ring test results for passing ability shall be less than or equal to 1.5-inches in accordance with the WSDOT FOP for ASTM C 1621.

4. Air content shall be tested in accordance with WSDOT Test Method T 818, and shall conform to Section 6-02.3(2)A.

5. Concrete unit weight results in pounds per cubic foot shall be recorded in accordance with AASHTO T 121, except that the concrete shall not be consolidated in the test mold.

6. The temperature of all concrete laboratory test samples shall be tested in accordance with AASHTO T 309 and shall conform to the placement limits specified in Section 6-02.3(4)D.

7. The modulus of elasticity in pounds per square inch at 28 days shall be recorded in accordance with ASTM C 469.

Use of Type III cement is permitted.

Placement for construction may include consolidation using light vibration, but the requirements of Section 6-02.3(4)C for consistency will not apply.

Items 3, 7, and 8 in Section 6-02.3(27)A require the precast plant to cast one representative structure acceptable to the Engineer and have the structure sawn in half for examination by the Contracting Agency to determine that segregation has not occurred. The Contracting Agency's approval of the sawn structure will constitute approval of the precast plant to use SCC and a concrete mix design submittal is not required.

6-02.3(27)C Acceptance Testing of Self Consolidating Concrete for Precast Units
Acceptance testing shall be performed by the Contractor and test results shall be submitted to the Engineer. Placement of SCC for concrete testing such as cylinder preparation shall be in accordance with WSDOT Test Method T 819.

SCC for items 1, 2, 4, 5, and 6 in Section 6-02.3(27)A will be accepted in accordance with Section 6-02.3(5) procedures, and based on conformance to the requirements specified above and in Section 6-02.3(2)A, for the following:

1. Temperature.

2. Air content.

3. Compressive strength at 28-days.

4. Slump flow within the target slump flow range.

5. J ring passing ability less than or equal to 1.5-inches.

6. VSI less than or equal to 1.

SCC for concrete barrier will be accepted in accordance with temperature, air, and compressive strength testing listed above.

SCC for precast junction boxes, cable vaults, and pull boxes will be accepted in accordance with temperature and compressive strength testing listed above.

SCC for precast drainage structure elements will be accepted in accordance with the requirements of AASHTO M 199.

6-02.3(28) Precast Concrete Panels
In this section, all references to "units" are revised to read "panels".

6-02.3(28)B Casting
The second paragraph is revised to read:

Concrete shall meet requirements of Section 6-02.3(25)B for annual pre-approval of the concrete mix design, and slump. If SCC is used the concrete shall conform to Sections 6-02.3(27)B and 6-02.3(27)C.

6-02.3(28)F Tolerances
The reference to "PCI-MNL-166" is revised to read "PCI-MNL-116".

6-02.4 Measurement
The first sentence in the seventh paragraph is revised to read:

All reinforcing steel will be measured by the computed weight of all metal, including mechanical splices, actually in place and required by the Plans or the Engineer.

Item no. 2 in the seventh paragraph is revised to read:

2. Extra steel in splices not shown in the Plans or specified in the Plans as optional.

The following new paragraph is inserted after item number 3 in the seventh paragraph:

The weight of mechanical splices will be based on the weight specified in the manufacturer's catalog cut for the specific item.

6-02.5 Payment
The bid item "St. Reinf. Bar" is revised to read:

"St. Reinf. Bar___"

The bid item "Epoxy-Coated St. Reinf. Bar" is revised to read:

"Epoxy-Coated St. Reinf. Bar___"

The paragraph after the bid item "Epoxy-Coated St. Reinf. Bar" is revised to read:

Payment for reinforcing steel shall include the cost of furnishing, fabricating, placing, and splicing the reinforcement. In structures of reinforced concrete where there are no structural steel bid items, such minor metal parts as expansion joints, bearing assemblies, and bolts will be paid for at the unit contract price for "St. Reinf. Bar___" unless otherwise specified.

SECTION 7-02, CULVERTS
January 3, 2011

7-02.2 Materials
In the first paragraph, the following three items are inserted after the item "Corrugated Polyethylene Culvert Pipe 9-05.19":

Steel Rib Reinforced Polyethylene Culvert Pipe	9-05.21
High Density Polyethylene (HDPE) Pipe	9-05.23
Polypropylene Culvert Pipe	9-05.25

The third paragraph is revised to read:

Thermoplastic culvert pipe includes solid wall PVC culvert pipe, profile wall PVC culvert pipe, corrugated polyethylene culvert pipe, and polypropylene culvert pipe.

In the '**Culvert Pipe** Schedules' table, the last column is revised to read:

Thermoplastic PE[1], PVC[2] or PP[3]
PE, PVC, or PP PE, PVC, or PP PE, PVC, or PP
PE, PVC, or PP PE, PVC, or PP PE, PVC, or PP
None None None
None None None None

The footnotes below the '**Culvert Pipe Schedules**' table are supplemented with the following:

3 Polypropylene pipe

7-02.5 Payment
This section is supplemented with the following:

"Steel Rib Reinforced Polyethylene Culvert Pipe ____ In. Diam.", per linear foot.
"High Density Polyethylene (HDPE) Pipe ____ In. Diam.", per linear foot.
"Polypropylene Culvert Pipe ____ In. Diam.", per linear foot.

SECTION 8-01, EROSION CONTROL AND WATER POLLUTION CONTROL August 1, 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)	
May 1 through September 30	17 Acres
October 1 through April 30	5 Acres

Eastern Washington (East of the Cascade Mountain crest.)	
April 1 through October 31	17 Acres
November 1 through March 31	5 Acres

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. 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 before any work begins.

Modified TESC Plans shall meet all requirements of Chapter 6, Section 6-2 of the current edition of the WSDOT Highway Runoff Manual. The TESC Plan shall cover all areas the Contractor's Work may affect 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
The first sentence in the third paragraph is revised to read:

When a TESC Plan is included in the Contract Plans, the ESC Lead shall also inspect all areas disturbed by construction activities, all on-site erosion and sediment control BMP's, and all stormwater discharge points at least once every calendar week and within 24-hours of runoff events in which stormwater discharges from the site. Inspections of temporarily stabilized, inactive sites may be reduced to once every calendar month.

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 hydroseeder 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 "hydroseeder".

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 "hydroseeder".

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 Tacking Agent and Soil Binders
The following new paragraph is inserted at the beginning of this Section:

Tacking agent or soil binders applied using a hydroseeder 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:

Western Washington[1]	Eastern Washington
(West of the Cascade Mountain crest)	(East of the Cascade Mountain crest)
March 1 through May 15	October 1 through November 15 only
September 1 through October 1	

[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.

SECTION 8-03, IRRIGATION SYSTEMS
January 4, 2010

8-03.1 Description
In this section, "staked" is revised to read "approved by the Engineer."

8-03.3 Construction Requirements
The second paragraph is revised to read:

Potable water supplies shall be protected against cross connections in accordance with applicable Washington State Department of Health rules and regulations and approval by the local health authority.

8-03.3(1) Layout of Irrigation System
This section is revised to read:

The Contractor shall stake the irrigation system following the schematic design shown in the Plans. Approval must be obtained from the Engineer. Alterations and changes in the layout may be expected in order to conform to ground conditions and to obtain full and adequate coverage of plant material with water. However, no changes in the system as planned shall be made without prior authorization by the Engineer.

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

8-03.3(1)A Locating Irrigation Sleeves
Existing underground irrigation sleeve ends shall be located by potholing. Irrigation sleeves placed during general construction prior to installation of the irrigation system shall be marked at both ends with a 2x4x24-inch wood stake extending 6-inches out of the soil and painted blue on the exposed end.

8-03.3(2) Excavation
In the first paragraph, the fourth sentence is revised to read:

Trenches through rock or other material unsuitable for trench bottoms and sides shall be excavated 6-inches below the required depth and shall be backfilled to the top of the pipe with

sand or other suitable material free from rocks or stones. Backfill material shall not contain rocks 2-inches or greater in diameter or other materials that can damage pipe.

The second paragraph is revised to read:

The Contractor shall exercise care when excavating pipe trenches near existing trees to minimize damage to tree roots. Where roots are 1-1/2-inches or greater in diameter, the trench shall be hand excavated and tunneled under the roots. When large roots are exposed, they shall be wrapped with heavy, moist material, such as burlap or canvas, for protection and to prevent excessive drying. The material must be kept moist until the trench is backfilled. Trenches dug by machines adjacent to trees having roots less than 1-1/2-inches in diameter shall have severed roots cleanly cut. Trenches having exposed tree roots shall be backfilled within 24-hours unless adequately protected by moist material as approved by the Engineer. All material and fastenings used to cover the roots shall be removed before backfilling.

The third paragraph is revised to read:

Detectable marking tape shall be placed in all trenches 6-inches directly above, parallel to, and along the entire length of all nonmetallic water pipes, and all nonmetallic and aluminum sleeves, conduits and casing pipe. The width of the tape and installation depth shall be as recommended by the manufacturer for the depth of installation or as shown in the Plans.

8-03.3(3) Piping
This section is revised to read:

All water lines shall be a minimum of 18-inches below finished grade measured from the top of the pipe or as shown in the Plans. All live water mains to be constructed under existing pavement shall be placed in steel casing jacked under pavement as shown in the Plans. All PVC or polyethylene pipe installed under areas to be paved shall be placed in irrigation sleeves. Irrigation sleeves shall extend a minimum of 2-feet beyond the limits of pavement. All jacking operations shall be performed in accordance with an approved jacking plan. Where possible; mains and laterals or section piping shall be placed in the same trench. All lines shall be placed a minimum of 3-feet from the edge of concrete sidewalks, curbs, guardrail, walls, fences, or traffic barriers. Pipe pulling will not be allowed for installation and placement of irrigation pipe.

Mainlines and lateral lines shall be defined as follows:

Mainlines: All supply pipe and fittings between the water meter and the irrigation control valves.

Lateral Lines: All supply pipe and fittings between the irrigation control valves and the connections to the irrigation heads. Swing joints, thick walled PVC or polyethylene pipe, flexible risers, rigid pipe risers, and associated fittings are not considered part of the lateral line but incidental components of the irrigation heads.

8-03.3(4) Jointing
In the second paragraph, the third sentence is revised to read:

Threaded galvanized steel joints shall be constructed using either a nonhardening, nonseizing multipurpose sealant or Teflon tape or paste as recommended by the pipe manufacturer, or as shown in the Plans.

In the last sentence of the second paragraph, "will" is revised to read "shall".

In the fourth sentence of the third paragraph, "will" is revised to read "shall" and "at" is revised to read "of".

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

On PVC or polyethylene-to-metal connections, work the metal connection first.

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

Connections between metal and PVC or polyethylene are to be threaded utilizing female threaded PVC adapters with threaded schedule 80-PVC nipple only.

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

The ends of the polyethylene pipe shall be cut square, reamed smooth inside and out, and inserted to the full depth of the fitting.

8-03.3(5) Installation
The following new paragraph is inserted after the third paragraph:

All automatic control valves, flow control valves, and pressure reducing valves shall be installed in appropriate sized valve boxes. Manual control valves shall be installed in an appropriate sized valve box and where appropriate, upstream of the automatic control valves. Manual and automatic valves installed together shall be in an appropriate sized box with 3-inches of clearance on all sides.

The fourth paragraph is revised to read:

Final position of valve boxes, capped sleeves, and quick coupler valves shall be between ½-inch and 1-inch above finished grade or mulch, or as shown in the Plans.

The following new paragraph is inserted after the fourth paragraph:

Quick coupler valves and hose bibs shall be installed in valve boxes, either separately or within a control valve assembly box upstream of the control valves. Valves, quick couplers, and hose bibs shall have 3-inches of clearance on all sides within the valve box.

In the fifth paragraph "an" is revised to read "a minimum".

The following new paragraph is inserted after the fifth paragraph:

Automatic controller pedestals or container cabinets shall be installed on a concrete base as shown in the Plans or in accordance with the manufacturer's recommendations. Provide three 1-inch diameter galvanized metal or PVC electrical wire conduits through the base and 3-inches minimum beyond the edge or side of the base both inside and outside of the pedestal.

8-03.3(6) Electrical Wire Installation
This section is revised to read:

All electrical work shall conform to the National Electric Code, NEMA Specifications and in accordance with Section 8-20. Electrical wiring between the automatic controller and automatic valves shall be direct burial and may share a common neutral. Separate control conductors shall be run from the automatic controller to each valve. When more than one automatic controller is required, a separate common neutral shall be provided for each controller and the automatic valves which it controls. Electrical wire shall be installed in the trench adjacent to or above the irrigation pipe, but no less than 12-inches deep. Plastic tape or nylon tie wraps shall be used to bundle wires together at 10-foot intervals. If it is necessary to run electrical wire in a separate trench from the irrigation pipe, the wire shall be placed at a minimum depth of 18-inches and be "snaked" from side to side in the trench. Each circuit shall be identified at both ends and at all splices with a permanent marker identifying zone and/or station.

Wiring placed under pavement and walls, or through walls, shall be placed in an electrical conduit or within an irrigation sleeve. Electrical conduit shall not be less than 1-inch in diameter, and shall meet conduit specifications for PVC conduit as required in Section 9-29.1.

Splices will be permitted only in approved electrical junction boxes, valve boxes, pole bases, or within control equipment boxes or pedestals. A minimum of 18-inches of excess conductor shall be left at all splices, terminals and control valves to facilitate inspection and future splicing. The excess wire shall be neatly coiled to fit easily into the boxes.

All 120-volt electrical conductors and conduit shall be installed by a certified electrician including all wire splices and wire terminations.

All wiring shall be tested in accordance with Section 8-20.3(11).

Continuity ground and functionality testing shall be performed for all 24-volt direct burial circuits. The Megger test, confirming insulation resistance of not less than 2 megohms to ground in accordance with Section 8-20.3(11), is required.

8-03.3(7) Flushing and Testing
In the first paragraph "correct" is revised to read "as accurate" and "ordered" is revised to read "required".

The third paragraph is revised to read:

Main Line Flushing
All main supply lines shall receive two fully open flushing's to remove debris that may have entered the line during construction: The first before placement of valves and the second after placement of valves and prior to testing.

The fourth paragraph is revised to read:

Main Line Testing
All main supply lines shall be purged of air and tested with a minimum static water pressure of 150-psi for 60-minutes without introduction of additional service or pumping pressure. Testing shall be done with one pressure gauge installed on the line, in the location required by the Engineer. For systems using a pump, an additional pressure gauge shall be installed at the pump when required by the Engineer. Lines that show loss of pressure exceeding 5-psi at the ends of specified test periods will be rejected.

The fifth paragraph is deleted.

In the sixth paragraph, "any" is revised to read "all".

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

The operating line pressure shall be maintained for 30-minutes with valves closed and without introduction of additional service or pumping pressure.

In the eighth paragraph, the fourth and fifth sentences are revised to read:

The Contractor shall then conduct a thorough inspection of all sprinkler heads, emitters, etc., located downstream of the break or disruption of service, and make all needed repairs to ensure that the entire irrigation system is operating properly.

8-03.3(8) Adjusting System
In the first paragraph, the last sentence is revised to read:

Unless otherwise specified, sprinkler spray patterns will not be permitted to apply water to pavement, walks, or Structures.

8-03.3(11) System Operation
In the first paragraph, the last sentence is revised to read:

The final inspection of the irrigation system will coincide with the end of the Contract or the end of first-year plant establishment, whichever is later.

In the second paragraph "ordered" is revised to read "required".

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

Potable water shall not flow through the cross-connection control device to any downstream component until tested and approved for use by the local health authority in accordance with Section 8-03.3(12).

The fourth paragraph is revised to read:

In the spring, when the drip irrigation system is in full operation, the Contractor shall make a full inspection of all emitters, and irrigation heads. This shall involve visual inspection of each emitter and irrigation head under operating conditions. All adjustments, flushing, or replacements to the system shall be made at this time to ensure the proper operation of all emitters and irrigation heads.

8-03.3(12) Cross Connection Control Device Installation
In the first sentence of the first paragraph "serving utility" is revised to read "local health authority".

8-03.3(13) Irrigation Water Service
The first paragraph is revised to read:

All water meter(s) shall be installed by the serving utility. The Contracting Agency shall arrange for a water meter installation(s) for the irrigation system at the locations and sizes as shown in the Plans at no cost to the Contractor. It shall be the Contractor's responsibility to contact the Engineer to schedule the water meter installation. The Contractor shall provide a minimum of 60-calendar days notice to the Engineer prior to the desired water meter installation date.

In the second paragraph, "will" is revised to read "shall".

8-03.3(14) Irrigation Electrical Service
The first paragraph is revised to read:

The Contracting Agency shall arrange for electrical service connection(s) for operation of the automatic electrical controller(s) at the locations as shown in the Plans. The Contractor shall splice and run conduit and wire from the electrical service connection(s), or service cabinet to the automatic electrical controller and connect the conductors to the circuit(s) per the controller manufacturer's diagrams or recommendations.

In the second paragraph, "conduit" is revised to read "conduits".

SECTION 8-15, RIPRAP
January 4, 2010

8-15.2 Materials
The referenced sections for the following items are revised to read:

Heavy Loose Riprap	9-13
Light Loose Riprap	9-13
Hand Placed Riprap	9-13
Sack Riprap	9-13
Quarry Spalls	9-13

SECTION 9-01, PORTLAND CEMENT
April 5, 2010

9-01.2(1) Portland Cement
In the first paragraph, all the text after "shall not exceed 8-percent by weight" is deleted and the paragraph ends.

In the second paragraph, "per" is revised to read "in accordance with".

SECTION 9-05, DRAINAGE STRUCTURES, CULVERTS, AND CONDUITS
August 1, 2011

9-05.2(8) Perforated Corrugated Polyethlene Underdraine Pipe (12-inch through 60-inch)
This section including title is revised to read:

9-05.2(8) Perforated Corrugated Polyethylene Underdrain Pipe, Couplings and Fittings (12-inch through 60-inch)
Perforated corrugated polyethylene underdrain pipe, couplings and fittings, 12-inch through 60-inch diameter maximum, shall meet the requirements of AASHTO M 294 Type CP or Type SP. Type CP shall be Type C pipe with Class 2 perforations and Type SP shall be Type S pipe with either Class 1 or Class 2 perforations. Additionally, Class 2 perforations shall be uniformly spaced along the length and circumference of the pipe.

9-05.12(1) Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe
In this section, all references to "115 psi" are revised to read "46 psi".

9-05.12(2) Profile Wall PVC Culvert Pipe, Profile Wall PVC Storm Sewer Pipe, and Profile Wall PVC Sanitary Sewer Pipe
In the fourth paragraph, the word "producer's" is revised to read "Manufacturer's".

9-05.13 Ductile Iron Sewer Pipe
The second and third paragraphs are revised to read:

Ductile iron pipe shall conform to ANSI A 21.51 or AWWA C151 and shall be cement mortar lined and have a 1- mil seal coat per AWWA C104, or a Ceramic Filled Amine cured Novalac Epoxy lining, as indicated on the Plans or in the Special Provisions. The ductile iron pipe shall be Special Thickness Class 50, Minimum Pressure Class 350, or the Class indicated on the Plans or in the Special Provisions.

Nonrestrained joints shall be either rubber gasket type, push on type, or mechanical type meeting the requirements of AWWA C111.

9-05.19 Corrugated Polyethylene Culvert Pipe
This sections title is revised to read:

9-05.19 Corrugated Polyethylene Culvert Pipe, Couplings, and Fittings

The first paragraph is revised to read:

Corrugated polyethylene culvert pipe, couplings, and fittings, shall meet the requirements of AASHTO M 294 Type S or D for pipe 12-inch to 60-inch diameter with silt-tight joints.

9-05.20 Corrugated Polyethylene Storm Sewer Pipe
This sections title is revised to read:

9-05.20 Corrugated Polyethylene Storm Sewer Pipe, Couplings, and Fittings

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

Corrugated polyethylene storm sewer pipe, couplings, and fittings shall meet the requirements of AASHTO M 294 Type S or D.

Section 9-05 is supplemented with the following new sub-sections:

9-05.21 Steel Rib Reinforced Polyethylene Culvert Pipe
Steel rib reinforced polyethylene culvert pipe shall meet the requirements of ASTM F2562 Class 1 for steel reinforced thermoplastic ribbed pipe and fittings for pipe 24-inch to 60-inch diameter with silt-tight joints.

Silt-tight joints for steel reinforced polyethylene culvert pipe shall be made with a bell/bell or bell and spigot coupling and incorporate the use of a gasket conforming to the requirements of ASTM F 477. All gaskets shall be installed on the pipe by the manufacturer.

Qualification for each manufacturer of steel reinforced polyethylene culvert pipe requires an approved joint system and a formal quality control plan for each plant proposed for consideration.

A Manufacturer's Certificate of Compliance shall be required and shall accompany the materials delivered to the project. The certificate shall clearly identify production lots for all materials represented. The Contracting Agency may conduct verification tests of pipe stiffness or other properties as it deems appropriate.

9-05.22 Steel Rib Reinforced Polyethylene Storm Sewer Pipe

Steel rib reinforced polyethylene storm sewer pipe shall meet the requirements of ASTM F2562 Class 1 for steel reinforced thermoplastic ribbed pipe and fittings. The maximum diameter for steel reinforced polyethylene storm sewer pipe shall be the diameter for which a manufacturer has submitted a qualified joint. Qualified manufacturers and approved joints are listed in the Qualified Products Lists. Fittings shall be rotationally molded, injection molded, or factory welded.

All joints for steel reinforced polyethylene storm sewer pipe shall be made with a bell and spigot coupling and conform to ASTM D 3212 using elastomeric gaskets conforming to ASTM F 477. All gaskets shall be installed on the pipe by the manufacturer.

Qualification for each manufacturer of steel reinforced polyethylene storm sewer pipe requires joint system conformance to ASTM D 3212 using elastomeric gaskets conforming to ASTM F 477 and a formal quality control plan for each plant proposed for consideration.

A Manufacturer's Certificate of Compliance shall be required and shall accompany the materials delivered to the project. The certificate shall clearly identify production lots for all materials represented. The Contracting Agency may conduct verification tests of pipe stiffness or other properties as it deems appropriate.

9-05.23 High Density Polyethylene (HDPE) Pipe

HDPE pipe shall be manufactured from resins meeting the requirements of ASTM D3350 with a cell classification of 345464C and a Plastic Pipe Institute (PPI) designation of PE 3408.

The pipes shall have a minimum standard dimension ratio (SDR) of 32.5.

HDPE pipe shall be joined into a continuous length by an approved joining method.

The joints shall not create an increase in the outside diameter of the pipe. The joints shall be fused, snap together or threaded. The joints shall be water tight, rubber gasketed if applicable, and pressure testable to the requirements of ASTM D 3212.

Joints to be welded by butt fusion, shall meet the requirements of ASTM F 2620 and the manufacturer's recommendations. Fusion equipment used in the joining procedure shall be capable of meeting all conditions recommended by the pipe manufacturer, including but not

limited to fusion temperature, alignment, and fusion pressure. All field welds shall be made with fusion equipment equipped with a Data Logger. Temperature, fusion pressure and a graphic representation of the fusion cycle shall be part of the Quality Control records. Electro fusion may be used for field closures as necessary. Joint strength shall be equal or greater than the tensile strength of the pipe.

Fittings shall be manufactured from the same resins and Cell Classification as the pipe unless specified otherwise in the Plans or Specifications. Butt fusion fittings and Flanged or Mechanical joint adapters shall have a manufacturing standard of ASTM D3261. Electro fusion fittings shall have a manufacturing standard of ASTM F1055.

HDPE pipe to be used as liner pipe shall meet the requirements of AASHTO M 326 and this specification.

The supplier shall furnish a Manufacturer's Certification of Compliance stating the materials meet the requirements of ASTM D 3350 with the correct cell classification with the physical properties listed above. The supplier shall certify the dimensions meet the requirements of ASTM F 714 or as indicated in this Specification or the Plans.

At the time of manufacture, each lot of pipe, liner, and fittings shall be inspected for defects and tested for Elevated Temperature Sustain Pressure in accordance with ASTM F 714. The Contractor shall not install any pipe that is more than 2 years old from the date of manufacture.

At the time of delivery, the pipe shall be homogeneous throughout, uniform in color, free of cracks, holes, foreign materials, blisters, or deleterious faults.

Pipe shall be marked at 5 foot intervals or less with a coded number which identifies the manufacturer, SDR, size, material, machine, and date on which the pipe was manufactured.

9-05.24 Polypropylene Culvert Pipe, Polypropylene Storm Sewer Pipe, and Polypropylene Sanitary Sewer Pipe

Polypropylene Culvert Pipe, Polypropylene Storm Sewer Pipe and Polypropylene Sanitary Sewer pipe shall conform to the following requirements:

1. For pipe sizes up to 30 inches: ASTM F2736.
2. For pipe sizes from 30 to 60 inches: ASTM F2764.
3. Fittings shall be factory welded, injection molded or PVC.

All joints for corrugated polypropylene pipe shall be made with a bell/bell or bell and spigot coupling and shall conform to ASTM D3212 using elastomeric gaskets conforming to ASTM F477. All gaskets shall be factory installed on the pipe in accordance with the producer's recommendations.

Qualification for each producer of corrugated polypropylene storm sewer pipe requires joint system conformance to ASTM D3212 using elastomeric gaskets conforming to ASTM F477 and a formal quality control plan for each plant proposed for consideration.

A Manufacturer's Certificate of Compliance shall be required and shall accompany the materials delivered to the project. The certificate shall clearly identify production lots for all materials represented. The Contracting Agency may conduct verification tests of pipe stiffness or other properties deems appropriate.

SECTION 9-07, REINFORCING STEEL
August 1, 2011

9-07.1(1)A Acceptance of Materials
The following new paragraph is inserted before the first paragraph:

Reinforcing steel rebar manufacturers shall comply with the requirements of AASHTO R 53, "Qualification of Deformed and Plain Reinforcing Steel Bar, Welded Wire, and Wire Producing Mills" and the National Transportation Product Evaluation Program (NTPEP) Work Plan for Reinforcing Steel (rebar) Manufacturers. Reinforcing steel rebar manufacturers shall participate in the NTPEP Audit Program for Reinforcing Steel (rebar) Manufacturers and be listed on the NTPEP audit program website displaying that they are NTPEP compliant.

9-07.2 Deformed Steel Bars
The first paragraph is revised to read:

Deformed steel bars for concrete reinforcement shall conform to either AASHTO M 31 Grade 60, or ASTM A 706, except as otherwise noted in this Section or as shown in the Plans. Steel reinforcing bar for the cast-in-place components of bridge structures (excluding sidewalks and barriers but including shafts and concrete piles), and for precast substructure components of bridge structures, shall conform to ASTM A 706 Grade 60 only.

9-07.5(1) Epoxy Coated Dowel Bars (For Cement Concrete Pavement)
This section's title is revised to read:

9-07.5(1) Epoxy Coated Dowel Bars (For Cement Concrete Pavement Rehabilitation)

The following is inserted after the third sentence of the first paragraph:

The Contractor shall furnish a written certification that properly identifies the material, the number of each batch of coating material used, quantity represented, date of manufacture, name and address of manufacturer, and a statement that the supplied coating material meets the requirements of ASTM A 934.

SECTION 9-15, IRRIGATION SYSTEM
January 4, 2010

The first paragraph is supplemented with the following:

When the water supply for the irrigation system is from a non-potable source, irrigation components shall have lavender indicators supplied by the equipment manufacturer.

9-15.3 Automatic Controllers
This section is revised to read:

The automatic controller shall be an electronic timing device for automatically opening and closing control valves for predetermined periods of time. The automatic controller shall be enclosed in a weatherproof, painted, metal housing fabricated from 16 gauge sheet aluminum alloy 6061-T6 or 16 gauge sheet steel or unpainted, non-rusting industrial grade stainless steel. The pedestal shall have a completely removable locking faceplate to allow easy access to wiring.

The automatic controller housing shall have hasp and lock or locking device. All locks or locking devices shall be master keyed and three sets of keys provided to the Engineer. The controller shall be compatible with and capable of operating the irrigation system as designed and constructed and shall include the following operating features:

1. Each controller station shall be adjustable for setting to remain open for any desired period of time, from five minutes or less to at least 99 minutes.
2. Adjustments shall be provided whereby any number of days may be omitted and whereby any one or more positions on the controller can be skipped. When adjustments are made, they shall continue automatically within a 14-day cycle until the operator desires to make new adjustments.
3. Controls shall allow any position to be operated manually, both on or off, whenever desired, without disrupting the 14 day cycle.
4. Controls shall provide for resetting the start of the irrigation cycle at any time and advancing from one position to another.
5. Controllers shall contain a power on-off switch and fuse assembly.
6. Output shall be 24 volt AC with battery back up for memory retention of the 14 day cycle.
7. Both normally-open or normally-closed rain sensor compatibility.

9-15.4 Irrigation Heads
This section is supplemented with the following new paragraph:

All instructions, special wrenches, clamps, tools, and equipment supplied by the manufacturer necessary for the installation and maintenance of the irrigation heads shall be turned over to the Engineer upon completion and acceptance of the project.

9-15.5 Valve Boxes and Protective Sleeves
This section including title is revised to read:

9-15.5 Valve Boxes
Valve boxes shall conform to the Plans and be extendible to obtain the depth required. All manual drain valves and manual control valves shall be installed in valve box with a vandal resistant lid as shown in the Plans.

9-15.7(1) Manual Control Valves
The third and fourth sentences are revised to read:

The Contractor shall furnish three suitable operating keys. Valves shall have removable bonnet and stem assemblies with adjustable packing glands and shall house long acme threaded stems to ensure full opening and closing.

9-15.7(2) Automatic Control Valves
In the second paragraph, the first and second sentences are revised to read:

Valves shall be of a normally closed design and shall be operated by an electronic solenoid having a maximum rating of 6.5 watts utilizing 24 volt AC power. Electronic solenoids shall have a stainless steel plunger and be directly attached to the valve bonnets or body with all control parts fully encapsulated.

In the fifth sentence of the second paragraph, "electric" is revised to read "electrical".

9-15.7(3) Automatic Control Valves With Pressure Regulator
This section is revised to read:

Automatic control valves with pressure regulators shall be similar to automatic control valves described in Section 9-15.7(2) and shall reduce the inlet pressure to a constant pressure regardless of supply fluctuations. The regulator must be fully adjustable.

9-15.8 Quick Coupling Equipment
In the first paragraph, the first and second sentences are revised to read:

Quick coupler valves shall have a service rating of not less than 125-psi for non-shock cold water. The body of the valves shall be of cast Copper Alloy No. C84400 Leaded Semi-Red Brass conforming to ASTM B 584.

In the fifth sentence of the first paragraph, "will" is revised to read "shall".

9-15.9 Drain Valves
This section is revised to read:

Drain valves may be a ½-inch or ¾-inch PVC or metal gate valve manufactured for irrigation systems. Valves shall be designed for underground installation with suitable cross wheel for operation with a standard key, and shall have a service rating of not less than 150-psi non-shock

cold water. The Contractor shall furnish three standard operating keys per Contract. Drain valves shall be installed in a valve box with a vandal resistant lid as shown in the Plans.

Drain valves on potable water systems shall only be allowed on the downstream side of approved cross connection control devices.

9-15.10 Hose Bibs
The first sentence is revised to read:

Hose bibs shall be angle type, constructed of bronze or brass, threaded to accommodate a ¾-inch hose connection, and shall be key operated.

9-15.11 Cross Connection Control Devices
This section is revised to read:

Atmospheric vacuum breaker assemblies (AVBAs), pressure vacuum breaker assemblies (PVBAs), double check valve assemblies (DCVAs), and reduced pressure backflow devices (RPBDs), shall be of a manufacturer and product model approved for use by the Washington State Department of Health, Olympia, Washington or a Department of Health certified agency.

9-15.12 Check Valves
The last sentence is revised to read:

Valves shall have angled seats, Buna-N seals and threaded connections, and shall be installed in 8-inch round plastic valve boxes with vandal resistant lids.

9-15.14 Three-Way Valves
The last sentence is revised to read:

When handles are included as an integral part of the valves, the Contractor shall remove the handles and give them to the Engineer for ultimate distribution to the Maintenance Division.

9-15.15 Flow Control Valves
The third sentence is revised to read:

Valves shall be factory set to the flows as shown in the Plans.

9-15.17 Electrical Wire and Splices
This section is revised to read:

Electrical wire used between the automatic controller and automatic control valves shall be solid or stranded copper, minimum size AWG 14. Insulation shall be Type USE Chemically Cross Linked Polyethylene or Type UF, and shall be listed by a National recognized Testing Laboratory. Each conductor shall be color coded and marked at each end and at all splices with zone or station number identification.

Low voltage splices shall be made with a direct bury splice kit using a twist-on wire connector and inserted in a waterproof polypropylene tube filled with a silicone electrical insulating gel, or heat shrinkable insulating tubing. Heat shrinking insulating tubing shall consist of a mastic lined heavy wall polyolefin cable sleeve.

9-15.18 Detectable Marking Tape

The first paragraph is revised to read:

Detectable marking tape shall consist of inert polyethylene plastic that is impervious to all known alkalis, acids, chemical reagents, and solvents likely to be encountered in the soil, with a metallic foil core to provide for the most positive detection and pipeline location.

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

The tape shall be color coded and shall be imprinted continuously over its entire length in permanent black ink indicating the type of line buried below and shall also have the word "Caution" prominently shown.

The last paragraph is revised to read:

The width of the tape shall be as recommended by the manufacturer based on depth of installation.