

CONTRACT DOCUMENTS
FOR
**BISHOP BOULEVARD / KLEMGARD
AVENUE TRAFFIC SIGNAL PROJECT**
CITY OF PULLMAN, WA



PREPARED FOR:
CITY OF PULLMAN
325 SE Paradise Street
Pullman, WA 99163



PREPARED BY:

Taylor Engineering, Inc.
Civil Design • Surveying • Land Planning

245 E Main Street
Pullman, WA 99163

**BISHOP BOULEVARD /
KLEMGARD AVENUE
TRAFFIC SIGNAL PROJECT**

Contract No. 11-17



CONTACT PERSON:

**Clayton Forsmann, P.E., Deputy Public Works Director
Phone (509) 338-3222, clayton.forsmann@pullman-wa.gov**

FOR PLANS AND PLAN HOLDERS LIST:

**Bethany Johnson, Public Works Admin. Asst.
Phone (509) 338-3213, bethany.johnson@pullman-wa.gov**

**CONSTRUCTION CONTRACT DOCUMENTS
AND
TECHNICAL SPECIFICATIONS
FOR THE
BISHOP BOULEVARD / KLEMGARD AVENUE TRAFFIC SIGNAL PROJECT
Pullman, WA**

The technical material and data contained in these specifications was prepared under the supervision and direction of the undersigned, whose seal as a professional engineer licensed to practice as such in the State of Washington is affixed below:



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CALL FOR BIDS

Sealed bids will be received by the City of Pullman at the Public Works Department, Attention: Bethany Johnson, 325 SE Paradise Street, Pullman, WA 99163, until 2:00 p.m. local time, on December 11, 2014 for the following:

Project: **Bishop Boulevard / Klemgard Avenue Traffic Signal Project**

Contract No.: **11-17**

This improvement is a roadway widening and traffic signal project consisting of the construction of approximately 1365 square yards of asphalt pavement section, 1810 linear feet of curb and gutter, 1025 square yards of sidewalk, storm sewer treatment and detention, site demolition / removals, utility adjustments, driveway reconstruction, property restoration, signage, striping, intersection traffic signal and other related work.

A non-mandatory pre-bid conference for all interested bidders will be held on December 3, 2014 at 1:00 p.m. local time at the City of Pullman Public Works Large Conference Room, 325 SE Paradise, Pullman, WA, 99163.

Contract documents, specifications, and bidding documents are available from the Engineering Division of the Pullman Public Works Department, Attention: Bethany Johnson, City Hall, 325 SE Paradise Street, Pullman, WA 99163. Bidding documents are available on compact disk only at no cost.

A certified check, bid bond, or cashier's check in an amount not less than five percent (5%) of the total bid must accompany the proposal.

The local agency hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, political affiliation, religion, gender, age, sexual orientation, disabilities, or any other protected status in consideration for an award.

The city reserves the right to reject any and all bids, to waive technicalities or irregularities, and after careful consideration of all bids and factors involved, make the award to best serve the interests of the City of Pullman.

Kevin Gardes, P.E.
Public Works Director

BID PROPOSAL

TO: City of Pullman
325 SE Paradise Street
Pullman, WA 99163

ATTN: Public Works Director

The undersigned, as bidder, declare that we have examined all of the contract documents and that we will contract with the City of Pullman on the form of contract provided to do everything necessary to complete the construction described as follows:

Project: **Bishop Boulevard / Klemgard Avenue Traffic Signal Project**

Contract No.: **11-17**

We acknowledge that addenda numbers ____ to ____ have been delivered to us and have been examined as part of the contract documents. We agree that the bid bond shall form a part of this proposal.

Attached is a bid bond duly completed by a guaranty company authorized to carry on business in the State of Washington in the amount of at least five percent (5%) of the total amount of our proposal, or alternatively, there is attached a certified or cashier's check payable to the City of Pullman in the amount of at least five percent (5%) of the total amount of proposal.

If our proposal is accepted, we agree to sign the contract form and to furnish the contract bond and the required evidences of insurance within ten (10) calendar days after receiving written notice of the award of contract.

We further agree, if our proposal is accepted and a contract for performance of work is entered into with the City of Pullman, to so plan the work and to prosecute it with such diligence that all of the work shall be completed within the time period stated in the contract. We understand that the City of Pullman reserves the right to reject any or all bids and to determine which proposal is, in the judgment of the City of Pullman, the lowest responsible bid of a bidder or group of bidders and which proposal, if any, should be accepted in the best interests of the City, and that the City also reserves the right to waive any informalities in any proposal or bid.

We further state that we have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract.

We propose to perform the work for the following prices bid:

BID SCHEDULE				
BISHOP BOULEVARD / KLEMGARD AVENUE TRAFFIC SIGNAL PROJECT				
Bid Item No.	Estimated Quantity	Description of Item	Unit Price	Total Amount
1	1 LS	Mobilization Per Lump Sum	\$ _____	\$ _____
2	1 LS	Roadway Surveying Per Lump Sum	\$ _____	\$ _____
3	1 LS	Spill Prevention, Control and Countermeasure Plan (SPCC) Per Lump Sum	\$ _____	\$ _____
4	16 EA	Construction Signs, Class A Per Each	\$ _____	\$ _____
5	1 LS	Traffic Control Supervisor Per Lump Sum	\$ _____	\$ _____
6	300 HR	Flagger and Spotter Per Hour	\$ _____	\$ _____
7	1 LS	Other Temporary Traffic Control Per Lump Sum	\$ _____	\$ _____
8	1 LS	Pedestrian Control and Protection Per Lump Sum	\$ _____	\$ _____
9	1 LS	Clearing and Grubbing Per Lump Sum	\$ _____	\$ _____
10	1 LS	Removal of Structures and Obstructions Per Lump Sum	\$ _____	\$ _____
11	1,000 CY	Roadway Excavation including Haul Per Cubic Yard	\$ _____	\$ _____
12	75 CY	Unsuitable Foundation Excavation Incl. Haul Per Cubic Yard	\$ _____	\$ _____
13	1,400 SY	Construction Geogrid for Soil Stabilization Per Square Yard	\$ _____	\$ _____
14	150 TON	Ballast Per Ton	\$ _____	\$ _____
15	1,910 TON	Crushed Surfacing Base Course Per Ton	\$ _____	\$ _____
16	235 TON	Crushed Surfacing Top Course Per Ton	\$ _____	\$ _____
17	180 TON	HMA, Class 1/2", PG 64-28 Per Ton	\$ _____	\$ _____
18	210 TON	HMA, Class 3/4", PG 64-28 Per Ton	\$ _____	\$ _____

BID SCHEDULE				
BISHOP BOULEVARD / KLEMGARD AVENUE TRAFFIC SIGNAL PROJECT				
Bid Item No.	Estimated Quantity	Description of Item	Unit Price	Total Amount
19	55 LF	4" Diameter Solid Wall PVC, Street Tree Underdrain Storm Sewer Per Linear Foot	\$ _____	\$ _____
20	8 LF	8" Diameter Solid Wall PVC Storm Sewer (ASTM D-3034, SDR 35) Per Linear Foot	\$ _____	\$ _____
21	61 LF	12" Diameter Solid Wall PVC Storm Sewer (ASTM D-3034, SDR 35) Per Linear Foot	\$ _____	\$ _____
22	115 CY	Controlled Density Fill for Pipe Backfill Per Cubic Yard	\$ _____	\$ _____
23	4 EA	Catch Basin Per Each	\$ _____	\$ _____
24	1 EA	Connection to Existing Storm Sewer Pipe Per Each	\$ _____	\$ _____
25	1 EA	Plug Existing Manhole / Catch Basin Per Each	\$ _____	\$ _____
26	2 EA	Connection to Existing Manhole / Catch Basin Per Each	\$ _____	\$ _____
27	1 LS	Storm Water Detention System, Complete Per Lump Sum	\$ _____	\$ _____
28	2 EA	Street Tree Filtration System, Complete Per Each	\$ _____	\$ _____
29	2 EA	Relocate Existing Fire Hydrant Assembly, Complete Per Each	\$ _____	\$ _____
30	2 EA	Adjust 8" Water Gate Valve Per Each	\$ _____	\$ _____
31	3 EA	Adjust Existing Manhole / Vault / Structure to New Finish Grade, Complete Per Each	\$ _____	\$ _____
32	3 EA	Relocate Existing Water Service / Meter, Complete Per Each	\$ _____	\$ _____
33	T & M	Irrigation System Repairs and Adjustments Per Time and Materials	\$4,000.00	\$4,000.00
34	6 EA	Inlet Protection - Silt Sacks Per Each	\$ _____	\$ _____
35	700 SY	Sod Installation Per Square Yard	\$ _____	\$ _____
36	30 CY	Topsoil, Type C Per Cubic Yard	\$ _____	\$ _____

BID SCHEDULE				
BISHOP BOULEVARD / KLEMGARD AVENUE TRAFFIC SIGNAL PROJECT				
Bid Item No.	Estimated Quantity	Description of Item	Unit Price	Total Amount
37	120 SY	Seeding and Fertilizer by Hand Per Square Yard	\$ _____	\$ _____
38	T & M	Roadside Landscape Restoration Per Time and Materials	\$5,000.00	\$5,000.00
39	1,810 LF	Cement Concrete Traffic Curb and Gutter Per Linear Foot	\$ _____	\$ _____
40	110 LF	Cement Concrete Parking Lot Curb Per Linear Foot	\$ _____	\$ _____
41	190 SY	Cement Concrete Driveway Entrance Per Square Yard	\$ _____	\$ _____
42	1,100 SY	Cement Concrete Sidewalk Per Square Yard	\$ _____	\$ _____
43	20 LF	City of Pullman Handrail Per Linear Foot	\$ _____	\$ _____
44	1 LS	Retail Center Parking Lot Illumination System Modifications, Complete Per Lump Sum	\$ _____	\$ _____
45	1 LS	Traffic Signal System, Bishop Boulevard and Klemgard Avenue, Complete Per Lump Sum	\$ _____	\$ _____
46	1 LS	Permanent Signing Per Lump Sum	\$ _____	\$ _____
47	1 LS	Removing Pavement Striping / Traffic Markings, Complete Per Lump Sum	\$ _____	\$ _____
48	1 LS	New Pavement Striping / Traffic Markings, Complete Per Lump Sum	\$ _____	\$ _____
49	45 SY	Segmental Block Retaining Wall Per Square Yard	\$ _____	\$ _____
50	1 LS	Relocate Existing Bus Shelter, Complete Per Lump Sum	\$ _____	\$ _____
51	1 LS	Relocate Existing Holiday Inn Express Electric Sign, Complete Per Lump Sum	\$ _____	\$ _____
BID TOTAL:			\$ _____	

BID PROPOSAL SIGNATURE SHEET

Project: **Bishop Boulevard / Klemgard Avenue Traffic Signal Project**

Contract No.: **11-17**

BIDDER _____

NAME: _____

ADDRESS: _____

CITY: _____ COUNTY: _____ STATE: _____

ZIP CODE _____

TELEPHONE NO.: (____) _____ FAX NO.: (____) _____

TAX IDENTIFICATION NO. _____

WASHINGTON STATE CONTRACTOR'S LICENSE NO. _____

EXPIRES: _____

UBI NO. _____

BIDDER IS A: (CHECK ONE)

_____ CORPORATION

_____ PARTNERSHIP

_____ INDIVIDUAL DOING BUSINESS AS _____

BID SUBMITTED FOR BIDDER BY:

Signature _____ Title _____ Date _____

NOTE:

- (1) If the bidder is a co-partnership, so state, giving firm name under which business is transacted.
- (2) If bidder is corporation, this proposal must be executed by its duly authorized officers.
- (3) Documents required at bid time:
 - (a) Signed Bid Proposal
 - (b) Qualification of Bidder form
 - (c) Bid Bond
 - (d) Subcontractor List

QUALIFICATION OF BIDDER

Project: **Bishop Boulevard / Klemgard Avenue Traffic Signal Project**

Contract No.: **11-17**

If the above contract is awarded to our company, the following persons will be authorized to sign change orders, progress payments and similar documents for the company: (names and positions)

The Contractor's superintendent at the job site will be (give full name)

The last three projects completed or substantially completed by our company involving similar construction work are as follows:

1. Project Name: _____
Dollar amount of Contract: ___ \$ _____
Owner: _____
Owner's Representative _____ Phone _____
Contractor's Superintendent on this project _____
Brief Description of Project Scope: _____

2. Project Name: _____
Dollar amount of Contract: ___ \$ _____
Owner: _____
Owner's Representative _____ Phone _____
Contractor's Superintendent on this project _____
Brief Description of Project Scope: _____

3. Project Name: _____
Dollar amount of Contract: ___ \$ _____
Owner: _____
Owner's Representative _____ Phone _____
Contractor's Superintendent on this project _____
Brief Description of Project Scope: _____

Company _____

Title of Person completing this form _____

Signature _____ Date _____ Phone _____

BID BOND FORM

Herewith find deposit in the form of a certified check, cashiers check, cash, or bid bond in the amount of \$ _____ which amount is not less than five percent of the total bid.

Sign Here: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto the CITY OF PULLMAN, as Obligee, in the penal sum of _____, dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for **Contract No. 11-17, Bishop Boulevard / Klemgard Avenue Traffic Signal Project** according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for the faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure so to do, pay the forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS _____ DAY OF _____, 20____.

Principal

Surety

_____, 20____

Received return of deposit in the sum of \$ _____

Signed: _____

CONTRACT

This contract made and entered into this _____ day of _____, 20___, by and between the City of Pullman, a municipal corporation, Whitman County, Washington, hereinafter called "Owner," and _____, a _____ doing business as _____ of _____, County of _____ State of _____, hereinafter called "Contractor."

WITNESSETH: It is hereby mutually understood and agreed by and between the Owner and the Contractor as follows:

I. CONTENTS OF CONTRACT: The contract shall consist of:

- (1) this document, including amendments thereto;
- (2) the bid proposal;
- (3) call for bids;
- (4) the City of Pullman Standard Construction Specifications, 2012 Edition;
- (5) plans for the project (includes maps, plats, blueprints and any other drawings and any printed or written explanation thereof);
- (6) special provisions for the project prepared by the Engineer.

II. WORK TO BE PERFORMED: Contractor shall commence and complete the construction described as follows:

Contract No. 11-17, Bishop Boulevard / Klemgard Avenue Traffic Signal Project, hereinafter called "the project," and all extra work in connection therewith. The Contractor shall perform the contract in accordance with terms and conditions set forth in this contract.

III. PRICE: Contractor shall perform the contract for the unit prices stated in the bid proposal for the several respective items of work for an estimated sum of _____, and at the Contractor's own proper cost and expense furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories, and services necessary to complete the said project in accordance with the conditions and prices stated in this contract.

IV. COMPLIANCE WITH STATE LAWS: It is understood and agreed that all statutes of the State of Washington relating to public works projects applicable hereto shall be fully complied with and fulfilled by the Contractor, and upon Contractor's failure to do so the Owner may terminate this contract as provided for under the laws of the State of Washington and the terms of this contract.

- V. PAYMENT: The Owner agrees to pay the Contractor in current funds for the performance of the contract, subject to additions and deductions, as provided in the Standard Specifications of the contract, and for any extra work as provided for pursuant to Section 1-09.4 of the Standard Specifications. Owner also agrees to make payments on account of performance of the contract as provided in Section 1-09.9 of the Standard Specifications.

- VI. COMMENCEMENT OF WORK: The Contractor hereby agrees to commence work under this contract promptly upon receipt of written "Notice to Proceed" from the Owner or on the date specified in the "Notice to Proceed" and to fully complete the project within the time shown in the Special Provisions.

- VII. LIQUIDATED DAMAGES: If the Contractor fails to complete the work within the time specified in Section VI, the Contractor shall pay liquidated damages as provided in Section 1-08.9 of the Standard Specifications.

By executing this document below, the parties to this contract signify that they have read the contents of this contract, understand it and agree to be bound by its terms.

DATE: _____, 20__

DATE: _____, 20__

CONTRACTOR:

OWNER:

(Name of Organization)

CITY OF PULLMAN

(President-Individual)

Mayor

ATTEST:

ATTEST:

Secretary

Finance Director

Washington Contractor's

License # _____

**CONTRACT BOND
BOND TO CITY OF PULLMAN**

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, _____
as principal, and _____, a corporation organized and existing
under the laws of the State of _____, as a surety corporation, and qualified under
the laws of the State of Washington to become surety upon bonds of contractors with municipal
corporations, as surety, are jointly and severally held and firmly bound to the City of Pullman in the
penal sum of \$_____ for the payment of which sum on demand we bind ourselves
and our successors, heirs, administrators or personal representatives, as the case may be.

This obligation is entered into in pursuance of the statutes of the State of Washington, the
Ordinances of the City of Pullman.

Dated at _____, Washington, this _____ day of _____, 20__.

Nevertheless, the conditions of the above obligation are such that:

WHEREAS, under and pursuant to Resolution No. R- -14 passed by the City Council of the
City of Pullman, on _____, the City of Pullman has let or is about to let to the said
_____, the above bonded Principal, a certain contract, the said
contract being numbered **11-17** and providing for **Bishop Boulevard / Klemgard Avenue Traffic
Signal Project**, which contract is referred to herein and is made a part hereof as though attached hereto),
and

WHEREAS, the said Principal has accepted, or is about to accept, the said contract, and
undertake to perform the work therein provided for in the manner and within the time set forth;

NOW, THEREFORE, if the said _____
shall faithfully perform all of the provisions of said contract in the manner and within the time therein
set forth, or within such extensions of time as may be granted under said contract, and shall pay all
laborers, mechanics, subcontractors and material men, and all persons who shall supply said principal or
subcontractors with provisions and supplies for the carrying on of said work, and shall in all respects
faithfully perform said contract according to law then this obligation shall be void, but otherwise it will
remain in full force and effect.

Contractor

By: _____
Agent for Surety

By: _____

Mailing Address of Agent for Surety:

Title: _____

NOTE: THIS QUESTIONNAIRE MUST BE COMPLETED AND ATTACHED TO CERTIFICATE OF INSURANCE.

INSURANCE COVERAGE QUESTIONNAIRE

FOR: _____
(Name of Insured)

Project Name/Number: **Bishop Boulevard / Klemgard Avenue Traffic Signal Project / 11-17**
Project Owner: **City of Pullman**

Are the following coverage or conditions in effect?	Yes	No
The policy is written on ISO Commercial General Liability form CG 00 01 and provides coverage of liability arising from premises, operations, independent contractors, personal injury and advertising injury, and liability assumed under an insured contract.		
Products completed operations coverage		
Stop gap liability or equivalent coverage		
Endorsed to provide the Aggregate Per Project Endorsement ISO form CG 25 03 11 85		
X, C, U hazards not excluded		
City named as an additional insured using ISO Additional Insured Endorsement CG 20 10 10 01 and CG 20 37 10 01 or equivalent		

Deductibles: GL \$ _____ AL \$ _____ Excess \$ _____

Insurers' Best Rating(s): GL _____ AL _____ Excess _____

This Questionnaire is issued as a matter of information. This Questionnaire is not an insurance policy and does not amend, extend, or alter the coverage afforded by the policies indicated on the attached Certificate of Insurance.

Agency or Brokerage

Completed by (type or print)

Address

Completed by (signature)

Name of Person to be Contacted

Telephone Number

CITY OF PULLMAN STANDARD CONSTRUCTION SPECIFICATIONS

2012 Edition

Adopted by Ordinance #13-8

SECTION A: DEFINITIONS

1. "City of Pullman Standard Construction Specifications" means the 2012 Standard Specifications for Road, Bridge, and Municipal Construction published by the Washington State Department of Transportation as they are amended in Section C: Supplemental Specifications below and the City of Pullman Standard Drawings.

SECTION B: HOW TO OBTAIN COPIES

1. The *2012 Standard Specifications* can be purchased from the Washington State Department of Printing website at www.prt.wa.gov.
2. The *2012 Standard Specifications* can be also downloaded, free of charge, from the following web page at www.wsdot.wa.gov/publications/manuals/m41-10.htm.
3. Copies of the Supplemental Specifications and Standard Drawings may be obtained from the Public Works Dept. office in Pullman City Hall, 325 S.E. Paradise Street, Pullman, WA 99163 or from the following web page at <http://www.pullman-wa.gov/departments/public-works/engineering/formsapplicationsinformation>.

SECTION C: SUPPLEMENTAL SPECIFICATIONS

1. Division 1 of the Standard Specifications is revised and augmented as follows:
 - (a) Amend the definition of "contracting agency" in Section 1-01.3 as follows:

"Contracting Agency" is the City of Pullman.
 - (b) Delete the following phrase from the first sentence of the first paragraph of Section 1-02.6

"or electronic forms that the bidder has been authorized to access"
 - (c) Delete the third sentence of Section 1-02.7 and replace the first sentence of Section 1-02.7 Bid Deposit with the following:

When bids are anticipated to exceed \$100,000, or \$200,000 for multi-craft or trade projects, as estimated by the Engineer, a deposit of at least five percent (5%) of the total bid shall accompany each bid.
 - (d) Delete the fourth and fifth paragraphs of Section 1-02.9
 - (e) Replace the second sentence of the second paragraph and the third and fourth paragraphs of Section 1-02.10 with the following:

Faxed and e-mailed requests to revise or supplement a Bid Proposal will not be accepted.

- (f) Insert the following as a new second paragraph to 1-05.10 Guarantees:

The Contractor shall indemnify and hold the City of Pullman harmless from any damage or expense by reason of failure of performance as specified in said contract or from defects appearing or developing in the material or workmanship provided or performed under said contract within a period of one year after its acceptance thereof by the City of Pullman.

- (g) Delete Section 1-06.1(4).

- (h) Add the following to Section 1-07.7(1) Load Limits:

When the gross vehicle weight of a truck delivering material to the job site exceeds the gross vehicle load limit for which the vehicle is licensed by more than 1000 pounds, as determined by scale tickets, the City will not pay for that material which exceeds the load limit.

- (i) Replace the last paragraph of Section 1-07.14 Responsibility for Damage with the following:

Indemnification / Hold Harmless

The Contractor shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with the performance of this contract, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this contract is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this contract.

- (j) Add the following to Section 1-07.17 Utilities and Similar Facilities:

The Palouse Empire Underground Coordinating Council provides a one call number for requesting location of underground utilities. The number is 1-800-424-5555.

- (k) Replace Section 1-07.18 Public Liability and Property Damage Insurance with the following:

1.07.18 Insurance Requirements For Contractors

BIDDERS' ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW. IT IS HIGHLY RECOMMENDED THAT BIDDERS CONFER WITH

THEIR RESPECTIVE INSURANCE CARRIERS OR BROKERS TO DETERMINE IN ADVANCE OF BID SUBMISSION THE AVAILABILITY OF INSURANCE CERTIFICATES AND ENDORSEMENTS AS PRESCRIBED AND PROVIDED HEREIN. IF AN APPARENT LOW BIDDER FAILS TO COMPLY STRICTLY WITH THE INSURANCE REQUIREMENTS, THAT BIDDER MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, their agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

No Limitation.

Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

(1) Minimum Scope of Insurance

Contractor shall obtain insurance of the types described below:

- (aa) Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
- (bb) Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract. The Commercial General Liability insurance shall be endorsed to provide the Aggregate Per Project Endorsement ISO form CG 25 03 11 85 or an equivalent endorsement. There shall be no endorsement or modification of the Commercial General Liability insurance for liability arising from explosion, collapse or underground property damage. The City shall be named as an insured under the Contractor's Commercial General Liability insurance policy with respect to the work performed for the City using ISO Additional Insured Endorsement CG 20 10 10 01 and Additional Insured-Completed Operations Endorsement CG 20 37 10 01 or substitute endorsements providing equivalent coverage.
- (cc) Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

(2) **Minimum Amounts of Insurance**

Contractor shall maintain the following insurance limits:

- (aa) Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
- (bb) Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate and a \$2,000,000 products-completed operations aggregate limit.

(3) **Other Insurance Provisions**

The Contractor's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance as respect the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Contractor's insurance shall not contribute with it.

(4) **Contractor's Insurance for Other Losses**

The Contractor shall assume full responsibility for all loss or damage from any cause whatsoever to any tools, Contractor's employee owned tools, machinery, equipment, or motor vehicles owned or rented by the Contractor, or the Contractor's agents, suppliers or contractors as well as to any temporary structure, scaffolding and protective fences.

(5) **Waiver of Subrogation**

The Contractor and the City waive all rights against each other, any of their Subcontractors, Sub-subcontractors, agents and employees, each of the other, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to the Insurance Requirements Section of this Contract or other insurance applicable to the work. The policies shall provide such waivers by endorsement or otherwise.

(6) **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

(7) **Verification of Coverage**

Contractor shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the Automobile Liability and Commercial General Liability insurance of the Contractor before commencement of the work. A completed Insurance Coverage Questionnaire shall be attached to the Certificate of Insurance.

(8) Subcontractors

The Contractor shall have sole responsibility for determining the insurance coverage and limits required, if any, to be obtained by subcontractors, which determination shall be made in accordance with reasonable and prudent business practices.

(9) Notice of Cancellation

The Contractor shall provide the City and all Additional Insureds for this work with written notice of any policy cancellation, within two business days of their receipt of such notice.

(10) Failure to Maintain Insurance

Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days notice to the Contractor to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Contractor from the City.

- (l) Insert the following before the first sentence of the third paragraph in Section 1-09.6(3) Force Account for Equipment:

Rental rates for equipment that is locally available shall be established at prevailing local rates.

- (m) Insert the following after the second sentence in Section 1-09.6(5) Force Account Mobilization:

The City will pay mobilization and demobilization to the nearest piece of equipment available from any source. If the Contractor chooses to bring in his own equipment from a greater distance, mobilization-demobilization shall be compensated based on the distance to the nearest equipment available.

- (n) In Section 1-09.11(3) replace “State of Washington” and “State” with “City of Pullman” and replace “Thurston County” with “Whitman County”.

- (o) Replace Section 1-09.13 with the following:

Claims submitted in accordance with Section 1-09.11 not resolved through negotiation shall be resolved through litigation with venue in Whitman County.

- (p) Insert the following initial sentence to 1-10.2(1)B:

This section shall apply only when included by the Contract Special Provisions

2. Division 2 of the Standard Specifications is revised and augmented as follows:

- (a) The compaction requirements of Sections 2-03.3(14)C; 2-03.3(14)I; 2-06.3 and 2-09.3 shall be amended as follows:

Earth embankments and backfill of excavations not under pavement or other structures shall be compacted to 80 percent of maximum density as provided in Section 2-03.3(14)D Amended.

Earth embankments and backfill of all excavations under pavements or other structures shall be compacted to 90 percent of maximum density as provided in Section 2-03.3(14)D Amended to 6 inches below subgrade. The zone from subgrade to 6 inches below subgrade shall be compacted to 95 percent of maximum density as provided in 2-03.3(14)D Amended.

All base materials above subgrade shall be compacted to 95 percent of maximum density as provided in Section 2-03.3(14)D Amended.

In-place density and moisture content shall be determined by nuclear densometer.

- (b) Replace Section 2-03.3(14)D Compaction and Moisture Control Tests with the following:

Maximum density and optimum moisture content will be determined using ASTM test method D1557 (modified proctor).

- (c) Add new Section 2-07.2 Construction Water as follows:

The Contractor may obtain water from a City fire hydrant (at no cost on City funded projects), by requesting a special hydrant outlet a minimum of 48 hours in advance. The outlet shall be used only by the Contractor and only for the project specified. The Contractor shall not operate the fire hydrant. Flow control shall be accomplished by means of the outlet valve provided. The Contractor shall furnish hoses and other transport equipment.

- (d) Replace the text of “Controlled Density Fill (CDF) or Controlled Low-Strength Material (CLSM) in Section 2-09.3(1)E Backfilling with the following:

Controlled density fill shall meet the following requirements:

<u>Ingredients</u>	<u>Amount Per Cubic Yard</u>
Portland cement	94 pounds
Aggregate class 1 or 2	3,300 pounds
Entrained air	8 percent minimum
Water	20 gallons maximum

3. Division 3 of the Standard Specifications is revised and augmented as follows:

- (a) Replace the first three paragraphs of Section 3-01.5 Measurement with the following:

For payment purposes, all crushed, screened, or naturally occurring materials that are to be paid for by the ton shall be measured in accordance with Section 4-04.4.

4. Division 4 of the Standard Specifications is revised and augmented as follows:

(a) Replace the first paragraph of Section 4-04.4 Measurement with the following:

Crushed surfacing top course, base course, ballast, and gravel base, when processed at a central plant, will be measured by the ton.

5. Division 5 of the Standard Specifications is revised and augmented as follows:

(a) Add the following to Section 5-04.3 Construction Requirements:

Hot mix asphalt shall be ½" Commercial mix unless specified otherwise in the contract.

An approved paving contractor shall perform all asphalt paving and patching. Utility covers, except for survey monuments, located in the pavement shall be adjusted to final grade before the final lift of pavement is placed.

(b) Delete the second paragraph of 5-04.3(3).

(c) Delete 5-04.3(3)A.

(d) Add the following to Section 5-04.3(12) Joints:

At the end of the workday, there shall be no longitudinal joint in the wearing course with an exposed length in excess of 25 feet.

(e) Add the following to Section 5-05.3 Construction Requirements:

An approved paving contractor shall perform all concrete paving and patching.

(f) Replace Section 5-05.3(13) Curing with the following:

Immediately after finishing operations have been completed and as soon as marring of the concrete will not occur, the entire surface of the newly placed concrete shall be coated with a cure and seal product as specified in 6-02.3(11) as amended herein.

6. Division 6 of the Standard Specifications is revised and augmented as follows:

(a) Replace Section 6-02.3(2)B Commercial Concrete with the following:

Commercial concrete shall meet the following requirements:

Coarse aggregate grading #5
564 pounds per cubic yard minimum cement content
0.49 maximum water/cement ratio
4-inch maximum slump
5 – 8 percent entrained air measured at the job site
3,000 psi minimum 28-day compressive strength

The Contractor may add up to 75 pounds per cubic yard of fly ash to the mix. Fly ash shall not be substituted for Portland cement. The Contractor shall provide a mix design to the Engineer for approval a minimum of 7 days prior to proposed use.

- (b) Replace Section 6-02.3(11) Curing Concrete with the following:

Immediately after finishing and/or the disappearance of the “sheen” of surface water, concrete surfaces shall be uniformly and completely coated with an approved, clear, acrylic copolymer curing and sealing compound such as Rez-Seal 800 (14% solids minimum) manufactured by Euclid Chemical Co. in accordance with manufacturer’s recommendations. To be approved, alternate products shall be the same product type and provide the same deposition of solids and performance.

7. Division 7 of the Standard Specifications is revised and augmented as follows:

- (a) The compaction requirements of Division 7 shall be amended pursuant to Section C:2.(a) of these Standard Construction Specifications.

- (b) Replace the last three paragraphs of Section 7-01.2 Materials with the following:

Drainpipes up to 27 inches in diameter shall be solid wall PVC pipe that meets the requirements of 9-05.12(1), unless specifically approved otherwise by the Engineer. Larger diameter pipes shall be as specified by the Engineer.

- (c) Add the following to Section 7-09.2 Materials:

Pipe for water mains shall be ductile iron or PVC conforming to Sections 9-30.1(1) and 9-30.1(5), respectively, unless specifically approved otherwise by the Engineer. Restrained joints shall be used only with approval by the Engineer.

- (d) Replace the last sentence of the first paragraph of Section 7-09.3(23) Hydrostatic Pressure Test with the following:

The City will provide necessary labor, test pump, gauges and water to perform pressure tests of all water pipelines. The Contractor shall provide excavations, thrust blocking, test plugs, pump and air relief connections, traffic control and all other items needed to meet the requirements of this section. The Contractor shall have all pipe, fittings, and thrust block installation sufficiently complete to allow the testing to occur, prior to calling out the Engineer to perform the pressure test. The Contractor shall request pipe testing a minimum of 48 hours in advance.

- (e) Add the following after the second sentence of the eleventh paragraph of Section 7-09.3(23) Hydrostatic Pressure Test:

If the utility pipeline being tested fails the initial pressure test, the Contractor shall reimburse the City for labor, material, and equipment costs for additional pressure testing and additional flushing of water pipelines on a time and material basis.

- (f) Replace Section 7-09.3(24) Disinfection of Water Mains with the following:

7-09.3(24) Disinfection of Water Mains

New water lines and extensions of water lines in excess of 20 feet in length shall satisfactorily pass bacteriological tests before the new mains or extensions are connected to the existing water system. Main extensions shorter than 20 feet and sections of pipe and fittings used to connect new water mains to the existing water system shall be soaked 24 hours in a 50 mg/l chlorine solution. In addition the connecting pipe and fittings shall be swabbed with a calcium hypochlorite paste immediately before they are installed.

The Contractor shall dose all lengths of pipe with dry, high test calcium hypochlorite (65-70% chlorine) as the pipeline is constructed. The dosage rate in grams of 65% test calcium hypochlorite per 20 foot length of pipe equals

$$0.008431 \times d^2$$

in which "d" is the diameter in inches.

The Contractor shall request pipe testing a minimum of 48 hours in advance. The City will provide necessary equipment and labor, water and materials to flush and perform bacteriological tests of all water pipelines. Disinfection, flushing and testing shall be performed as recommended by the American Water Works Association. The Contractor shall provide excavations, thrust blocking, traffic control, plugs, caps, fittings, and the other items needed to meet the requirements of this section. The Contractor shall provide a tank truck to receive and dispose of flushing water if a sanitary sewer is not readily available.

If the utility pipeline being tested fails the initial bacteriological test, the Contractor shall reimburse the City for labor, material, and equipment costs for additional bacteriological testing and additional flushing of water pipelines on a time and material basis. The Engineer may order a second bacteriological test at his discretion 48 hours after final connections are made and before the new line is placed in service. The City will pay the cost of this test. If this test fails, costs of flushing and additional tests shall be the responsibility of the Contractor.

- (g) Delete Sections 7-09.3(24)A through 7-09.3(24)O.

- (h) Replace the first paragraph of Section 7-17.2 Materials with the following:

Pipe for sewer mains shall be ductile iron sewer pipe or solid wall PVC pipe conforming to Sections 9-05.13 and 9-05.12, respectively, unless specifically approved otherwise by the Engineer.

8. Division 9 of the Standard Specifications is revised and augmented as follows:

- (a) The requirements of Sections 9-02.2(1) and 9-02.2(2) are waived on non-federally funded projects using less than 3000 tons of asphalt concrete pavement.
- (b) The gradation for Top Course and Keystone in Section 9-03.9(3) Crushed Surfacing is replaced with the following:

<u>Sieve Size</u>	<u>Percent Passing</u>
1"	100
¾"	94-100
¼" square	55-75
U.S. No. 40	8-24
U.S. No. 200	10.0 max.
% Fracture	75 min.
Sand Equivalent	35 min.

- (c) Replace Section 9-03.12(3) Gravel Backfill for Pipe Zone Bedding with the following:

Gravel backfill for pipe bedding shall meet the requirements for crushed surfacing top course in Section 9-03.9(3) Amended.

- (d) Replace Section 9-05.1(5) PVC Drain Pipe, Couplings and Fittings with the following:

PVC pipe for drains shall meet the requirements of Section 9-05.12.

- (e) Add the following sentence to 9-30.2(1) Ductile Iron Pipe:

All fittings and valves shall be mechanical joint unless otherwise shown on the construction drawings.

- (f) Replace the last sentence of 9-30.3(8) with the following:

Tapping sleeves shall be stainless steel.

- (g) Replace the last paragraph of section 9-30.6(4) Service Fittings with the following:

Fittings used for polyethylene tubing shall be compression type with stainless steel liners.

**CITY OF PULLMAN
STANDARD ABBREVIATIONS**

@	at	L.S.	lump sum
A.C.	asphalt concrete	Lt.	left
ACP	asphalt concrete pavement	Max.	maximum
Aggr.	aggregate	MH	manhole
Asph.	asphalt	Min.	minimum
Bldg.	building	N	north
BM	benchmark	No.	number
Bng.	bearing	Pavt.	pavement
CL	centerline	PC	point of curvature
CAP	corrugated aluminum pipe	PCC	portland cement concrete
C.B.	catch basin	PI	point of intersection
C.F.	cubic foot	PT	point of tangency
Cl.	class	Rt.	right
CI.	cast iron	S	south
CMP	corrugated metal pipe	San.	sanitary
Conc.	concrete	S.D.	storm drain
Const.	Construct, construction	Sdwb.	sidewalk
CSTC	crushed surfacing top course	S.F.	square foot
CSBC	crushed surfacing base course	Sht.	sheet
C.Y.	cubic yard	Spec.	specifications
Dr.	drive	St.	street
Drwy.	driveway	Sta	station
Dwg.	drawing	Std.	Standard
E	east	S.Y.	square yard
Ea.	each	T.	ton
Elev.	elevation	Typ.	typical
EOP	edge of pavement	VC	vertical curve
Exc., Excav.	excavate; excavation	W	west
Exist.	existing	Yd.	Yard
FH	fire hydrant		
Fin.	finish; finished		
Ft.	foot		
HMA	hot mix asphalt		
In.	inch		
Inv.	invert		
Jt.	joint		
Lb.	pound		
L.F.	linear foot		

CITY OF PULLMAN GENERAL SPECIFICATIONS

1. Scope of Contract

The work under this contract includes roadway widening and a traffic signal consisting of the construction of approximately 1365 square yards of asphalt pavement section, 1810 linear feet of curb and gutter, 1025 square yards of sidewalk, storm sewer treatment and disposal, site demolition / removals, utility adjustments, driveway reconstruction, property restoration, signage, striping, intersection traffic signal and other related work.

2. Contract Time

Work under this contract may begin at anytime following the issuance of the Notice to Proceed. All work shall be totally completed by September 4, 2015. See Special Provision Section 1-08.5 Time of Completion for additional schedule information.

3. Sales Tax

This project is exempt from sales tax under Washington Administrative Code 458-20-171. Therefore, the Owner will not pay retail sales tax in addition to the unit prices bid for all bid items. In the event that only a portion of the bid items are subject to sales tax the Owner will pay retail sales tax on those items only.

4. Permits

The Owner has obtained the following permit(s) for this project.

- SEPA Permit
- City of Pullman Substantial Development Permit
- City of Pullman Critical Areas and Resources
- Washington State Department of Archeology and Historical Preservation (DAHP)

The Contractor is required to comply with the conditions of these permits as part of this contract.

The Contractor shall obtain all required permits, state electrical permit, and shall pay all related fees.

5. Construction Water and Electricity

The Owner, at no cost to the contractor, will furnish water for construction requirements. The Contractor must obtain water from a hydrant tap to be furnished and installed by the City of Pullman. Under no circumstances shall the contractor or sub-contractor attempt to obtain water directly from a hydrant or operate the hydrant nut. The contractor must give the Engineer a minimum of 2 days advance notice prior to the date that the water will be required. The Contractor shall be responsible for providing electrical power to the site for construction purposes.

6. Construction Staking

The Contractor will provide construction staking. Information on the benchmarks and survey control points established for the project shall be provided to the City at the beginning of the work. The Contractor shall provide the City with copies of all survey cut sheets utilized on the project and shall include references to the survey control that has been established for the work.

7. Erosion and Sedimentation Control (ESC)

All work under this contract involving the movement of earth shall be in compliance with the ESC Special Provisions. All sediment is to be kept on site to the maximum extent practicable. Erosion control measures shall be installed prior to construction. Additional erosion control measures may be required if site conditions change. During construction the Contractor shall:

Report sediment discharges from the site to the Engineer.

Clean tracked-out sediment from streets daily.

Prevent concrete washout entering streets and storm drains.

Inspect and perform needed maintenance on all erosion control measures daily.

Cover all exposed soil using hydro-seed, hydro-mulch, straw mulch or approved equal within 5 working days after grading is completed.

Permanently stabilize disturbed soils with the specified seeding or other landscaping.

Remove all temporary erosion control measures at project completion with concurrence of the Engineer.

8. Material Testing

The City of Pullman Engineering Division will provide material testing. Initial tests will be at no cost to the Contractor. Repeat testing necessary due to failure of the Contractor's work to pass the initial test will be billed against the amount due the Contractor for the project and will be withheld from the pay estimates.

9. Labor and Industry Fees

The Contractor will be required to obtain "Statement of Intent to Pay Prevailing Wage" and "Affidavit of Wages Paid" forms from the State Department of Labor and Industries for his company and for all subcontractors. Copies of these forms must be submitted to the Engineer in a timely manner so as not to delay payments to the Contractor. All fees for L & I forms are the Contractor's responsibility and no separate reimbursement to the Contractor by the Owner will be made.

10. Prevailing Wages

The state wage rates incorporated in this contract have been established by the Industrial Statistician at the Department of Labor and Industries. Laborers, workmen, or mechanics shall not be paid less than the hourly minimum rate of wage determined to be the prevailing rate of wage at the time of bid opening. This requirement shall apply to the performance of this contract by the Contractor, subcontractor, or any other person doing the work contemplated. A copy of the wage rates currently in effect and assumed to be in effect at the time of bid opening is included in these specifications.

11. Subcontractor List

The following information shall be provided on the subcontractor list included in these documents and submitted with the bid:

- a. DBE certificate number of contractor, if applicable.
- b. Subcontractors, listing each subcontractor who will perform work that amounts to more than 10% of the contract price.
- c. DBE certificate number of subcontractor, if applicable.
- d. UBI of subcontractor
- e. The specific items of work those subcontractors will perform on the contract.
- f. The specific items of work that will be performed by the bidder on the contract.

A proposal will be considered irregular and will be rejected if the bidder does not provide this list as part of the proposal when submitting the bid.

12. Increased or Decreased Quantities

The quantities in the bid proposal for the following bid items are for estimating purposes only. Actual quantities may increase or decrease more than 25 percent of that shown in the bid proposal. For these items, the contractor shall not be entitled to an adjustment of the original bid prices when the final quantities are more or less than 25 percent of that shown in the bid proposal.

Bid Item No. 4	Construction Signs, Class A
Bid Item No. 5	Traffic Control Supervisor
Bid Item No. 6	Flagger and Spotter
Bid Item No. 12	Unsuitable Foundation Excavation incl. Haul
Bid Item No. 13	Construction Geogrid for Soil Stabilization
Bid Item No. 14	Ballast
Bid Item No. 15	Crushed Surfacing Base Course
Bid Item No. 16	Crushed Surfacing Top Course
Bid Item No. 22	Controlled Density Fill for Pipe Backfill
Bid Item No. 35	Sod Installation
Bid Item No. 36	Topsoil, Type C
Bid Item No. 37	Seeding and Fertilizer by Hand

13. Disposal Sites

The Contractor shall furnish waste sites. Waste sites shall be licensed for the material being disposed of by the authority having jurisdiction.

14. Maintenance of Existing Utilities

The Contractor shall protect existing improvements and take every reasonable precaution to maintain existing utilities in uninterrupted service. When construction activity results in interruption of utility service, the Contractor shall immediately repair, bypass, reconstruct, or reconnect the damaged utility. Waterline repairs shall be made or directly supervised by City staff at the Engineer's discretion.

The Contractor is alerted to the existence of Chapter 19.122 RCW, a law relating to underground utilities. Any cost to the Contractor incurred, as a result of this law, shall be at the Contractor's expense.

No excavation shall begin until all known facilities in the vicinity of the excavation area have been located and marked.

The Contractor shall call the Utility Location Request Center (One Call Center) for field location, no less than two nor more than ten business days before the scheduled date for commencement of excavation that may affect underground utility facilities. A business day is defined as any day other than Saturday, Sunday, or a legal local, State, or Federal holiday. The telephone number for the One Call Center for this project is 1-800-424-5555.

15. Disadvantaged Business Enterprise Data

The Bidder shall provide disadvantaged, minority, and women's business enterprise (DBE) status and certification numbers for itself and subcontractors on the Proposed Subcontractor List in the spaces provided. The successful Bidder shall provide the DBE status, certification numbers, and dollar amount paid to all subcontractors at project close-out on the form provided by the City.

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SPECIAL PROVISIONS

The following Special Provisions supersede any conflicting provisions of the 2012 Standard Specifications for Road, Bridge, and Municipal Construction and the foregoing amendments to the Standard Specifications and are made a part of this contract.

1-01 DEFINITIONS AND TERMS

1-01.2(1) Associations and Miscellaneous

Section 1-01.2(1) shall be supplemented as follows:

AHS	Archeological and Historical Services
BMP	Best Management Practice
CAO	Critical Areas Ordinance
CESCL	Certified Erosion and Sediment Control Lead
COE	United States Army Corp. of Engineers
CWA	Clean Water Act
DAHP	Department of Archeology and Historic Preservation
ESC	Erosion and Sediment Control Plans
GLO	General Land Office
L & I	Washington State Department of Labor & Industries
SWPPP	Storm Water Pollution Prevention Plan
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WSU	Washington State University

1-01.2(2) Items of Work and Units of Measurement

Section 1-01.2(2) shall be supplemented as follows and as shown on the plans:

Abnd	abandoned
Act.	actual
B.P.	buried power
B.T.	buried telephone
BW	bottom of wall
C	centerline
CB	catch basin
CAP	corrugated aluminum pipe
Conif.	coniferous tree
Dec.	deciduous tree
DI	ductile iron pipe
Dr.	drive
E	east
EA.	each
EG	existing ground
EL	elevation
EP	edge of pavement
FG	finish ground elevation
FH	fire hydrant

F.O.	fiber optics
Gas	buried gas
G	grade (FT/FT); gas
ga.	gauge
GT	lip of gutter elevation
GV	gate valve
Gal.	gallon
IE	invert elevation
Irr.	Irrigation
IRCV	irrigation control valve
L	length
LP	light pole
MH	manhole
N.A.	not applicable
NE	northeast
No.	number
NW	northwest
NTS	not to scale
O.C.	on center
PLF	pound per linear foot
PP	power pole
PRC	point of reverse curvature
R	radius
ROW	right-of-way
SD	storm sewer
SE	southeast
SI	station intersection
S.R.	State route
SS	sanitary sewer
SW	southwest
T	tangent
TBM	temporary bench mark
Tel.	telephone
T.V.	television
TW	top of wall
UT	Utility vault
V	volt
W	west
WP	witness post
WV	water valve

1-01.3 Definitions

Section 1-01.3 shall be revised as follows:

Owner – Contracting Agency that is responsible for the execution and administration of the contract shall be the City of Pullman and its authorized representatives.

Contact Person / Engineer – Contracting Agency authorized representative that is responsible for the execution and administration of the contract.

1-02 BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete Section 1-02.1

1-02.2 Plans and Specifications

Delete Section 1-02.2 and replace with the following:

Bidding documents are available on compact disk only from the Engineering Division of the Pullman Public Works Department, Attention: Bethany Johnson, City Hall, 325 SE Paradise Street, Pullman, WA 99163, at no cost.

After award of the contract, five (5) sets of contract documents will be issued to the Contractor without charge. Additional contract documents may be purchased at the cost of reproduction.

1-02.4(1) General

Section 1-02.4(1) shall be supplemented as follows:

Any person contemplating the submission of a proposal shall have thoroughly examined all of the various parts of these documents, and should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the Engineer, in writing, at least six (6) working days prior to bid opening an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing, in the form of addenda to the documents, and will be furnished to all Bidders receiving a set of the documents, who shall indicate receipt of same in the space provided on the proposal form. The Owner will not be responsible for any other explanation or interpretation of said documents.

PRE-BID CONFERENCE

A non-mandatory pre-bid conference for all interested bidders will be held on December 3, 2014 at 1:00 p.m. local time at the City of Pullman Public Works Large Conference Room, 325 SE Paradise, Pullman, WA, 99163.

1-02.6 Preparation of Proposal

Section 1-02.6 shall be supplemented as follows:

A. Unit Price:

When the proposal for the work is to be submitted on a unit price basis, unit price proposals will be accepted on all items of work set forth in the proposal, except those designated to be paid for as a lump sum.

The estimate of quantities of work to be done is tabulated in the proposal and, although stated with as much accuracy as possible, is approximate only and is assumed solely for the basis of calculation upon which the award of contract shall be made. Payment to the Contractor will be made on the measurement of the work actually performed by the Contractor as specified in the Contract

Documents. The Owner reserves the right to increase or diminish the amount of any class of work as may be deemed necessary, unless otherwise specified in the “Supplemental Conditions.”

B. Lump Sum

When the proposal for the work is to be submitted on a lump sum basis, a single lump sum price shall be submitted in the appropriate place. The total amount to be paid the Contractor shall be the amount of the lump sum proposal as adjusted for additions or deletions resulting from change orders.

Any proposal shall be deemed nonresponsive which contains omissions, erasures, alterations, or additions of any kind, or items uncalled for, in which any of the items are obviously unbalanced, or which in any manner shall fail to conform to the conditions or intent of the Contract Documents.

Section 1-02.6 shall be supplemented as follows:

In the case of a mathematical error in the extended “Total Amount” for a unit, the entered “Unit Price” shall prevail.

1-02.12 Public Opening of Proposals

Section 1-02.12 shall be supplemented as follows:

At the time and place set for the opening and reading of the bids, as designated in the “Call for Bids”, each and every official bid received prior to the scheduled closing time for receipt of bids will be publicly opened and read aloud, irrespective of any irregularities or informalities in such bids. Any bids received after the scheduled closing time for receipt of the bids will be returned to the Bidder unopened.

1-02.14 Disqualification of Bidders

Delete Item 3 and add the following:

The city reserves the right to reject any and all bids, to waive technicalities or irregularities, and after careful consideration of all bids and factors involved, make the award to best serve the interests of the City of Pullman.

1.03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

Section 1-03.1 shall be supplemented as follows:

The Bid Total will be the sum of the products of the estimated item quantities and the respective unit and/or lump sum prices submitted in the proposal.

The lowest Bidder will be selected by comparing the lowest Bid Total.

1-03.3 Execution of Contract

Section 1-03.3 shall be revised as follows:

Revise the first sentence to twenty (20) calendar days from ten (10) calendar days.

Add the following provision to this section:

PROJECT MEETINGS

Prior to the commencement of work, a preconstruction conference will be held to review the Contractor's Progress Schedule, intended work procedures, submittals, safety and other items pertinent to a working understanding between the parties about the project.

Weekly progress meetings will be held at a location selected by the Contracting Agency. The Contractor's on-site superintendent shall be in attendance. Representatives of the Contracting Agency and other affected agencies or subcontractors may also be present.

1-04 SCOPE OF WORK

1-04.1(2) Bid Items not Included in the Proposal

Delete this Section and replace with the following:

The Contractor shall include all costs of doing the work within the unit bid prices. If the contract plans, contract provisions, addenda, or any other part of the contract requires work that has no unit price in the proposal form, the cost of such work shall be incidental and included within the unit bid prices in the contract.

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

The second paragraph of Section 1-04.2 is amended to read as follows:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g. 1 presiding over 2, 3, 4, 5, 6 and 7; 2 presiding over 3, 4, 5, 6 and 7; and so forth):

1. Addendum
2. Bid Proposal
3. Project Plans
4. Special Provisions
5. General Specifications
6. Standard Plans
7. City of Pullman Standard Construction Specifications, 2012 Edition
8. WSDOT 2012 Standard Specifications for Road, Bridge and Municipal Construction.

On the contract plans, working drawings and standard plans, figured dimensions shall take precedence over scaled dimensions.

1-05 CONTROL OF WORK

1-05.4 Conformity with and deviations from plans and stakes.

Delete this section and replace with the following:

All surveying and construction staking shall be performed under the direct supervision of a licensed surveyor in the State of Washington. The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, lines and grades necessary for the construction of the roadbed, curb and gutter, storm drainage, surfacing, paving, channelization and pavement marking, landscaping, stockpiles, illumination and signals, retaining walls and signing and any other items necessary to complete the Contract. Except for the survey control data to be furnished by the Contracting Agency, all calculations, surveying, measuring and other items required for setting and maintaining the necessary lines and grades and construction of the work defined in these contract documents shall be the Contractor's responsibility.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency.
2. Establish the centerlines of all alignments by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and Pls) and at points on the alignments spaced no further than 50 feet apart.
3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart.
4. Establish sawcut limits on all pavement cuts, driveways and concrete surfaces.
5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.
6. Set 2" x 2" offset hubs with a tack at 50 foot intervals for storm sewer line and grade. The offset hubs shall be set perpendicular to the sewer line with two hubs set at manholes and structures. The station, offset, cut, and actual invert elevation shall be marked on the guard stake.

7. Curbs will be staked at 25 foot intervals at an offset suitable to the Contractor. In addition to 25 foot intervals, all high points, low points, P.C.'s P.T.'s and radius points will be set. All curbs will be staked to lip of gutter.
8. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius of less than 30 feet.
9. Establish intermediate elevation benchmarks as needed to check work throughout the project.
10. Provide references for paving pins at 25 foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.
11. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, monument cases, fences, landscaping, illumination and signals, retaining walls and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with primary survey control information consisting of descriptions of three primary control points used for the horizontal and vertical control. Primary control points will be described by reference to the project alignment and the coordinate system and elevation datum utilized by the project.

The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
Slope stakes	±0.02 feet	±0.5 Feet
Subgrade grade stakes set 0.04 feet below grade	0 high 0.04 feet low	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.04 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)

Roadway paving pins for surfacing or paving	± 0.04 feet	± 0.2 feet (parallel to alignment)
		± 0.1 feet (normal to alignment)

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking roadway alignment and stationing, the Contractor shall perform independent checks from different secondary control to ensure that the points staked are within the specified survey accuracy tolerances.

The Contractor shall calculate coordinates for the alignment. The Contracting Agency may at their discretion verify these coordinates prior to issuing approval to the Contractor for commencing with the work.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Stakes shall be marked in accordance with the Plans. When stakes are needed that are not described in the Plans, then those stakes shall be marked as directed by the Engineer.

All legal interpretation survey work shall be done by a licensed surveyor registered to practice in the State of Washington. All other work shall be done under the supervision of a licensed surveyor registered to practice in the State of Washington.

At the conclusion of the work, the Contractor shall furnish the Engineer with one set of "Record Drawings". This will be a full-size set of contract drawing prints marked to reflect any changes or deviations that occurred during the course of the work. Final payment will not be made until the "Record Drawings" have been submitted.

Add the following section:

1-05.5 Payment

The lump sum contract pay item for "Roadway Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the work specified in these contract documents, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

1-05.6 Inspection of work and materials.

Section 1-05.6 shall be supplemented as follows:

Authorized representatives of the State and Local Government Officials shall at all times have safe access to the work, and the Contractor shall provide proper facilities for such access and inspections.

The Owner may perform independent quality control testing on the project. The Contractor shall provide access to the site and shall provide samples for the Owner's laboratory. Test results that do not conform to these specifications shall necessitate retesting. All re-testing, whether or not the original testing costs were to be borne by the Contractor or the Owner, shall be borne by the Contractor and shall be at no additional cost to the Owner. The Owner will conduct compaction tests, including providing equipment and operator.

1-05.14 Cooperation with other Contractors.

Section 1-05.14 shall be supplemented as follows:

It is anticipated that the following work adjacent to or within the limits of this project will be performed by others during the course of this project, and will require coordination of the work:

1. Buried Power / Gas Relocation – Avista Utilities
2. Overhead Street Lights – Avista Utilities
3. Buried Telephone – Frontier Communications
4. Buried Television – Time Warner

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.16(4) Archeological and Historical Objects

Section 1-07.16(4) shall be supplemented as follows:

The City of Pullman developed an Inadvertent Discovery Plan in association with the Washington State Department of Archeology and Historic Preservation (DAHP). The plan provides a plan and procedure for dealing with the discovery of cultural resources by the Contractor. A copy of the plan is included in the permit section of these contract documents. The Contractor shall follow the procedures outlined in the plan, if cultural or archeological remains are discovered during the project.

1-07.17 Utilities and Similar Facilities

Section 1-07.17 is supplemented by the following:

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

Public and private utilities, or their contractors, will furnish all work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the work for this project.

The Contractor shall call the Utility Location Request Center (One Call Center), for field location, not less than two or more than ten business days before the scheduled date for commencement of excavation which may affect underground utility facilities, unless otherwise agreed upon by the parties involved. A business day is defined as any day other than Saturday, Sunday, or a legal local, State, or Federal holiday. The telephone number for the One Call Center for this project is 1 (800) 424-5555.

The Contractor is alerted to the existence of Chapter 19.122 RCW, a law relating to underground utilities. Any cost to the Contractor incurred as a result of this law shall be at the Contractor's expense.

No excavation shall begin until all known facilities, in the vicinity of the excavation area, have been located and marked.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic

Section 1-07.23(1) shall be supplemented as follows:

Protective barricades, fencing, and bridges, together with warning and guidance devices and signs, shall be utilized so that the passageway for pedestrians is safe, well defined and accessible. Whenever pedestrian walkways are provided across excavations, they shall be provided with suitable handrails.

In addition the Traffic Control Plan shall address the following:

- Traffic control devices and other construction materials and features shall not intrude into the usable width of the sidewalk, alternate accessible pedestrian route, or other pedestrian facility.
- A smooth, continuous hard surface shall be provided throughout the entire length and width of the pedestrian route throughout construction. There shall be no curbs or vertical elevation changes greater than ½-inch in grade or terrain that could cause tripping or be a barrier to wheelchair use. Vertical elevation differences between ¼-inch and ½-inch shall be beveled at a maximum 2:1 slope.
- Temporary ramps shall be provided when an alternate accessible pedestrian route crosses a curb and no permanent curb ramps are in place. The width of the curb ramp shall be a minimum of 48-inches and the maximum slope of the ramp shall be 8.3%. The maximum cross slope shall be 2.0%. The bottom of the curb ramp shall be flush with the Roadway. Temporary detectable warning mats shall be installed at street crossings.
- When possible, an alternate accessible pedestrian route shall be provided on the same side of the street as the disrupted route. When it is not possible, the alternate route shall be clearly identified at the nearest intersection crossing prior to the closure area.

1-07.23(1) Construction Under Traffic

Add the following measurement section:

No specific unit of measurement will apply to the lump sum item for pedestrian control and protection.

No specific measurement will apply for placement and maintenance of temporary signage required to ensure safe vehicular and pedestrian traffic during the period between substantial completion and total physical completion. This work shall be incidental to other bid items.

Add the following payment section:

Payment will be made on a lump sum basis under the bid item “Pedestrian Control and Protection”.

1-08 PROSECUTION AND PROGRESS

1-08.5 Time of Completion

Section 1-08.5 is revised to read as follows:

It is anticipated that the City of Pullman will grant Notice of Award in mid-January of 2015.

It is anticipated that the City of Pullman will grant Notice to Proceed (NTP) in mid-February of 2015. Upon NTP, the Contractor can submit and order approved long lead time procurement items relating to the traffic signal work. On-site contract work can begin no earlier than May 11, 2015.

The roadway construction shall be substantially completed by August 14, 2015. Substantial completion shall be defined as the completion of the roadway for vehicle and pedestrian travel with temporary signage in place including curb and gutter, crushed surfacing, HMA, sidewalks, retaining walls, driveway reconstruction, signage, traffic signal conduits, pole bases, striping and surface restoration. The final function and operational use of the traffic signal system is not required for substantial completion of the roadway.

This project shall be physically completed in its entirety on or before September 4, 2015. Upon physical completion of all work required by the contract, the Engineer will advise the Contractor in writing of the date on which such work was physically completed. Such date shall constitute the date of physical completion of the contract. Such notification of date of physical completion shall not constitute acceptance of the work by the Contracting Agency.

If the project is not substantially completed or physically completed by the dates specified or as extended by the Engineer, the Engineer will furnish the Contractor a weekly statement showing the number of working days charged to the contract that occur after the date specified for substantial completion or physical completion. Liquidated damages will be in effect if either or both of the substantial completion or physical completion dates are not met.

Construction activities on the following weekends shall be ceased by Friday at 12:00 p.m. and the work sites cleaned up with all excavations secured and materials and equipment safely stored in approved locations. Work shall not commence until the following Monday morning:

1. Washington State University – Graduation Weekend
2. Washington State University – Mom’s Weekend
3. Washington State University – Home Football Game Weekends

1-09 MEASUREMENT AND PAYMENT

1-09.7 Mobilization

Section 1-09.7 shall be supplemented as follows:

Payment will be made under the bid item, "Mobilization", per lump sum. The maximum bid amount for mobilization shall not exceed ten percent (10%) of the total bid amount.

1-09.8 Payment for Material on Hand

Section 1-09.8 shall be supplemented as follows:

Catch basins, storm pipe and traffic system components shall be allowed for materials purchased before their use in the Work.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.2(A) Traffic Control Management

Section 1-10.2 shall be supplemented as follows:

Prior to the Preconstruction Meeting, the Contractor shall submit four (4) copies of a Traffic Management Plan (TMP) to the City of Pullman. In addition to the requirements of this section, this plan shall identify the Contractor's plan for the separation and maintenance of vehicle traffic, pedestrians and bicycle traffic throughout the Bishop Boulevard and Klemgard Avenue work zones. The Traffic Management Plan shall be reviewed and approved by the City prior to the mobilization of equipment and materials to the work zones.

Following acceptance of the TMP, the Contractor shall submit four (4) copies of detailed Traffic Control Plans (TCP) for all of the work zones scenarios. The TCP's shall include methods for safely handling vehicle, pedestrian, and bicycle traffic during construction. The Traffic Control Plans shall be reviewed and approved by the City prior to the mobilization of equipment and materials to the work zones.

1-10.4 Measurement

The third paragraph of Section 1-10.4 is revised to read:

Class A construction signs will be per each sign installed or relocated as directed by the Engineer. A Class A construction sign may be used in more than one location and will be measured for payment for each new installation. Sign posts or supports will not be measured for payment.

1-10.5 Payment

Delete payment for construction signs Class "A", per square foot panel area and replace with revised payment:

Construction Signs Class "A", per each

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description

Section 2-01.1 is supplemented with the following:

No trees or shrubs shall be removed prior to approval by the Engineer. The Contractor shall take the necessary precautions to protect the trees and vegetation on private property. Clearing and Grubbing in this area shall be as directed by the Engineer.

The Work described in this section includes the removal of existing landscape shrubs and lawn. Contractor shall neatly remove these items within the work zone using methods that minimize disruption to existing landscaping items adjacent to the work zone.

2-01.2 Disposal of Usable Material and Debris

Delete the third paragraph, and replace with the following:

The Contractor shall dispose of all debris by Disposal Method No. 2.

2-01.2(1) Disposal Method No. 1 – Open Burning

Delete this section. Open burning will not be allowed.

2-01.2(3) Disposal Method No. 3 – Chipping

Delete this section. Chipping and spreading on-site will not be allowed.

2-01.5 Payment

Section 2-01.5 shall be supplemented with the following:

Payment for “Clearing and Grubbing” shall be made on a lump sum basis.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.3 Construction Requirements

Section 2-02.3 shall be supplemented as follows:

Existing roadway sign plates as shown on the plans shall be carefully removed by the Contractor and re-used with new posts and new mounting hardware. The existing poles and bases shall be removed and disposed of by the Contractor.

The existing Holiday Inn Express monument sign shall be carefully removed and relocated in kind to behind the new sidewalk.

The following items are a partial listing of items to be removed under the Bid Item “Removal of Structures and Obstructions”.

Storm pipe, catch basins, asphalt surfacing, concrete curb, driveways, gutters sidewalk, slabs, pavement markings, street signs, monument signs, segmental landscape blocks, landscape edging, decorative rocks / boulders, bus shelter, water / irrigation boxes, fire hydrants.

The Contractor shall refer to the plans for quantities of the items to be removed.

The Contractor shall remove the existing bus shelter and re-set it on a new concrete pad, as shown on the drawings. The bus shelter shall remain in service at all times, thus requiring the Contractor to construct the new concrete pad prior to removal of the existing bus shelter. The existing concrete pad shall be demolished and removed by the Contractor.

2-02.4 Measurement

Section 2-02.4 shall be supplemented as follows:

Sawcut shall be incidental to other bid items. No separate compensation shall be made.

2-02.5 Payment

Section 2-02.5 shall be supplemented as follows:

Payment for "Removal of Structures and Obstructions" shall be made on a lump sum basis.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.3(14)C Compacting Earth Embankments

Delete Methods A, B and C from this section, and replace with the following:

The top 2 feet of each embankment shall be compacted to 95 percent (95%) of the maximum dry density as determined by ASTM D-1557 (Modified Proctor). Earth embankments shall be placed in four-inch (4") loose lifts and compacted to 95 percent (95%) of the maximum dry density as determined by ASTM D-1557. All material below the 2-foot level shall be compacted to 92 percent (92) of the same maximum density.

2-03.3(14)D Compaction and Moisture Control Tests

Section 2-03.3(14)D shall be supplemented as follows:

The maximum density and optimum moisture content for materials with less than 30 percent (30%), by mass, retained on the U.S. No. 4 sieve shall be determined using ASTM D-1557 (Modified Proctor).

2-03.4 Measurement

Delete Items 1 and 5, and add the following:

Filling behind the curbs, sidewalks and retaining wall with suitable native material to match the new construction into existing ground shall be considered incidental to other bid items. No separate compensation shall be made.

Only one determination of the original ground elevation will be made on this project. Earthwork quantities will be based on the original ground elevations recorded previous to the award of this contract.

If discrepancies are discovered in the ground elevations, which will materially affect the quantities of earthwork, the original computations of earthwork quantities will be adjusted accordingly.

Earthwork quantities will be computed, either manually or by means of electronic data processing equipment, by use of the average end area method or by the finite element analysis method utilizing digital terrain modeling techniques.

Any protest by the Contractor regarding the quantity of "Roadway Excavation including Haul" listed in the bid proposal must be made by the Contractor to the Owner in writing, prior to the commencement of any roadway excavation work. Once this operation begins, the Contractor accepts the quantity listed in the proposal by default.

2-03.5 Payment

Section 2-03.5 shall be supplemented as follows:

Payment for "Roadway Excavation including Haul" shall be full pay for excavating, loading, placing, hauling or otherwise disposing of all material from original ground elevation to subgrade. Excavations below subgrade shall be made at the unit contract price for "Unsuitable Foundation Excavation including Haul".

Subgrade preparation, embankment, compaction, watering and haul shall be considered incidental to other pay items. No separate payment shall be made.

Payment for "Unsuitable Foundation Excavation including Haul" shall be made on a cubic yard basis.

2-06 SUBGRADE PREPARATION

2-06.3(1) Subgrade for Surfacing

Section 2-06.3(1) shall be supplemented as follows:

Compaction of the top twelve (12) inches of subgrade shall be to 95 percent (95%) of the maximum dry density as determined by ASTM D-1557.

2-07 WATERING

2-07.1 Description

Section 2-07.1 shall be supplemented as follows:

The Contractor will be provided water at no cost from the following existing fire hydrants located in the area of the project:

<u>Fire Hydrant Location</u>	<u>Jurisdiction</u>
Klemgard Avenue – Sta. 8+70 +/-, Lt.	City of Pullman

The Contractor will be required to monitor water consumption through an approved water meter and backflow prevention assembly . The water meter and backflow prevention assembly will be installed at no cost to the Contractor. The Contractor shall not operate the hydrants.

2-07.4 Measurement

Delete this section and replace with the following:

The water shall be measured and monitored by the Contracting Agency and Contractor via the water meter at each location.

2-07.5 Payment

Delete this section and replace with the following:

Water will be provided at the location shown in Section 2-07.1 at no cost to the Contractor. Application of water by the Contractor shall be considered incidental to other pay items.

2-12 CONSTRUCTION GEOTEXTILE

2-12.1 Description

Section 2-12.1 shall be supplemented with the following:

Construction Biaxial Geogrid shall be placed on prepared subgrade in areas of the construction for new pavement sections and in locations of unsuitable subgrade as determined by the Engineer during the construction process.

2-12.2 Materials

Section 2-12.2 shall be supplemented as follows:

Construction Biaxial Geogrid shall meet the following specification:

- | | |
|---------------------------------------------|------------------------------------------------|
| 1. Junction Efficiency | 93 percent junction efficiency
(GRI-GG2-05) |
| 2. Aperture Stability | 0.65 m-N/deg (COE Ref. 3.3.1.2000) |
| 3. Ultimate Tensile Strength | 1,310 lb/ft (ASTM D6637) |
| 4. Resistance to Long Term / UV Degradation | 100 % |

The Biaxial Geogrid shall be placed with the machine direction perpendicular to the roadway centerline. It shall be placed on the soft, over-excavated subgrade areas as directed by the Engineer. The geogrid shall be suitable for use with the Crushed Surfacing Base Course.

2-12.5 Payment

Section 2-12.5 shall be supplemented as follows:

Payment for "Construction Geogrid for Soil Stabilization" shall be made on a square yard basis.

4-04 BALLAST AND CRUSHED SURFACING

4-04.1 Description

Section 4-04.1 shall be supplemented as follows:

Ballast shall be defined as for the purposes of this project as crushed, partially crushed or naturally occurring granular material from approved sources to be used for placement in over-excavated soft areas in roadway and/or trenches, as directed by the Engineer.

4-04.2 Materials

Ballast shall be defined as per Section 9-03.9(2) Shoulder Ballast:

4-04.4 Measurement

Section 4-04.4 shall be supplemented with the following:

Crushed surfacing base course and crushed surfacing top course shall be measured by the ton for the placement under curbs, sidewalks, concrete slabs, driveways, road sections, pipe trenches, manholes, catch basins, pole bases, retaining wall foundations, structures. Crushed surfacing shall not be measured when placed greater than six inches behind the back of curbs and sidewalks and when placed outside of typical excavation limits as determined by the Engineer.

4-04.5 Payment

Section 4-04.5 shall be supplemented as follows:

Payment for "Crushed Surfacing Top Course" shall be made on a per ton basis.

Payment for "Crushed Surfacing Base Course" shall be made on a per ton basis.

Payment for "Ballast" shall be made on a per ton basis.

5-04 ASPHALT CONCRETE PAVEMENT

5-04.1 Description

Section 5-04.1 shall be supplemented with the following:

Asphalt concrete pavement for roadways shall be placed in two lifts. The initial (bottom) lift shall be 2 ½" thick, HMA Class ¾", PG 64-28 and final (top) lift shall be 1 ½" thick, HMA Class ½", PG 64-28.

Asphalt concrete pavement for driveways shall be placed in one lift. It shall be 2" thick, HMA Class ½", PG 64-28.

5-04.4 Measurements

Sections 5-04.4 shall be supplemented as follows:

Measurement of "HMA Class ¾" PG 64-28" and "HMA Class ½" PG 64-28" shall be made on a per ton basis. There will be no distinction for driveway or roadway asphalt concrete pavement.

5-04.5 Payment

Section 5-04.5 shall be supplemented as follows:

Payment of hot mix asphalt shall be made on a per ton basis under the bid items "HMA Class ¾" PG 64-28" and "HMA Class ½" PG 64-28".

7-04 STORM SEWERS

7-04.1 Description

Section 7-04.1 shall be supplemented as follows:

This work includes the connection of new storm sewer pipe into existing storm sewer pipe.

7-04.2 Materials

Section 7-04.2 shall be supplemented as follows:

Storm sewer pipe shall be solid wall PVC conforming to ASTM D 3034, SDR 35.

Connections from new storm sewer pipe into existing storm sewer pipe shall be made with an "Inserta-Tee" connection or approved equal. Contractor shall verify the exact depth, location and pipe materials of the existing storm sewer pipe prior to construction activity or the ordering of connection materials.

Section 7-04.3(1) Cleaning and Testing

Delete this section and replace with the following:

The Engineer will perform a visual test on all storm sewer piping prior to and after backfilling. The Contractor shall not backfill any storm sewer piping without approval from the Engineer.

7-04.4 Measurement

Section 7-04.4 shall be supplemented as follows:

Trench excavation, bedding, backfill, testing and compaction to subgrade and trench safety shall be incidental to other bid items.

Measurement of the 4 inch underdrain pipes that connect from the street tree filtration system to the detention system shall be made on a linear foot basis.

Crushed surfacing base course shall be used as bedding and backfill in all storm trenches and shall be measured on a per ton basis.

Connections of new storm sewer pipe into existing storm sewer pipe shall be measured on a per each basis.

7-04.5 Payment

Delete this section and replace with the following:

Payment for storm sewer shall be made on a linear foot basis under the following bid items

“4-Inch Diameter, Solid Wall PVC Street Tree Underdrain Storm Sewer”.

“8-Inch Diameter, Solid Wall PVC Storm Sewer”.

“12-Inch Diameter, Solid Wall PVC Storm Sewer”.

Payment for connections of existing storm sewer pipe into existing storm sewer pipe shall be made under the bid item “Connection to Existing Storm Sewer Pipe”.

7-05 MANHOLES, INLETS, CATCH BASINS AND DRYWELLS

7-05.1 Description

Section 7-05.1 shall be supplemented as follows:

This work shall include adjusting sanitary sewer and storm sewer manholes identified on the plans to new finish grade, plugging existing manholes, and connection to existing manholes.

The Contractor shall verify the existing storm sewer drainage patterns along the project limits prior to construction. An assessment of the storm sewer drainage patterns was made by the Engineer, based upon available records and field verifications during design of the project. The intent of the project is to preserve the existing storm drainage patterns without cutting off any of the existing connections or drainage ways. If the actual conditions are different than those shown on the plans, notify the Engineer immediately.

This work includes the construction of a stormwater detention system in the roadway as shown on the plans.

This work includes the construction of a “Filtera Stormwater Bioretention Filtration System” at two locations along the curb and gutter line of the roadway, as shown on the plans.

7-05.2 Materials

Section 7-05.2 shall be supplemented as follows:

Catch basins shall be per City of Pullman Standard Drawing No. 22.

Storm water detention storage pipe shall be 36 inch diameter PVC pipe, ASTM F 679. The orifice control outlet manhole shall be a 60 inch diameter manhole per WSDOT Standard Plan B-15.60-01.

The street tree filtration system shall be a 4’ by 6’ “Filtera Stormwater Bioretention Street Tree System”, or approved equal.

Four (4) inch diameter underdrain storm sewer pipe for the street tree filtration system shall be solid wall PVC conforming to ASTM D 3034, SDR 35.

7-05.3 Construction Requirements

Section 7-05.3 shall be supplemented as follows:

Existing manholes shown on the plans to be plugged shall have the pipe removed flush from the wall without damaging the structural integrity of the manhole or catch basin. The opening shall be plugged with a non-shrink grout and reinforcement if deemed necessary by the Owner, to form a smooth surface consistent with the existing wall.

7-05.3(1) Adjusting Manholes and Catch Basins to Grade

Section 7-05.3(1) shall be supplemented as follows:

The Contractor shall adjust sanitary sewer and storm manholes and catch basins identified on the plans to finish grade. Adjustments shall be made per City of Pullman Standard Plan No. 23. The Contractor shall note that existing rim elevations and finish grade rim elevations are shown on the plans. It will be up to the Contractor to verify if additional manhole barrel sections are required, or if the adjustments can be made by adding or removing grade rings. The allowable range of grade ring height in the finish grade condition shall be 4-inch minimum – 16-inch maximum.

All adjustment rings or shims shall be mortared in place. The adjustment section shall then receive a 3/8-inch coating of waterproof non-shrink mortar grout on the outside. The inside shall be struck off smooth with no protruding concrete, mortar or shims. The metal frame shall also be set in mortar.

The rims of all structures within paved areas shall be positioned so as to be FLUSH with the surface of the surrounding pavement.

Items within paved areas, shall be adjusted AFTER any initial (leveling or preleveling) course is placed, and PRIOR to placing the final (top, or wearing) course, unless pre-approved in writing by the Engineer.

7-05.4 Measurement

Delete this section and replace with the following:

Catch basins shall be measured on a per each basis.

Adjustments of sanitary or storm manholes and catch basins shown on the plans shall be measured on a per each basis.

Plugging of existing manholes, catch basins or structures shown on the plans shall be measured on a per each basis.

Connections to existing manholes or catch basins shown on the plans shall be measured on a per each basis.

Storm water detention system shall be measured on a lump sum basis.

Filtera Stormwater Bioretention Street Tree System shall be measured on a per each basis including the complete system and excluding the street tree and 4 inch underdrain storm sewer pipes that connect to the detention storage system.

7-05.5 Payment

Delete this section and replace with the following:

Payment for storm sewer structures shall be made on a per each basis under the bid item, "Catch Basin".

Payment for the plugging of existing catch basin or manholes shall be made on a per each basis under the bid item "Plug Existing Manhole / Catch Basin".

Payment for the connection to existing manholes, catch basin or pipes shall be made on a per each basis under the bid item "Connection to Existing Manhole / Catch Basin".

Payment for adjusting existing catch basins, sanitary or storm manholes and vaults to new finish grade shall be made on a per each basis under the bid item "Adjust Existing Manhole / Vault / Structure to New Finish Grade". No distinction shall be made for the type of structure or adjustment by barrel sections or grade rings.

Payment for the stormwater detention system shall include all materials, equipment, workmanship including 36 inch diameter storage pipe, 60 inch outlet manhole, connections, fittings, orifice standpipe and appurtenances necessary to complete the system under the bid item "Stormwater Detention System, Complete".

Payment for each street tree filtration system shall include all materials, equipment, and workmanship including the structure, filter media, fittings, connections and appurtenances necessary to complete the system under the bid item "Street Tree Filtration System, Complete".

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.1 Description

Section 7-08.1 shall be supplemented as follows:

Trench pipe bedding shall be crushed surfacing base course.

Trench backfill through the pipe zone to the top of roadway subgrade shall be crushed surfacing base course.

7-08.4 Measurement

Delete this section and replace with the following:

Trench excavation, bedding, backfill, testing and compaction to subgrade and trench safety shall be incidental to other bid items.

Trench pipe bedding and backfill using crushed surfacing base course material shall be measured on a per ton basis.

All costs in jointing dissimilar pipe with a coupling or concrete collar shall be incidental to other pay items.

7-12 VALVES FOR WATER MAINS

7-12.1 Description

Section 7-12.1 shall be supplemented as follows:

This work includes the adjustment of the existing water valve located in an 8 inch diameter water main at the northwest corner of the Bishop Boulevard / Klemgard Avenue intersection. The existing water valve shall be adjusted in the existing 8 inch water main so that it is not located in the new curb and gutter in conformance with City of Pullman Water Department requirements and Standard Drawing No.11.

7-12.4 Measurement

Section 7-12.4 shall be supplemented as follows:

Adjustment of the existing water valve shall be made on a per each basis including all pipe, fittings, connections and appurtenances necessary to relocate and adjust the valve to its new location.

Crushed surfacing base course shall be used as bedding and backfill in the excavation and shall be measured on a per ton basis.

7-12.5 Payment

Delete this section and replace with the following:

Payment for adjustment of the existing water valve shall be made on a per each basis under the bid item, "Adjust Existing 8 inch Water Gate Valve".

7-14 HYDRANTS

7-14.1 Description

Section 7-14.1 shall be supplemented as follows:

Fire hydrants shall be relocated to the back of new sidewalk as shown on the plans, in conformance with City of Pullman Water Department requirements and Standard Drawing No. 14.

7-14.4 Measurement

Section 7-14.4 shall be supplemented as follows:

Relocation of existing fire hydrants shall be made on a per each basis including all pipe, fittings, connections, gate valves, restraints and appurtenances necessary to relocate the fire hydrant to its new location.

Crushed surfacing base course shall be used as bedding and backfill in the excavation and shall be measured on a per ton basis.

7-14.5 Payment

Delete this section and replace with the following:

Payment for relocation of the existing fire hydrant shall be made on a per each basis under the bid item, "Relocate Existing Fire Hydrant Assembly, Complete".

7-16 SERVICE CONNECTIONS

7-16.1 Description

Section 7-16.1 shall be supplemented as follows:

Water services including box and meters shall be relocated to the back of new sidewalk as shown on the plans, in conformance with City of Pullman Water Department requirements.

7-16.4 Measurement

Section 7-14.4 shall be supplemented as follows:

Relocation of existing water services shall be made on a per each basis including all service pipe, fittings, connections, valves, boxes, meters and appurtenances necessary to relocate the water service to its new location.

Crushed surfacing base course shall be used as bedding and backfill in the excavation and shall be measured on a per ton basis.

7-16.5 Payment

Delete this section and replace with the following:

Payment for relocation of existing water services shall be made on a per each basis under the bid item, "Relocate Existing Water Service / Meter, Complete".

8-01 EROSION CONTROL

8-01.1 Description

Section 8-01.1 shall be supplemented as follows:

This work includes the application of "Seeding and Fertilizing by Hand" in disturbed areas as directed by the Engineer.

This work includes the installation, maintenance and removal after construction of silt sacks on existing and new catch basins within and adjacent to the work zone.

8-01.3(4)A Seeding

Section 8-01.3(4)A shall be supplemented as follows:

Seed of the following composition and proportion shall be applied on all areas requiring seeding. Seed type and application rate to be approved by the City of Pullman prior to application.

8-01.3(4)B Fertilizing

Section 8-01.3(4)B shall be supplemented as follows:

Fertilizer having the nutrient amounts of 16 x 16 x 16 shall be applied at a rate of 10 LBS. per 1000 square foot.

8-01.3(9)D Inlet Protection

Section 8-01.3(9)D shall be supplemented as follows:

Silt sacks for the catch basins shall be in conformance with City of Pullman Erosion Control BMP C-220 – Inlet Protection.

8-01.4 Measurement

Section 8-01.4 shall be supplemented as follows:

Measurement of seeding and fertilizer by hand in disturbed areas shall be made on a per square yard basis.

Measurement of inlet protection on the catch basins shall be made on a per each basis.

8-01.5 Payment

Section 8-01.5 shall be supplemented as follows:

Payment for application of seeding and fertilizer by hand in disturbed areas shall be made on a per square yard basis under the bid item “Seeding and Fertilizing by Hand”.

Payment for inlet protection on the catch basins shall be made on a per each basis under the bid item “Inlet Protection – Silt Sacks”.

8-02 ROADSIDE PLANTING

8-02.1 Description

Section 8-02.1 shall be supplemented with the following:

The Contractor shall provide and install sod at locations within the work zone as directed by the Engineer.

The Contractor shall remove, store and re-spread existing landscape decorative rock, landscape edging and landscape bark into the existing landscape beds along the right of way and within private property adjacent to the right of way after the completion of construction, as directed by the Engineer. This work may include the furnishing and placement of new similar landscape rock, edging, bark, shrubs, small trees and the Filtera System trees, as determined and directed by the Engineer. The intent of this work is to re-store the roadside landscaping to as “in kind” of a condition as reasonably practical, under the time and materials allowance “Roadside Landscape Restoration”.

8-02.2 Materials

Section 8-02.2 shall be supplemented as follows:

Sod shall match existing lawn areas. Prior to furnishing the new sod, the type shall be coordinated with the City of Pullman.

8-02.3 Construction Requirements

8-02.3(4) Topsoil

Section 8-02.3(4) shall be supplemented as follows:

Topsoil shall be Type C.

8-02.3 (15) Lawn Installation

Delete this section and replace with the following:

Remove all grass, weeds, other organic debris, rocks, masonry rubble, paving, wallboard, metal and all other deleterious material 1 inch or over in size prior to any cultivating or planting regardless of whom may have left such material in the plant area. Finely grade a 2 inch layer of topsoil prior to placement of the sod.

8-02.3(16) Lawn Establishment Period

Delete this section and replace with the following:

There will be no lawn establishment period.

8-02.4 Measurement

Section 8-02.4 shall be supplemented as follows:

Measurement of sod shall be measured on a square yard basis in the installed condition.

Measurement of topsoil shall be made on a neat line cubic yard basis.

8-02.5 Payment

Section 8-02.5 shall be supplemented as follows:

Payment of "Topsoil Type C" shall be made on a cubic yard basis under the bid item "Topsoil Type C" and shall include all costs in connection with furnishing all materials, labor tools, and equipment necessary to prepare the area and place the topsoil.

Payment of "Sod Installation" shall be made on a square yard basis for all costs in connection with furnishing all materials, labor tools, and equipment necessary to prepare the area and place the sod.

Payment of "Roadside Landscape Restoration" shall be measured in the field on a time and materials basis for actual materials, labor and equipment used for work this work, as approved and directed by the Engineer.

8-03 IRRIGATION SYSTEM

8-03.1 Description

Section 8-03.1 shall be supplemented with the following:

The Contractor shall provide repairs, adjustments and relocations to the existing private irrigation systems including control valves / boxes, irrigation mainlines, sprinkler heads, and irrigation laterals along the project limits, as shown on the plans.

8-03.5 Payment

Section 8-03.5 shall be supplemented as follows:

Payment of “Irrigation System Repairs and Adjustments” shall be measured in the field on a time and material basis for actual materials used and a laborer only, for work on irrigation system repairs, adjustments and relocations. All other equipment and labor costs will be incidental to other bid items.

8-04 CURBS, GUTTERS AND SPILLWAYS

8-04.3(1) Cement Concrete Curbs, Gutters and Spillways

Section 8-04.3(1) shall be supplemented as follows:

Cement concrete curb and gutter shall be constructed per City of Pullman Standard Drawing No. 5.

Parking lot curbs shall be constructed to match the “in kind” adjacent concrete curbs at each location. Parking lot curbs shall be chamfered 45 degrees at the curb ends.

Prior to the pouring of curb and gutter on Bishop Boulevard and Klemgard Avenue, the Contractor shall notify the Engineer that the string lines are placed. The Contractor and Engineer shall walk the string lines and the Engineer shall approve the string lines prior to commencing with the curb and gutter construction.

8-04.4 Measurement

Crushed surfacing base course for the curbs shall be measured on a per ton basis.

8-04.5 Payment

Delete this section and replace with the following:

Payment for cement concrete curb and gutter shall be made on a linear foot basis under the contract pay item “Cement Concrete Traffic Curb and Gutter”.

Payment for cement concrete parking lot curb including the chamfer shall be made on a linear foot basis under the contract pay item “Cement Concrete Parking Lot Curb”.

8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES

8-06.1 Description

Section 8-06.1 shall be supplemented with the following:

Cement concrete driveway entrances shall be constructed in conformance with City of Pullman Standard Drawing No. 8 series, as applicable.

8-06.4 Measurement

Section 8-06.4 shall be supplemented as follows:

Measurement of driveway entrances shall be measured on a square yard basis in the installed condition.

Crushed surfacing base course for the driveway entrances shall be measured on a per ton basis.

8-06.5 Payment

Section 8-06.5 shall be supplemented as follows:

Payment of driveways shall be made on a square yard basis under the bid item "Cement Concrete Driveway Entrance" and shall include all costs in connection with furnishing all materials, labor tools, and equipment.

8-14 CEMENT CONCRETE SIDEWALKS

8-14.1 Description

Section 8-14.1 shall be supplemented as follows:

Cement concrete sidewalks shall be constructed in conformance with City of Pullman Standard Drawing No. 8. Handicap ramps shall be constructed per City of Pullman Standard Drawing No. 9 and the texturing detail shown on the plans.

8-14.4 Measurement

Section 8-14.4 shall be supplemented as follows:

Measurement of sidewalk shall be made on a square yard basis. There will be no distinction and separate payment for ADA ramps and texturing.

8-14.5 Payment

Section 8-14.5 shall be supplemented as follows:

Payment for cement concrete sidewalk shall be made on a square yard basis under the bid item "Cement Concrete Sidewalk".

8-20 ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, INTELLIGENT TRANSPORTATION SYSTEMS AND ELECTRICAL

8-20.1 Description

Section 8-20.1 is supplemented with the following:

Furnish, install and field test to complete a fully functional traffic signal system at the intersection of Bishop Boulevard and Klemgard Avenue consisting of signal controller assembly, controller cabinet with auxiliary equipment, signal standards, luminaries, pole mounted terminal cabinets, vehicle heads, pedestrian heads, emergency vehicle pre-emption, video detection system, pedestrian push buttons, junction boxes, pull boxes, conduit, wiring and all other necessary

materials, equipment and labor as indicated on the plans and specifications. The controller assembly includes the cabinet, controller unit, load switches, signal conflict monitoring circuitry, accessory logic circuitry, AC line filters, vehicle detectors, coordination equipment and interface, and preemption equipment.

Furnish, install and field test all necessary materials, equipment and labor to modify the existing parking lot illumination system located in the private development east of the intersection of Bishop Boulevard and Klemgard Avenue by removing the existing parking light pole and base (STA 9+73.82, RT 38.5'), relocating the existing light pole onto a new contractor provided base (STA 9+73.2, RT 49.1') and wiring the new pole to maintain the parking lot illumination system.

A new 240/120 volt service is required at the intersection of Bishop Boulevard and Klemgard Avenue. Contractor shall coordinate with electrical utility.

8-20.2 Materials

Section 8-20.2 is supplemented with the following:

8-20.2(1) Equipment List And Drawings

Section 8-20.2(1) is supplemented with the following:

Manufacturer's data for materials proposed for use in the contract which require approval shall be submitted in one complete package.

If traffic signal standards, strain pole standards, or combination traffic signal and lighting standards are required, final verified dimensions including pole base to signal mast arm connection point, pole base to light source distances (H1), mast arm length, offset distances to mast arm mounted appurtenances, and orientations of pole mounted appurtenances will be furnished by the Engineer as part of the final approved shop drawings prior to fabrication.

8-20.3 Construction Requirements

Section 8-20.3 is supplemented with the following:

8-20.3(4) Foundations

Section 8-20.3(4) is supplemented with the following:

(BSP April 5, 2010)
Traffic Signal Standard Foundation Shaft Casing

All permanent casing shall be a smooth wall non corrugated structure of steel base metal. All permanent casing shall be of ample strength to resist damage and deformation from transportation and handling, installation stresses, and all pressures and forces acting on the casing. The casing shall be clean prior to placement in the excavation. The permanent casing may be telescoped, but the outside diameter of the casing shall not be less than the specified diameter of the shaft.

8-20.3(5) Conduit

Section 8-20.3(5) is supplemented with the following:

Conduit shall be placed under existing pavement by approved directional boring methods. Directional boring methods shall control the depth of the conduit to maintain a minimum depth of 24" and a maximum depth of 36". The pavement shall not be disturbed unless approved by the Engineer in the event obstructions or impenetrable soils are encountered.

A known utility will not be considered an obstruction that qualifies as a change of condition during a directional boring operation. The Contractor shall perform a physical exploratory investigation, prior to boring, at each location where the proposed conduit crosses an existing utility to determine the exact location and depth of the utility.

8-20.3(6) Junction Boxes, Cable Vaults, and Pull Boxes

Section 8-20.3(6) is supplemented with the following:

Unless otherwise noted in the Plans or approved by the Engineer, junction boxes, cable vaults and pull boxes shall not be placed within the traveled way or paved shoulders. If the Engineer allows placement of junction boxes, cable vaults, or pull boxes within the traveled way or shoulder the junction boxes, cable vaults or pull boxes so placed shall be heavy-duty. Junction boxes, cable vault and pull boxes shall not be placed within any accessible ramps.

Wiring shall not be pulled into any conduit until all associated junction boxes have been adjusted to, or installed in, their final grade and location.

When junction boxes, cable vaults and pull boxes are installed or adjusted prior to construction of finished grade, pre-molded joint filler for expansion joints may be placed around the junction boxes, cable vaults and pull boxes. The joint filler shall be removed prior to adjustment to finished grade.

Wiring shall be replaced if sufficient slack is not maintained due to junction box adjustment.

The six-inch gravel pad required in the Standard Plans shall be maintained.

Heavy-duty Type 4, 5 and 6 junction boxes, cable vaults and pull boxes shall be installed in accordance with the following:

1. Excavation and backfill shall be in accordance with Section 2-09. Excavation for junction boxes, cable vaults and pull boxes shall be sufficient to leave one foot in the clear between their outer surface and the earth bank.
2. Junction boxes, cable vaults and pull boxes shall be installed on a level 6-inch layer of crushed surfacing top course, in accordance with 9-03.9(3), placed on a compacted or undisturbed foundation. The crushed surfacing shall be compacted in accordance with Section 2-09.3(1)E.
3. After installation, the lid/cover shall be kept bolted down during periods when work is not actively in progress at the junction box, cable vault or pull box.
4. Before closing the lid/cover, the lid/cover and the frame/ring shall be thoroughly brushed and cleaned of all debris. There shall be absolutely no visible dirt, sand or other foreign matter between the bearing surfaces.

5. When the lid/cover is closed for the final time, a liberal coating of anti-seize compound shall be applied to the bolts and nuts and the lid shall be securely tightened.
6. Hinges on the Type 4, 5 and 6 junction boxes shall be located on the side of the box, which is nearest to adjacent shoulder. Hinges shall allow the lid to open 180 degrees.

8-20.3(3) Wiring

Section 8-20.3(8) is supplemented with the following:

At all junction boxes, pull boxes, cable vaults and cabinets, wiring shall be labeled with a PVC marking sleeve. At splices the wire shall be labeled on both sides of the splice. Labeling shall be as follows:

Individual conductors - the circuit number indicated in the contract

Multi-conductor cable – the number of the signal head(s) or pedestrian button(s) served

Loop lead-in cable – the number(s) of the loop(s) served

Video detection camera cable – the number of the associated phase(s)

ITS camera cable – the number of the camera indicated in the contract, and the number of the associated cabinet as indicated in the contract

Communication Cable – shall be marked “Comm.”

Emergency Vehicle Detector cable – the letter(s) of the associated phase(s)

(March 13, 1995)
Field Wiring Chart

Movement Number	1	2	3	4	5	6	7	8	9
501	AC+ Input			516-520 Railroad Pre-empt					
502	AC- Input			5A1-5D5 Emergency Pre-empt					
503-510	Control-Display			541-580 Coordination					
511-515	Sign Lights			581-599 Spare					
Vehicle Head									
Red	611	621	631	641	651	661	671	681	691
Yellow	612	622	632	642	652	662	672	682	692
Green	613	623	633	643	653	663	673	683	693
Spare	614	624	634	644	654	664	674	684	694
Spare	615	625	635	645	655	665	675	685	695
AC-	616	626	636	646	656	666	676	686	696
Red Auxiliary	617	627	637	647	657	667	677	687	697
Yellow Auxiliary	618	628	638	648	658	668	678	688	698
Green Auxiliary	619	629	639	649	659	669	679	689	699
Pedestrian Heads & Dets.									
Hand	711	721	731	741	751	761	771	781	791
Man	712	722	732	742	752	762	772	782	792
AC-	713	723	733	743	753	763	773	783	793
Detection	714	724	734	744	754	764	774	784	794
Common-Detection	715	725	735	745	755	765	775	785	795
Spare	716	726	736	746	756	766	776	786	796
Spare	717	727	737	747	757	767	777	787	797
Spare	718	728	738	748	758	768	778	788	798
Spare	719	729	739	749	759	769	779	789	799
Detection									
AC+	811	821	831	841	851	861	871	881	891
AC-	812	822	832	842	852	862	872	882	892
Common-Detection	813	823	833	843	853	863	873	883	893
Detection A	814	824	834	844	854	864	874	884	894
Detection B	815	825	835	845	855	865	875	885	895
Loop 1 Out	816	826	836	846	856	866	876	886	896
Loop 1 In	817	827	837	847	857	867	877	887	897
Loop 2 Out	818	828	838	848	858	868	878	888	898
Loop 2 In	819	829	839	849	859	869	879	889	899
Supplemental Detection									
Loop 3 Out	911	921	931	941	951	961	971	981	991
Loop 3 In	912	922	932	942	952	962	972	982	992
Loop 4 Out	913	923	933	943	953	963	973	983	993
Loop 4 In	914	924	934	944	954	964	974	984	994
Loop 5 Out	915	925	935	945	955	965	975	985	995
Loop 5 In	916	926	936	946	956	966	976	986	996
Loop 6 Out	917	927	937	947	957	967	977	987	997
Loop 6 In	918	928	938	948	958	968	978	988	998
Spare	919	929	939	949	959	969	979	989	999

8-20.3(10) Services, Transformer, Intelligent Transportation System Cabinet

Section 8-20.3(10) is supplemented with the following:

The Contractor shall obtain the required electrical permits for installation of electrical service. Permit fees shall be included in the unit contract price for the item of work requiring said permit(s).

The service shall meet industry code requirements and the Contractor shall make all necessary arrangements with the servicing utility to complete the service connection prior to the final inspection.

8-20.3(11) Testing

Section 8-20.3(11) is supplemented with the following:

Signal Turn-On will be permitted Monday through Thursday, between 9:00 am and 2:00 pm the same day, with the exception that the change to stop and go operation shall not occur on a holiday or the day preceding a holiday.

Prior to scheduling a turn-on date, the Contractor shall provide verification to the Engineer that:

- a. Tests 1, 2, and 3 as specified in this section have been completed;
- b. All other tests specified in Section 8-20.3(14)D have been completed.
- c. Contractor supplied 48" x 48" New Signal Ahead (W20-902) signs have been installed on 4-inch x 6-inch wood posts along each approach at locations staked by the Engineer. The signs and posts shall become the property of the Contracting Agency. The Engineer will remove the signs and posts 6 weeks following turn-on or change over.

8-20.3(14) Signal Systems

8-20.3(14)A Signal Controllers

Section 8-20.3(14)A is supplemented with the following:

(August 2, 2010)
Testing

All signal control equipment shall be tested at the Washington State Department of Transportation Materials Laboratory located in Tumwater, Washington, prior to final delivery. The tests shall check the operation of each individual component as well as the overall operation of the system.

The Contractor shall designate a qualified representative for these tests. Notification of this representative shall be submitted for approval, in writing, to the State Materials Laboratory, 14 calendar days prior to any equipment deliveries. The Engineer shall also receive a copy of this notification, which includes the representative's name, address, and telephone number. All communications and actions regarding testing of all equipment submitted to the State Materials

Laboratory shall be made through this representative. These communications and actions shall include, but not be limited to, the following:

All notifications of failure or rejection, demonstration of the equipment, and the return of rejected equipment.

The State Materials Laboratory testing process will consist of the following four separate stages:

- a. Delivery and Assembly
- b. Demonstration and Documentation
- c. Performance Test
- d. Operational Test

Testing will follow in the correct order with no time gaps between stages unless mutually agreed upon by the Contractor and State Materials Laboratory.

Stage 1 Delivery Assembly

All components for the complete traffic control systems, including the necessary test equipment, shall be assembled and ready for demonstration within ten working days of delivery to the Materials Laboratory. The systems shall simulate the operations as installed in the field.

Equipment and prerequisites necessary to complete this stage shall include:

- a. Detection Simulator:
The detection simulator shall provide at least one detector per phase and variable traffic volumes. One simulator shall be required for every two controllers tested.
- b. Communications Network:
Locations, specified for coordinating communications equipment and cable, shall be completely wired to provide an operational communications system between all local and master controllers.

The Contractor shall provide labor, equipment, and materials necessary to assemble all control equipment complete and ready for demonstration. Materials and equipment used for this stage that are not required for field installation shall remain the property of the Contractor. Failure to complete this stage within ten working days will result in rejection of the entire system.

Stage 2 Demonstration and Documentation

This stage shall be completed within seven working days following the completion of Stage 1. Failure to do so shall result in rejection of the entire shipment.

All documentation shall be furnished with the control equipment prior to the start of testing. If corrections to any document are deemed necessary by the State, the Contractor shall submit this updated version prior to the final approval by the State Materials Laboratory. The documents to be supplied shall consist of or provide the following:

- a. A Complete accounting of all the control and test equipment required.

- b. A complete set of documents which shall include:
 - 1. Serial numbers when applicable.
 - 2. Written certification that equipment of the same make and model has been tested according to NEMA Environmental Standards and Test Procedures, and has met or exceeded these standards. The certificate shall include equipment model number and where, when, and by whom the tests were conducted. This certificate shall accompany each shipment of controllers.
 - 3. Reproducible mylar wiring diagrams and two blue-tone prints for each controller and cabinet supplied. The sheet size shall be 24 inches by 36 inches.
 - 4. Wiring diagrams for all auxiliary equipment furnished. One set per cabinet.
 - 5. Complete operations and maintenance manuals including complete and correct software listing and flow charts. One set of operations and maintenance manuals per cabinet; at least four but no more than ten. Five sets of software listings and flow charts.
 - 6. Complete operations and maintenance manuals for all auxiliary equipment. One set per cabinet.
- c. A description of the functions and the capabilities of individual components and of the overall control system.
- d. A presentation on how to operate the system.
- e. A complete and thorough demonstration to show that all components of the control system are in good condition and operating properly, and proof that the controller and cabinet are functioning correctly.
- f. Detailed instructions for installing and operating the controller(s), including explanations on the use of all features of the controller(s).
- g. The operational and maintenance manuals for each traffic signal controller supplied including as a minimum, but not to be limited to the following:
 - 1. Detailed instructions for maintaining all hardware components, controller, and auxiliary equipment.
 - 2. A complete parts list detailing all manufacturer's identification codes.
 - 3. Detailed wiring diagrams and schematics indicating voltage levels and pictorial description, part name, and location for all hardware components, controller, and auxiliary equipment.

The demonstration shall include the following:

- a. Phasing per plans and all phase timing.
- b. Detection including any special detector functions.
- c. Conflict Monitor and Load Switches.
- d. Special Coordination including communication equipment.

This demonstration shall be performed by the Contractor in the presence of State Materials personnel. The Contractor shall supply any item not accounted for within five working days of the accounting. Controllers and cabinets that remain incomplete five working days after notification shall be rejected and returned freight collect to the Contractor.

Stage 3 Unit Performance Test

A minimum of ten working days shall be allowed for one or two cabinet assemblies and five working days for each additional assembly.

The unit performance test will be conducted by State Personnel to determine if each and every controller cabinet assembly complies with NEMA Environmental Standards as stated in NEMA publication No. TS 1-1976, Part 2.

Any unit submitted, whose failure has been corrected, shall be retested from the beginning of this stage.

Stage 4 Operational Test

All control and auxiliary equipment shall operate without failure for a minimum of ten consecutive days. If an isolated controller is specified, it shall operate as an isolated controller. If a coordinated system is specified, it shall operate as a total coordinated system with the master and all local controllers operating in all coordinated modes.

If any failure occurs during this stage, all equipment for this stage shall be restarted following completion of repairs.

Equipment Failure or Rejection

Equipment failures shall be defined as set forth in NEMA Publication No. TS 1-1976. Failure of load switches, detector amplifiers, and conflict monitors shall not result in rejection of the controller or cabinet. However, the Contractor shall stock, as replacements, approximately 30 percent more than the total for these three items. All excess material shall remain the property of the Contractor following completion of all tests.

If a failure occurs during Stages 3 or 4, repairs shall be made and completed within ten working days following notification of the malfunction. The Contractor shall have the option of making onsite repairs or repair them at a site selected by the Contractor. Failure to complete repairs within the allotted time shall result in rejection of the controller or cabinet assembly under test.

A total of two failures will be allowed from the start of Stage 3 to the end of Stage 4. If three failures occur during this time period, the equipment will be rejected. New equipment of different serial numbers submitted as replacement shall be received by the Materials Laboratory for testing under Stage 3 within ten working days following notification of rejection. Failure to meet this requirement within the allotted time will result in rejection of the entire system. Software errors will be considered as failures and, if not corrected within ten working days, the entire system will be subject to rejection. Following rejection of any equipment, the Contractor shall be responsible for all costs incurred. This shall include but not be limited to all shipping costs.

When the traffic control program is supplied by the State, the Contractor shall prove that any failures are, in fact, caused by that program and not the hardware.

All component or system failures, except load switches and detector amplifiers, shall be documented. This documentation shall be submitted prior to commencing the test or stage in which the failure was found and shall provide the following information:

- a. A detailed description of the failure.
- b. The steps undertaken to correct the failure.
- c. A list of parts that were replaced, if any.

Upon completion of the tests, the equipment will be visually inspected. If material changes are observed which adversely affect the life of the equipment, the cause and conditions shall be noted. The Contractor will immediately be given notice to correct these conditions. If not repaired within ten working days of notification, the equipment will be subject to rejection. A final accounting shall be made of all equipment prior to approval.

All failed or rejected equipment shall be removed from the Materials Laboratory within three working days following notification; otherwise, the failed or rejected equipment will be returned, freight collect, to the Contractor.

Following final approval by the State Materials Laboratory, all equipment shall be removed from the State Materials Laboratory and delivered to sites as designated elsewhere in this contract.

Guarantees

Guarantees and warranties shall be in accordance with Section 1-05.10.

8-20.3(14)B Signal Heads

Section 8-20.3(14)B is supplemented with the following:

(SCR April 11, 2007)

The first paragraph is revised to read as follows:

Signal heads shall not be installed at any intersection until all other signal equipment is installed and the controller is in place, inspected, and ready for operation at that intersection, unless ordered by the Engineer. If the Engineer orders advance installation, the signal heads shall be covered to clearly indicate the signal is not in operation. The signal head covering material shall be of sufficient size to entirely cover the display. The covering shall extend over all edges of the

signal housing and shall be securely fastened at the back.

8-20.4 Measurement

Section 8-20.4 is supplemented with the following:

Delete third paragraph and replace with the following:

Casing and directional boring related to the installation of the traffic signal system or illumination systems shall be included in the lump sum bid items.

8-20.5 Payment

Section 8-20.5 is supplemented with the following:

All costs for furnishing, installing and field testing the complete and fully functional traffic signal system at the intersection of Bishop Boulevard and Klemgard Avenue consisting of signal controller, controller cabinet, signal standards, luminaries, pole mounted terminal cabinets, vehicle heads, pedestrian heads, mast arm signs, emergency vehicle pre-emption, video detection system, pedestrian push buttons, junction boxes, pull boxes, conduit, wiring, state testing and all other necessary materials, equipment and labor as indicated on the plans and specifications shall be made on a lump sum basis under the bid item "Traffic Signal System, Bishop Boulevard and Klemgard Avenue, Complete."

All costs for the furnishing and installation of conduit, excavation, bedding, backfill, directional bore across Klemgard Avenue and Bishop Boulevard necessary to complete the work shall be included in the lump sum price for "Traffic Signal System, Bishop Boulevard and Klemgard Avenue, Complete."

All costs for furnishing, installing and field testing the modification to the existing parking lot illumination system located in the private retail center east of the intersection of Bishop Boulevard and Klemgard Avenue by removing the existing parking light pole and base (STA 9+73.82, RT 38.5'), relocating the existing light pole onto a new contractor provided base (STA 9+73.2, RT 49.1') and wiring the new pole to maintain the parking lot illumination system shall be made on a lump sum basis under the bid item "Retail Center Parking Lot Illumination System Modification, Complete."

The construction signs used during signal turn-on will be paid as part of "Construction Signs Class A".

All costs for adjustment of junction boxes, both to the final grade and any grade adjustments required for the various construction stages proposed in the Contract, or for alternative stages proposed by the Contractor, shall be included in the lump sum contract price for the associated electrical system.

8-21 PERMANENT SIGNING

8-21.1 Description

Section 8-21.1 shall be supplemented as follows:

This work shall include the Contractor removing and re-using existing sign plates and furnishing new sign plates as shown on the drawings. All mounting hardware shall be new material.

This work shall include the construction of new bollards per the detail shown on the plans.

8-21.2 Materials

Section 8-21.2 shall be supplemented as follows:

Sign posts shall be per City of Pullman standards with breakaway bases.

New sign panels for all permanent signs shall be constructed of sheet aluminum per Section 9-28.

8-21.3(1) Location of Signs

Section 8-21.3(1) shall be supplemented as follows:

The exact sign locations shall be provided by the Engineer so as to meet clear distance requirements.

8-21.4 Measurement

Delete this section and replace with the following:

Measurement of the permanent signs shown on the plans shall be made on a lump sum basis with no distinction for sign panel type or the use of new or existing sign plates

Measurement of the bollards shown on the plans shall be made on a per each basis, complete.

8-21.5 Payment

Delete this section and replace with the following:

Payment for removal of existing signs and posts, furnishing and placement of new signs and posts, including all hardware shall be made on a lump sum basis under the bid item "Permanent Signing".

Payment for furnishing and placement of new bollards, including all hardware shall be made on a per each basis under the bid item "New Bollard".

8-22 PAVEMENT MARKING

8-22.1 Description

Section 8-22.1 shall be supplemented as follows:

Skip center stripe, double yellow center stripe, edge stripes, 45 degree stripes, lane stripes gore stripes, crosswalk, stop bar strip, parking lot striping / markings and pavement arrows shall be painted per City of Pullman Standards, as depicted on the plans.

Removal of existing pavement striping and markings shall be per City of Pullman and WSDOT standards.

8-22.4 Measurement

Delete this section and replace with the following:

Measurement of the removal of pavement markings and striping shall be made on a lump sum basis.

Measurement for the construction of new pavement striping and markings shall be made on a lump sum basis.

8-22.5 Payment

Delete this section and replace with the following:

Payment for the removal of pavement striping and markings shall be made under the bid item “Removing Pavement Striping / Traffic Markings, Complete”.

Payment for new pavement striping and markings shall be made under the bid item “New Pavement Striping / Traffic Markings, Complete”.

8-30 SEGMENTAL BLOCK RETAINING WALL STRUCTURE

The following new section is added to Division 8 of the Standard Specifications:

8-30.1 Description

This work shall consist of furnishing and installing a segmental modular block retaining wall in accordance with the contract documents at the location shown in the plans.

The Contractor shall provide the City with a submittal for approval of the modular block system prior to construction.

8-30.2 Materials

Materials shall be modular, concrete blocks with the standard unit being straight split, sculptured rock face. The color shall be determined by the City of Pullman. Exposed faces of the units shall be free of cracks, chips or other imperfections when viewed from a distance of five feet under diffused light. Cap units shall be provided along the full length of the wall. The modular block shall be Keystone straight split, Standard III units, or approved equal.

Concrete shall have compressive strength greater than 3000 psi and shall conform to ASTM C1372 – Standard Specifications for Segmental Retaining Wall Units and ASTM C140 – Sampling and Testing of Concrete Masonry Units.

Wall leveling course material shall be a minimum 4 inch thick compacted layer of crushed surfacing base course.

Wall backfill material shall be native earth material, free of organics and debris.

8-30.3 Construction Requirements

Contractor shall excavate behind the new sidewalk to the lines and grades shown on the plans. The Engineer shall inspect the excavation and approve the foundation soils prior to placement of the leveling course.

The leveling course shall be compacted to 95 percent (95%) of the maximum dry density as determined by ASTM D-1557 (Modified Proctor). The leveling course shall be finished to parallel to the back of sidewalk with a consistent reveal of 2 inches below the back edge of the sidewalk.

The modular block courses shall be placed to the lines and grades shown on the plans. All blocks shall be parallel and with a consistent reveal from the top back of sidewalk. The locks shall be checked in all directions, ensuring that all units are in contact with the base and adjacent units with no gaps. The modular blocks adjacent to the existing concrete light pole bases shall be neatly cut to fit around the pole base with no modification or alteration of the exposed block face. The layout of end transitions and caps shall be in conformance with the manufacturer's recommendations.

The final wall elevations, lines, grades, and back slopes shall be approved by the Engineer prior to acceptance.

8-30.4 Measurement

Measurement of the segmental block retaining wall shall be made on a square yard basis along the face of the completed installation.

Measurement of crushed surfacing base course for the leveling course shall be made on a per ton basis.

8-30.5 Payment

Payment shall be made under the bid items "Segmental Block Retaining Wall", including all tools, equipment, materials and labor necessary to furnish and install the work. This work includes the custom cutting and fitting of modular blocks around the existing concrete light pole bases.

8-31 RELOCATE EXISTING BUS SHELTER and EXISTING HOLIDAY INN EXPRESS ELECTRIC SIGN

The following new section is added to Division 8 of the Standard Specifications:

8-31.1 Description

This work shall consist of furnishing a new bus shelter slab and relocating the existing bus shelter and bench to the new slab location as shown on the plans.

This work shall consist of relocating the existing Holiday Inn Express monument sign, including electrical to behind the new sidewalk, at a location determined by the Engineer. The Contractor

shall review the existing sign base and electrical power supply with the intent of relocating the monument sign to an “in-kind” condition.

8-31.2 Materials

Concrete shall be a minimum 4000 psi compressive strength and of similar mix design as the City of Pullman driveway aprons.

Reinforcement shall be grade 60 ksi per ASTM A184.

Electric conduits, wiring and appurtenances shall be in conformance with NEC requirements.

8-31.3 Construction Requirements

Contractor shall field measure and use the same existing bus shelter and bench bolt patterns and relative slab placement dimensions for the placement of the existing bus shelter and bench on the new concrete slab.

8-31.4 Measurement

Measurement of the relocation of the existing bus shelter and bench onto a new slab shall be made on a lump sum basis.

Measurement of the relocation of the existing Holiday Inn Express monument sign to a new location shall be made on a lump sum basis.

8-31.5 Payment

Payment of relocating the existing bus shelter and bench on a new concrete slab shall be made on a lump sum basis under the bid item “Relocate Existing Bus Shelter, Complete” and shall include all costs in connection with furnishing all materials, labor tools, and equipment necessary to complete the work.

Payment of relocating the existing Holiday Inn Express monument sign shall be made on a lump sum basis under the bid item “Relocate Existing Holiday Inn Express Electric Sign, Complete” and shall include all costs in connection with furnishing all materials, labor tools, and equipment necessary to complete the work.

9-29 ILLUMINATION, SIGNAL ELECTRICAL

9-29.1 Conduit, Innerduct, and Outerduct

Section 9-29.1 is supplemented with the following:

Cabinet Conduit Sealing

Mechanical plugs for cabinet conduit sealing shall be one of the following:

1. Tyco Electronics - TDUX
2. Jackmoon – Triplex Duct Plugs
3. O-Z Gedney – Conduit Sealing Bushings

Installation shall conform to the manufacturer's recommendations.

The mechanical plug shall withstand a minimum of 5 psi of pressure.

Surface Mounting Conduit Attachment Components

Fastening hardware components for stainless steel channel supports shall be stainless steel. Conduit clamps shall be one piece, two bolt units with lock washers.

9-29.1(2) Rigid Metal Conduit Fittings and Appurtenances

Section 9-29.1(2) is supplemented with the following:

Couplings for rigid metal-type conduits shall be hot-dip galvanized.

Conduit supports for surface mounted conduit shall be Type 304 stainless steel channel type using Type 304 stainless steel bolts and spring nuts, except in marine environments, where Type 316 stainless steel shall be used.

Conduit clamps for the conduit entering a strut mount type B modified service cabinet shall be two-piece and interlock with the support channel with a single bolt. At all other locations, conduit clamps shall be one piece two-hole units and shall span the entire width of the support channel and attach to the supports on both sides of the conduit with bolts and associated hardware too include lock washers.

Conduit clamps shall be Type 304 stainless steel or hot dip galvanized, except in marine environments, where Type 316 stainless steel shall be used.

For conduit smaller than 2 inch diameter, conduit clamps shall have a minimum manufacturer's design load rating of 500 lb. For conduit from 2 inch to 6 inch diameter, conduit clamps shall have a minimum manufacturer's design load rating of 1000 lb.

Galvanizing repair paint used for conduit fittings and couplings shall be Formula A-9-73. Electroplated fittings are not allowed.

The colloidal copper compound required for coating threads on metallic conduit, couplings and fittings shall consist of approximately 70 percent by weight of petroleum oil and 30 percent by weight of copper flakes.

9-29.2 Junction Boxes, Cable Vaults, and Pull Boxes

Section 9-29.2 is supplemented with the following:

9-29.2(1)A Standard Duty Junction Boxes

Section 9-29.2(1)A is supplemented with the following:

(January 7, 2013)

Concrete Junction Boxes

Both the slip-resistant lid and slip-resistant frame shall be treated with Mebac#1 as manufactured

by IKG industries, or SlipNOT Grade 3-coarse as manufactured by W.S. Molnar Co. Where the exposed portion of the frame is ½ inch wide or less the slip-resistant treatment may be omitted on that portion of the frame. The slip-resistant lid shall be identified with permanent marking on the underside indicating the type of surface treatment (“M1” for Mebac#1; or “S3” for SlipNOT Grade 3-coarse) and the year manufactured. The permanent marking shall be 1/8 inch line thickness formed with a stainless steel weld bead.

9-29.2(2) Standard Duty and Heavy-Duty Cable Vaults and Pull Boxes

Section 9-29.2(2) is supplemented with the following:

9-29.2(2)A Standard Duty Cable Vaults and Pull Boxes

Section 9-29.2(2)A is supplemented with the following:

(January 7, 2013)

Both the slip-resistant lid and slip-resistant frame shall be treated with Mebac#1 as manufactured by IKG industries, or SlipNOT Grade 3-coarse as manufactured by W.S. Molnar Co. Where the exposed portion of the frame is ½ inch wide or less the slip-resistant treatment may be omitted on that portion of the frame. The slip-resistant lid shall be identified with permanent marking on the underside indicating the type of surface treatment (“M1” for Mebac#1; or “S3” for SlipNOT Grade 3-coarse) and the year manufactured. The permanent marking shall be 1/8 inch line thickness formed with a stainless steel weld bead.

9-29.6 Light and Signal Standards

Section 9-29.6 is supplemented with the following:

9-29.6(1) Steel Light and Signal Standards

Section 9-29.6(1) is supplemented with the following:

(January 6, 2014)

Traffic Signal Standards

Traffic signal standards shall be furnished and installed in accordance with the methods and materials noted in the applicable Standard Plans, pre-approved plans, or special design plans.

All welds shall comply with the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. Welding inspection shall comply with Section 6-03.3(25)A Welding Inspection.

Hardened washers shall be used with all signal arm connecting bolts instead of lockwashers. All signal arm ASTM A 325 connecting bolts tightening shall comply with Section 6-03.3(33).

Traffic signal standard types and applicable characteristics are as follows:

Type PPB	Pedestrian push button posts shall conform to Standard Plan J-20.10 or to one of the following pre-approved plans:
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Fabricator

Drawing No.

Northwest Signal Supply Inc.	NWS 3565
Valmont Ind. Inc.	DB00655 Rev. J Sheet's 1, 2 & 3
Ameron Pole Prod. Div.	WA10TR-1 Rev. C and WAPPBPBA Rev. B
Union Metal Corp.	A-10035 Rev. R6 Sht. 1
West Coast Engineering Group	WSDOT-PP-01 Rev. 1
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

Type PS Pedestrian signal standards shall conform to Standard Plan J-20.16 or to one of the following pre-approved plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3540 Rev. 3 and NWS 3540B Rev. 3
Valmont Ind. Inc.	DB00655 Rev.J Sht. 1, 2 & 3
Ameron Pole Prod. Div.	WA10TR-1 Rev. C and WA10TR-2 Rev. B
Union Metal Corp.	TA-10025 Rev. R17 Sht. 1 & 2
West Coast Engineering Group	WSDOT-PP-02 Rev. 1
American Pole Structures, Inc.	WS-PP-03 Rev. 1D
KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3

Type I Type I vehicle signal standards shall conform to Standard Plan J-21.15 or to one of the following pre-approved plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3540 Rev. 3 and Supply Inc. NWS 3540B Rev. 3
Valmont Ind. Inc.	DB00655 Rev. J

		Sht. 1 2 & 3
	Ameron Pole Prod. Div	WA10TR-1 Rev. C and WA10TR-2 Rev. B
	Union Metal Corp.	TA-10025 Rev. R17 Sht. 1 & 2
	West Coast Engineering Group	WSDOT-PP-02 Rev. 1
	American Pole Structures, Inc.	WS-PP-03 Rev. 1D
	KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3
Type FB	Type FB flashing beacon standard shall conform to Standard Plan J-21.16 or the following pre-approved plan:	
	<u>Fabricator</u>	<u>Drawing No.</u>
	Union Metal Corp	50200-B58 Rev. R6 Sht. 1 & 2
	Valmont Ind. Inc.	DB00655 Rev.J Sht. 1 2 & 3
	Ameron Pole Prod. Div.	WA10TR-1 Rev. C and WA10TR-2 Rev. B
	Northwest Signal Supply, Inc.	NWS 3540 Rev. 3 and NWS 3540B Rev. 3
	KW Industries	10-200-PED-1 Rev. 7, Sheets 1, 2 and 3
Type RM	Type RM ramp meter standard shall conform to Standard Plan J-22.15 or the following pre-approved plan:	
	<u>Fabricator</u>	<u>Drawing No.</u>
	Union Metal Corp	50200-B58 Rev. R6 Sht. 1 & 2
	Valmont Ind. Inc.	DB00655 Rev. J Sht. 1 2 & 3
	Ameron Pole Prod. Div.	WA10TR-1 Rev. C and WA10TR-2 Rev. B
	Northwest Signal Supply, Inc.	NWS 3540 Rev. 3 and NWS 3540B Rev. 3

KW Industries 10-200-PED-1
Rev. 7, Sheets 1, 2 and 3

Type CCTV Type CCTV camera pole standards shall conform to one of the following pre-approved Plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Valmont Industries, Inc.	DB 00759 Rev. L
Ameron Pole Product Div.	W6CCTV1 Rev F & W6CCTV2 Rev A
West Coast Engineering Group	AP-WSDOT-CP-01-Rev. 3
American Pole Structures	WS-CP-01 Rev. 1C Sht. 1 & 2
Union Metal Corporation	Drawing No. P33-B318, R11.1, Sheets 1, 2 of 2
Union Metal Corporation	Drawing No. P33-B323, Rev. 3, Sheets 1, 2 of 2
Northwest Signal Supply, Inc.	Drawing No. NWS 3545 (For Type CCTV) Rev. 1
KW Industries	Drawing No. 10-200-CAM-1 Rev. 6, Sheets 1 and 2

Type II Characteristics:

Luminaire mounting height N.A.
Luminaire arms N.A.
Luminaire arm length N.A.
Signal arms One Only

Type II standards shall conform to one of the following pre- approved plans, provided all other requirements noted herein have been satisfied. Maximum (x) (y) (z) signal arm loadings in cubic feet are noted after fabricator.

<u>Signal Arm Length (max)</u>	<u>Fabricator-(x) (y) (z)</u>	<u>Drawing No.</u>
65 ft.	Valmont Ind. Inc.-(2894)	DB00625-Rev.R, Shts. 1, 2, 3 & 4
65 ft.	Union Metal Corp. (2900)	71026-B86 Rev. R10.1, Shts. 1, 2, & 3 of 3
65 ft.	Ameron Pole-(2900)	W3724-1 Rev. J &

	Prod. Div.	W3724-2 Rev.G
65 ft.	Northwest Signal-(2802) Supply Inc.	NWS 3500 Rev. 4 or NWS 3500B Rev. 4
45 ft.	American Pole(1875) Structures, Inc.	WS-T2-L Rev. 8 Sheet 1 & 2 of 2
65 ft.	American Pole (2913) Structures, Inc. Sheets	WS-T2-H Rev. 8 1 & 2 of 2
65 ft.	KW Industries	10-200-TSP-4 Rev. 5, Sheets 1, 2, and 3
65 ft	West Coast Engineering Group	WSDOT-TS-01 Rev. 3 Sheets 1, 2, and 3
65 ft.	Maico Industries (2894)	WSDOTMA Rev. 3 Sheets 1, 2 and 3

Type III Characteristics:

Luminaire mounting height	30 ft., 35 ft., 40 ft., or 50 ft.
Luminaire arms	One Only
Luminaire arm type	Type 1
Luminaire arm length (max.)	16 ft.
Signal arms	One Only

Type III standards shall conform to one of the following pre-approved plans, provided all other requirements noted herein have been satisfied. Maximum (x) (y) (z) signal arm loadings in cubic feet are noted after fabricator.

<u>Signal Arm</u> <u>Length (max)</u>	<u>Fabricator-(x) (y) (z)</u>	<u>Drawing No.</u>
65 ft.	Valmont Ind. Inc.-(2947)	DB00625-Rev.R, Shts. 1, 2, 3 & 4 and "J" luminaire arm
65 ft.	Union Metal Corp. (2900)	71026-B87 Rev. R11 Shts. 1, 2 & 3
65 ft.	Ameron Pole-(2900) Prod. Div.	W3724-1 Rev. J & W3724-2 Rev. G and "J" luminaire arm
65 ft.	Northwest Signal-(2802) Supply Inc.	NWS 3500 Rev. 4 or NWS 3500B Rev. 4

45 ft.	American Pole (1875)	WS-T3J-L, Rev. 11 Structures, Inc. Sheets 1 & 2 of 2
65 ft.	American Pole (2913)	WS-T3J-H, Rev. 10 Structures, Inc. Sheets 1 & 2 of 2
65 ft	West Coast Group	WSDOT-TS-01 Rev. 3 Engineering Sheets 1, 2, and 3
65 ft.	Maico Industries (2947)	WSDOTMA Rev. 3 Sheets 1, 2 and 3 and "J" luminaire arm
65 ft.	KW Industries	10-200-TSP-3 Rev. 5, Sheets 1, 2, and 3

Type IV Type IV strain pole standards shall be consistent with details in the plans and Standard Plan J-27.15 or one of the following pre-approved plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3520 Rev. 2 or NWS 3520B Rev. 2
Valmont Industries, Inc.	DB006885, Rev. A Sheets 1 and 2
Ameron Pole Prod. Div.	M3650 Rev. G
Union Metal Corp.	EA-10224 Rev. R13 Sheet 1 of 1
American Pole	9000-12-037 Rev. A Structures, Inc.
Maico Industries	WA-SP-4 Rev.2, Sheets 1 and 2 of 2
KW Industries	10-200-SP-1 Rev. 4, Sheets 1 and 2
KW Industries	10-200-SP-2 Rev. 5, Sheets 1 and 2

Type V Type V combination strain pole and lighting standards shall be consistent with details in the plans and Standard Plan J-27.15 or one of the following pre-approved plans:

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3520 Rev. 2 or NWS 3520B Rev. 2

Valmont Industries, Inc.	DB006885, Rev. A Sheets 1 and 2
Ameron Pole Prod. Div.	M3650 Rev. G
Union Metal Corp.	EA-10225, Rev. R13 Shts. 1 & 2
American Pole	9020-12-007 Rev. B Structures, Inc.
Maico Industries	WA-SP-5 Rev. 2 , Sheets 1, and "J" luminaire arm

The luminaire arm shall be Type 1, 16 foot maximum and the luminaire mounting height shall be 40 feet or 50 feet as noted in the plans.

Type SD

Type SD standards require special design. All special design shall be based on the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and pre-approved plans and as follows:

1. A 90 mph wind loading shall be used.
2. The Design Life and Recurrence Interval shall be 50 years for luminaire support structures.
3. Fatigue design shall conform to AASHTO Section 11, Table 11-1 using fatigue category III.

Complete calculations for structural design, including anchor bolt details, shall be prepared by a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural Engineering or by an individual holding valid registration in another state as a civil or structural Engineer.

All shop drawings and the cover page of all calculation submittals shall carry the Professional Engineer's original signature, date of signature, original seal, registration number, and date of expiration. The cover page shall include the contract number, contract title, and sequential index to calculation page numbers. Two copies of the associated design calculations shall be submitted for approval along with shop drawings.

Details for handholes and luminaire arm connections are available from the Bridges and Structures Office.

Foundations for various types of standards shall be as follows:

- Type PPB As noted on Standard Plan J-20.10-02
- Type PS As noted on Standard Plan J-21.10-03
- Type I As noted on Standard Plan J-21.10-03
- Type FB As noted on Standard Plan J-21.10-03
- Type RM As noted on Standard Plan J-21.10-03
- Type CCTV As noted on Standard Plan J-29.15-00
- Type II As noted in the Plans.
- Type III As noted in the Plans.
- Type IV As noted in the Plans and Standard Plan J-27.10
- Type V As noted in the Plans and Standard Plan J-27.10
- Type SD As noted in the Plans.

9-29.13 Traffic Signal Controllers

Section 9-29.13 is supplemented with the following:

9-29.13(3) Traffic Actuated Controllers

Section 9-29.13(3) is supplemented with the following:

NEMA TS-2 Type 1 control equipment shall be used in this contract. The Contractor shall furnish, test and install an Econolite Cobalt™ controller compatible with the City's current Areis Closed Loop Traffic Management System.

9-29.13(6) Emergency Preemption

Section 9-29.13(3) is supplemented with the following:

The system shall be capable of preempting the controller to the phases shown in the Plans when a signal is received from the field detector.

Pre-emption equipment shall be Global Traffic Technologies.

The Contractor shall furnish and install the following:

1. Pre-emption detectors shall be GTT Model 711.
2. Discriminators shall be four-channel model 454 units. One is required at each controller.

9-29.13(7)B Auxiliary Equipment for NEMA Controllers

Section 9-29.13(7)B is supplemented with the following:

Generator Transfer Switch

The Generator Transfer Switch shall be capable of switching power from a utility power source to an external generator power source.

The Transfer Switch enclosure shall be of identical materials and dimensions and installation methods as the Police Panel type enclosure specified in the first paragraph of Special Provision 9-29.13(7)E except that the enclosure door shall include a spring loaded construction core lock capable of accepting a Best 6-pin CX series core. The core lock shall be installed with a green construction core. Upon contract completion, two master keys for the construction core shall be delivered to the Engineer.

The enclosure shall contain the following Transfer Switch equipment:

One Nema L5-30P Flanged Inlet generator connector

One Utility power indicator light

Two 30 amp, 120 volt, single pole, single phase, circuit breakers. One circuit breaker shall be labeled "Generator" and the other circuit breaker shall be labeled "Utility". Both labels shall be engraved phenolic name plates.

The enclosure shall include a mechanical lock out feature that prevents the Utility circuit breaker and the Generator circuit breaker from being in the ON position at the same time. The circuit breakers shall be capable of being independently switched.

The conductors from the Generator Transfer Switch enclosure to the cabinet circuit breaker shall be enclosed in nylon mesh sleeve.

The enclosure door shall be labeled with the letters "GTS".

9-29.13(7)D NEMA Controller Cabinets

Section 9-29.13(7)D is supplemented with the following:

The Contractor shall furnish, test and install an Econolite Plug-n-Go™ Cabinet meeting NEMA

TS-2, Type 1 standards.

9-29.18 Vehicle Detector

Section 9-29.18 is supplemented with the following:

Vehicle video detection equipment shall be Autoscope Encore by Econolite.

9-29.19 Pedestrian Push Buttons

Section 9-29.19 is replaced with the following:

Bulldog III (Model #RBDL3-B-4H), accessible pedestrian push buttons manufactured by Polara Engineering, Inc. shall be furnished and installed. The pedestrian push button shall be round with blank stainless steel button. A rectangular, black powder-coated aluminum body with four mounting holes shall be provided.

9-29.22 Vacant

Section 9-29.22 is replaced with the following:

9-29.22 Internally Illuminated Street Signs

The internally illuminated street signs shown on the plans shall be bi-directional, evenly lit with no dark or "hot" spots and legible from a minimum of 400' away at night. The housing shall be constructed of aluminum with a black powder coat finish. Sign panels shall be polycarbonate with retroreflective transparent green sheeting. Sign legend shall be a combination of upper-case and lower-case letter. Series D lettering with 10" (min.) upper-case letters shall be used.

All hardware used in the construction of the sign shall be stainless steel type 304 or 305. Signs shall be mounted under the signal mast-arm using galvanized mounting brackets to prevent rust and corrosion.

The Contractor shall submit shop drawings for approval showing:

- The sign and the mounting hardware
- Weight of sign assembly including mounting hardware
- Brand and type of sign face substrate material
- Brand and type of sheeting material
- Sign face design layout including font type and letter size

Each sign shall be furnished complete and installed per manufacturer's specifications.

9-29.24 Service Cabinets

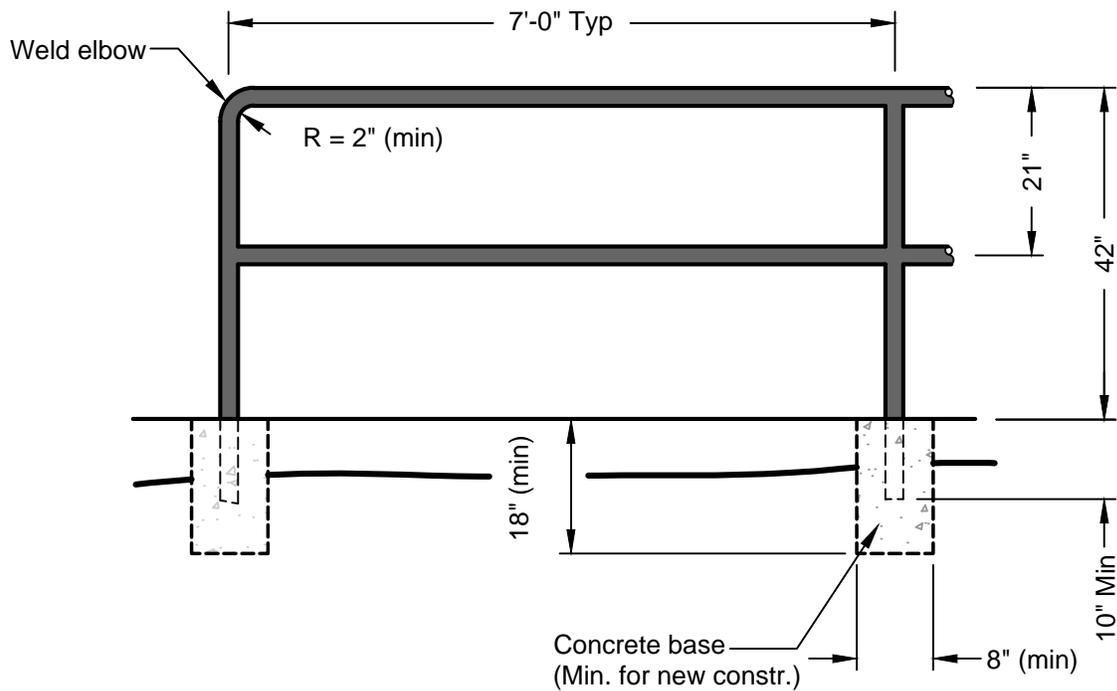
Section 9-29.24 is supplemented with the following:

Service cabinets shall be fabricated from 0.125 inch sheet aluminum (5052 alloy H32 ASTM) with mill finish. The aluminum shall not be anodized and the exterior shall not be painted.

9-29.25 Amplifier, Transformer, and Terminal Cabinets

Section 9-29.25 is supplemented with the following:

Cabinets shall be fabricated from 0.125-inch sheet aluminum (5052 alloy) with mill finish. Cabinets shall not be anodized and the exterior shall not be painted.



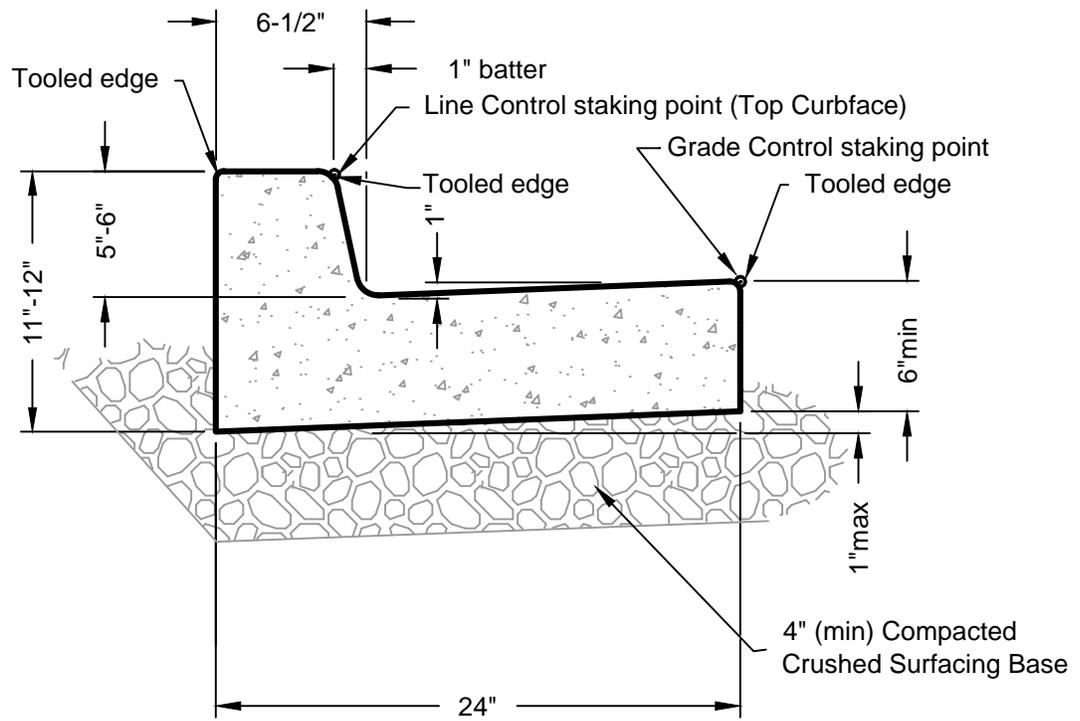
NOTES:

1. Top railing shall be 2 inch Schedule 40 clean black steel pipe. Stanchions and intermediate rails shall be 1-1/2 inch (min) Schedule 40 clean black steel pipe.
2. Weld pipe joints. Remove all sharp edges and burrs.
3. Stanchions shall be welded, bolted, grouted, or otherwise firmly set to prevent movement of the rail. Stanchions for new construction shall be set in concrete as shown above.
4. Stanchions shall be vertical regardless of the slope of the wall, sidewalk, or ground surface.
5. The installed railing shall be solvent-cleaned, made free of rust or other contaminants, and coated with gloss black Sherwin-Williams Kem-400 coating # F75B401, or Sher-Kem coating # 6016-49349387, or approved equal.
6. Total dry paint film thickness shall be no less than 4.5 mils.
7. Alternate materials may be used with the prior approval of the Engineer.

PEDESTRIAN RAILING

PAGE NO:

1



TYPICAL SECTION

NOTES:

1. Control joints with tooled edges shall be cut 1/4 to 1/3 the section depth at 10-foot intervals or as directed by the Engineer. Curb joints shall match street joints when adjacent to concrete pavement.
2. Through joints and full form plates shall not be used except where specifically approved by the Engineer.
3. All exposed corners shall be tooled to a 1/2-inch (min) radius.
4. Do not use expansion joints.
5. Construction stakes shall establish the face of curb for horizontal control and lip of gutter for vertical control.

AutoCAD: Curb & Gutter

dwc 10-12
dwc 3-00
DRR

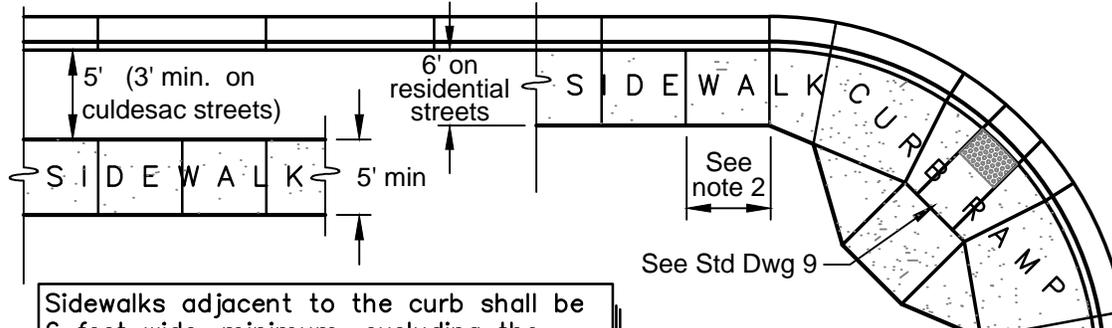
PAGE NO:

CURB AND GUTTER

5

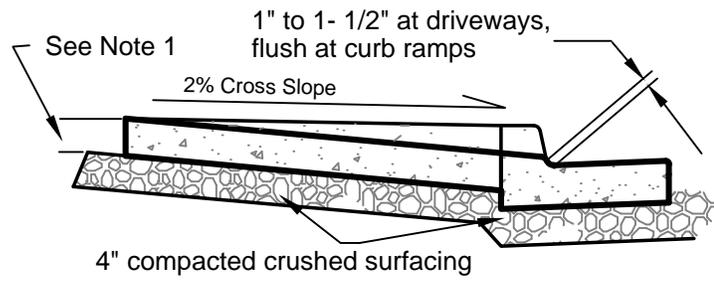
ROLLED CURB

CURB & GUTTER



Sidewalks adjacent to the curb shall be 6 feet wide, minimum, excluding the curb width. If a planter strip at least 30" wide is provided, the sidewalk width may be reduced to 5 feet, minimum.

PLAN

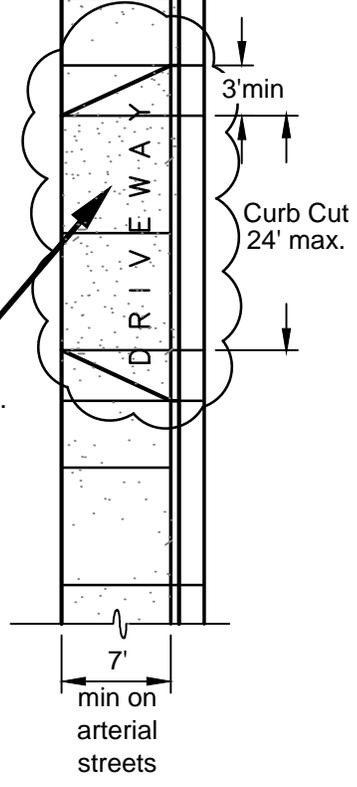


SECTION AT CURB CUT

See Std. Dwg. Sheet 8-A , B, C, D for Example Layouts

NOTES:

1. Sidewalks shall be 4 inches thick, except that they shall be 5-¹/₂ inches thick at curb cuts and curb ramps and where adjacent to rolled curbs.
2. Control joint depth shall measure one-fourth the thickness (min) of the concrete. Joint spacing shall be 5 feet on centers, and shall match curb joints as shown. Joint spacing shall continue through curb cuts at a spacing approved by the Engineer.
3. 3/8-inch expansion joints are required between sidewalk and structures, only. (Sign posts, Walls, Hydrants, for example)
4. Curb cuts wider than 24 feet require prior approval of the Engineer.
5. Driveways shall be constructed to provide a 3-foot minimum walkway with 2% maximum cross-slope through the driveway. The maximum slope for driveway ramps from the curb to the walkway is 10%.
See Standard Drawing Sheets 8-A, 8-B, 8-C, and 8-D for Example Layouts.



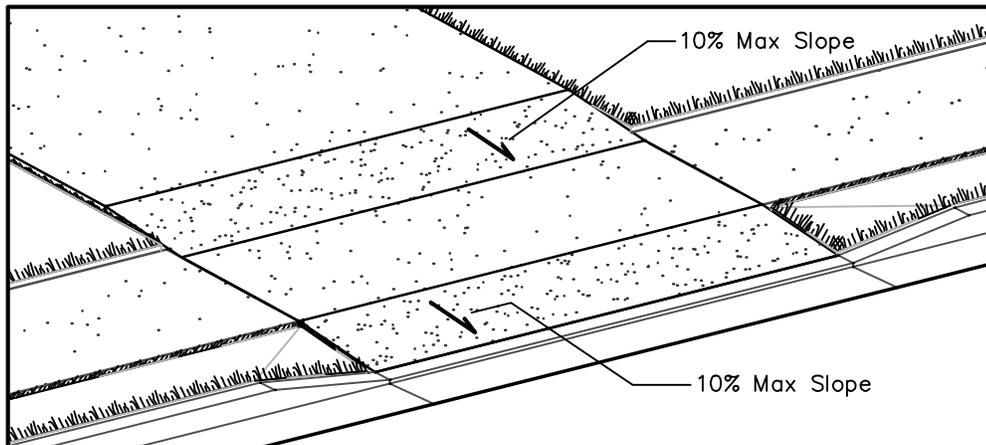
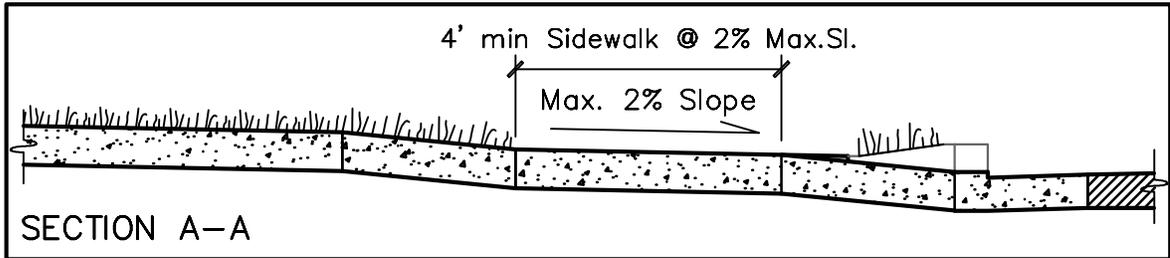
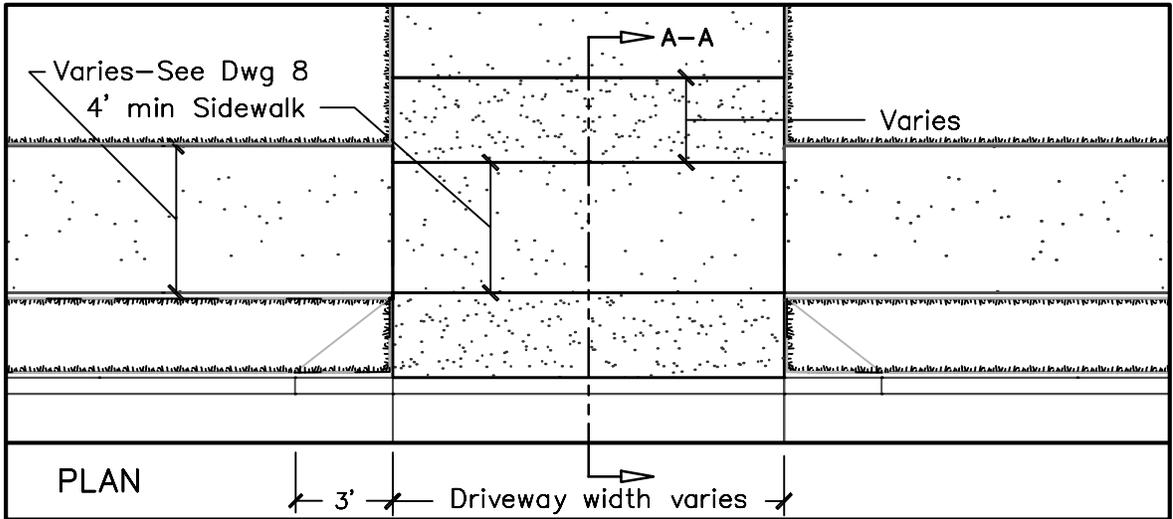
AutoCAD:Curb & Sidewalk Layout

06 dwc
DRR

CURB AND SIDEWALK LAYOUT

PAGE NO:

8



NOTES:

1. Sidewalks shall be 4 inches thick, except that they shall be 5- $\frac{1}{2}$ inches thick at curb cuts and curb ramps and where adjacent to rolled curbs.

utoCAD:Driveway Crossings Alternative 8A

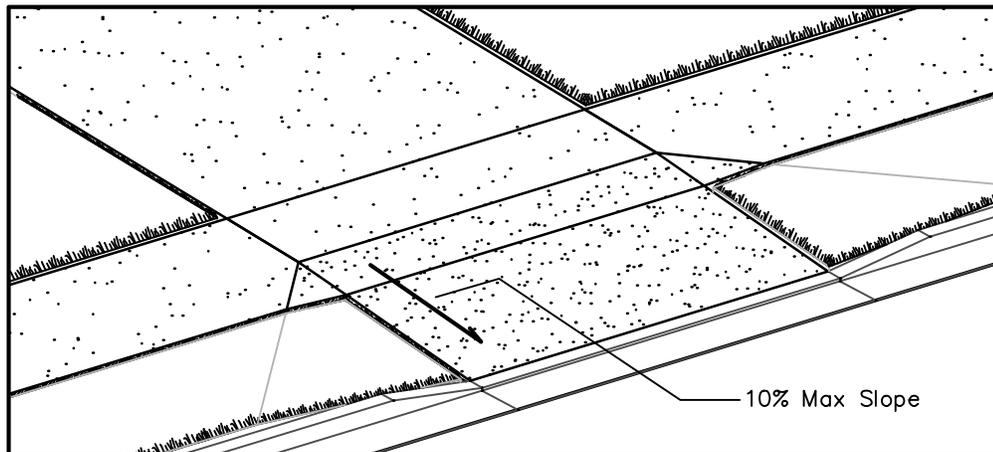
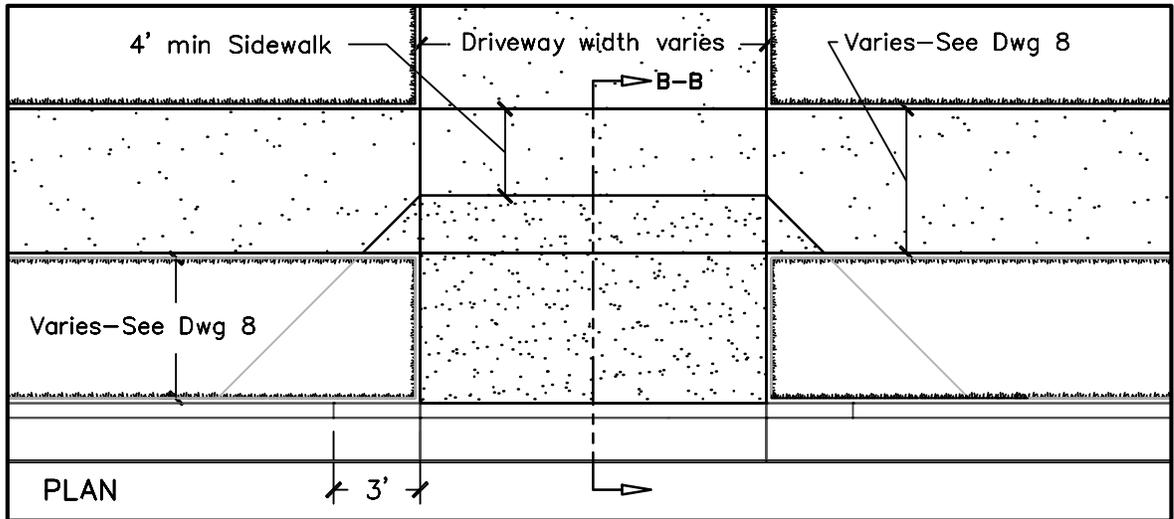
nrf-06

DRIVEWAY CROSSINGS - A

SPLIT APRON SIDEWALK

PAGE NO:

8A



NOTES:

1. Sidewalks shall be 4 inches thick, except that they shall be 5- $\frac{1}{2}$ inches thick at curb cuts and curb ramps and where adjacent to rolled curbs.

AutoCAD: Driveway Crossings Alternatives 8B

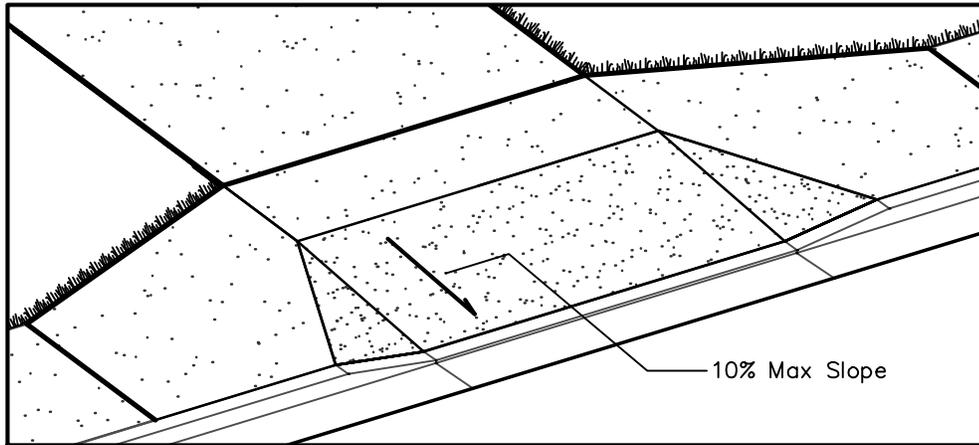
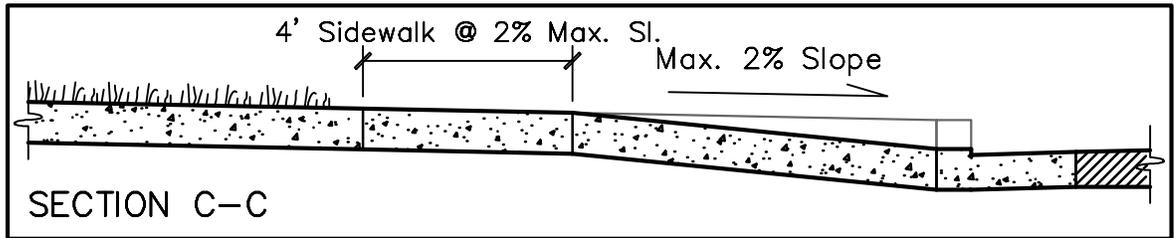
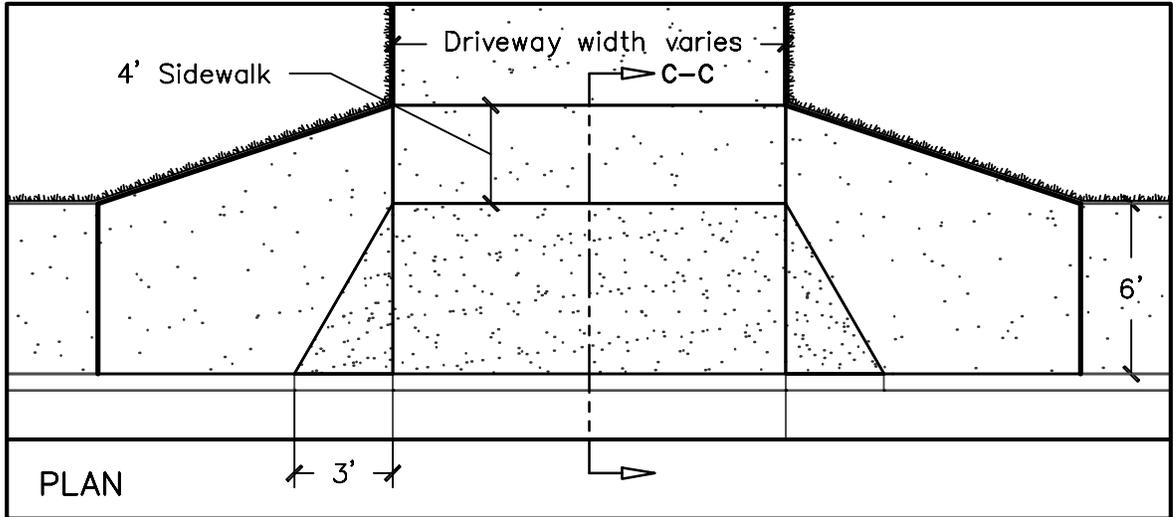
nri

DRIVEWAY CROSSINGS - B

PLANTING STRIP SIDEWALK

PAGE NO:

8B



NOTES:

1. Sidewalks shall be 4 inches thick, except that they shall be 5- $\frac{1}{2}$ inches thick at curb cuts and curb ramps and where adjacent to rolled curbs.

AutoCAD: Driveway Crossings Alternatives 8C

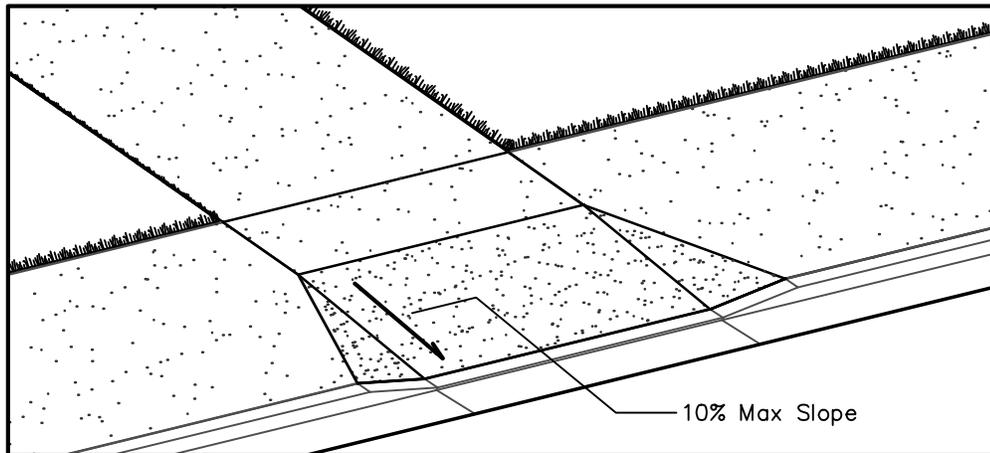
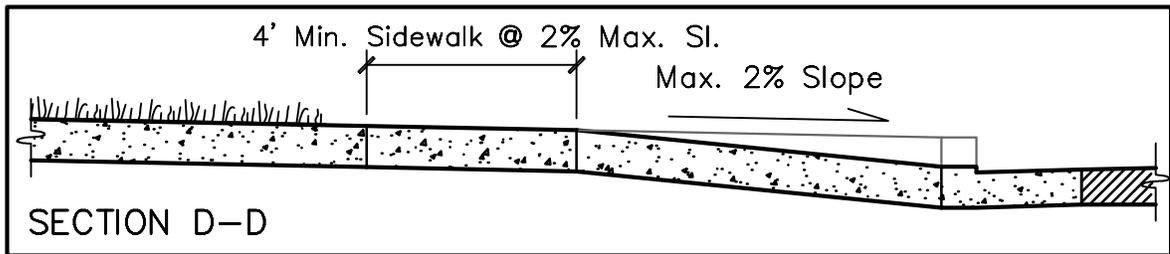
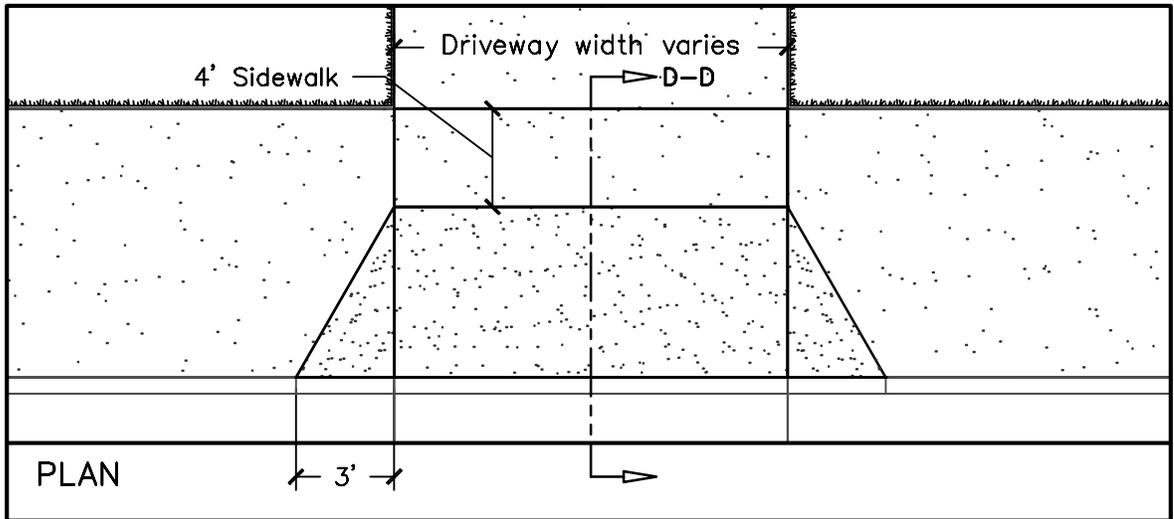
nj

DRIVEWAY CROSSINGS - C

JOGGED SIDEWALK

PAGE NO:

8C



NOTES:

1. Sidewalks shall be 4 inches thick, except that they shall be 5- $\frac{1}{2}$ inches thick at curb cuts and curb ramps and where adjacent to rolled curbs.

AutoCAD: Driveway Crossings Alternatives 8A-D

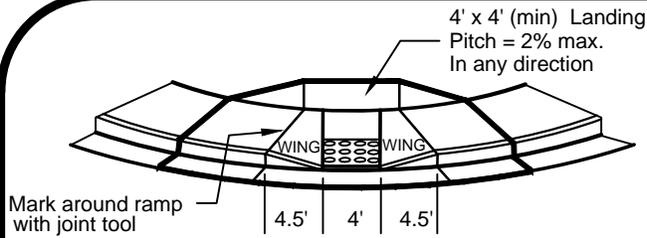
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DRIVEWAY CROSSINGS - D

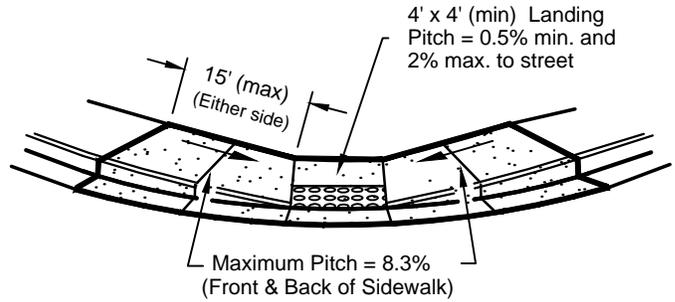
WIDE SIDEWALK

PAGE NO:

8D

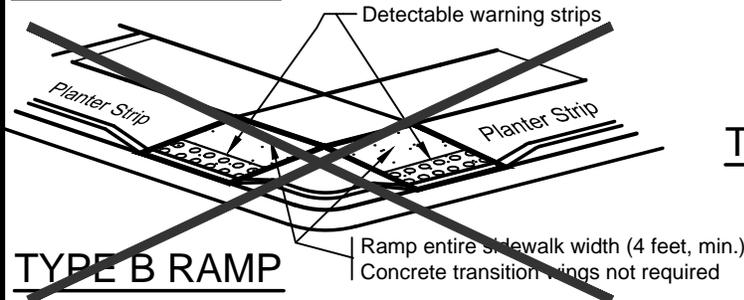


TYPE A RAMP

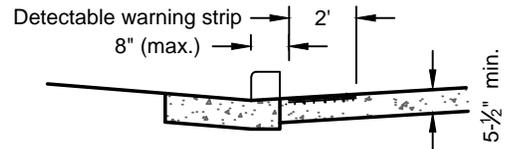


TYPE C LANDING - RAMP

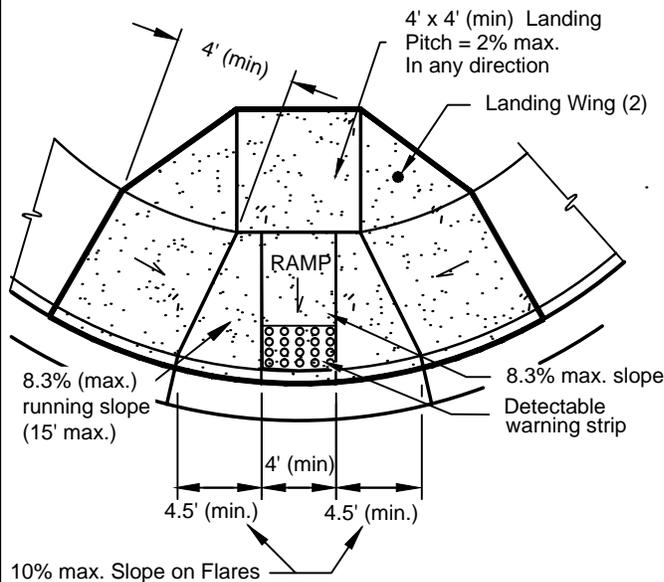
Full-Radius Style



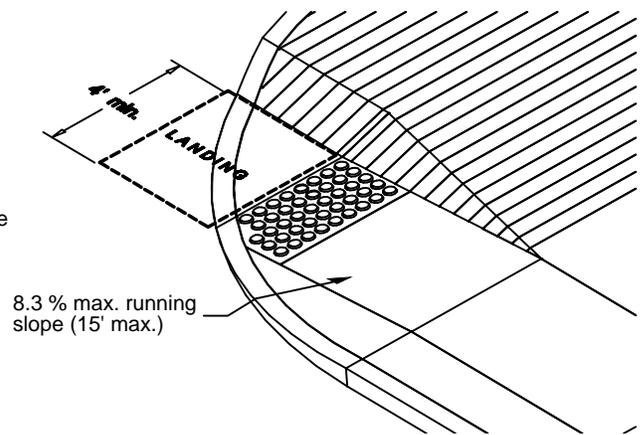
TYPE B RAMP



CROSS SECTION



PLAN (Type "A")



PARALLEL CURB RAMP

NOTES:

1. Ramp cross slopes and landing slopes shall not exceed 2%.
2. Ramps shall be flush with the gutter flow line. Maintain 5% (max.) gutter slope at ramp.
3. Curb Ramps are required with all curb types.
4. Detectable warning strips shall consist of a 24" x [Ramp Width] truncated-dome style surface installed full width of ramp (*at least one corner of the leading edge of the warning strip shall be within 8" of the face of curb, but no other point on the leading edge of the warning strip shall be greater than 5' from the back of curb.*) Color shall be Federal Yellow. Brick or concrete strips are not approvable.
5. Construction of Type C ramps is allowed only where site conditions prevent construction of Type A ramps; obtain Engineer's approval before constructing Type C ramps.

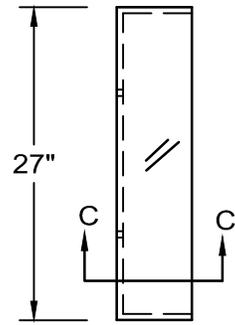
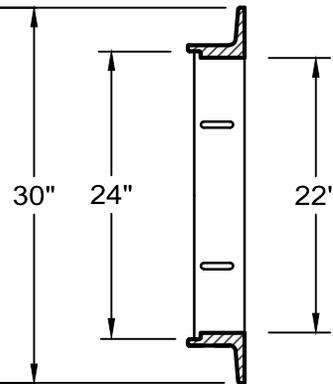
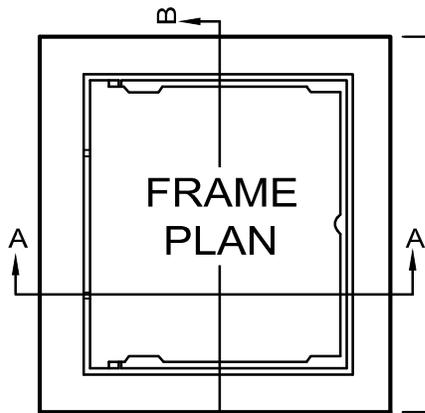
P:\Eng & CAD\STANDARD DWGS - ALL YEARS\Std Dwgs new for 2013\Curb Ramp 9.dwg

12 dwc
06 dwc

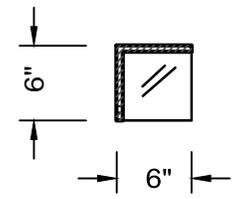
CURB RAMP DETAILS

PAGE NO:

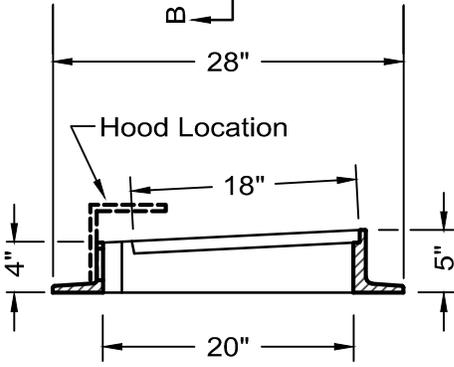
9



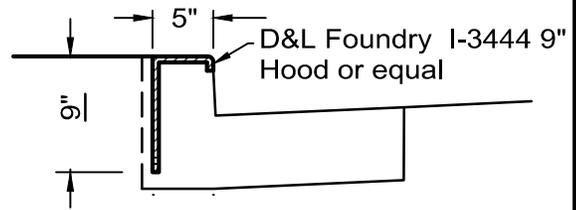
SECTION B-B



**SECTION C-C
IMBEDDED HOOD**



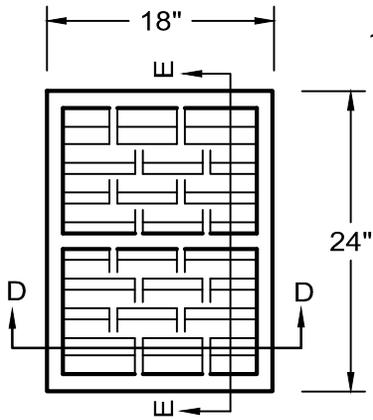
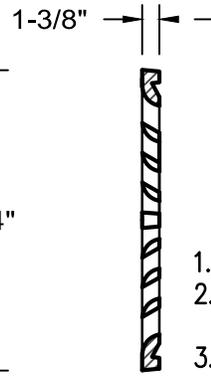
SECTION A-A



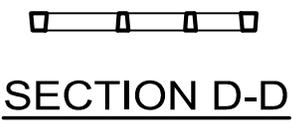
ALT. SECTION C-C

HOOD FLUSH WITH TOP & FACE OF CURB

SECTION E-E



GRATE PLAN



SECTION D-D

NOTES:

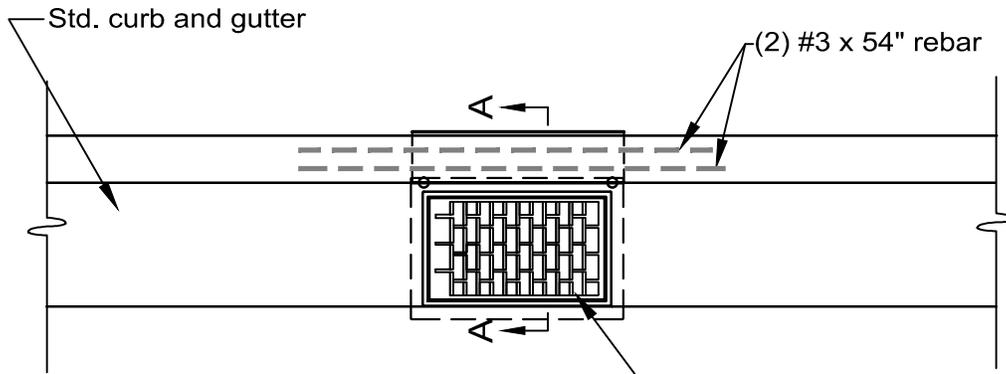
1. Frames to be ASTM A48 class 30 grey iron.
2. Grate castings to be ASTM class 80-55-06 ductile iron.
3. Lids and frames shall be machine ground to prevent rocking.
4. See Standard Drawing # 7 for rolled curb frame and grate section.
5. Use East Jordan Iron Works # 7701 frame with Type B hood, D&L Foundry grate and frame No. I-4431 and I-4434, or equal.
Use style D2 grate (shown) at low points. Otherwise, use style D1 (one-way) grate, with vanes pointing against flow.

AutoCAD: Catch Basin Frame & Grate

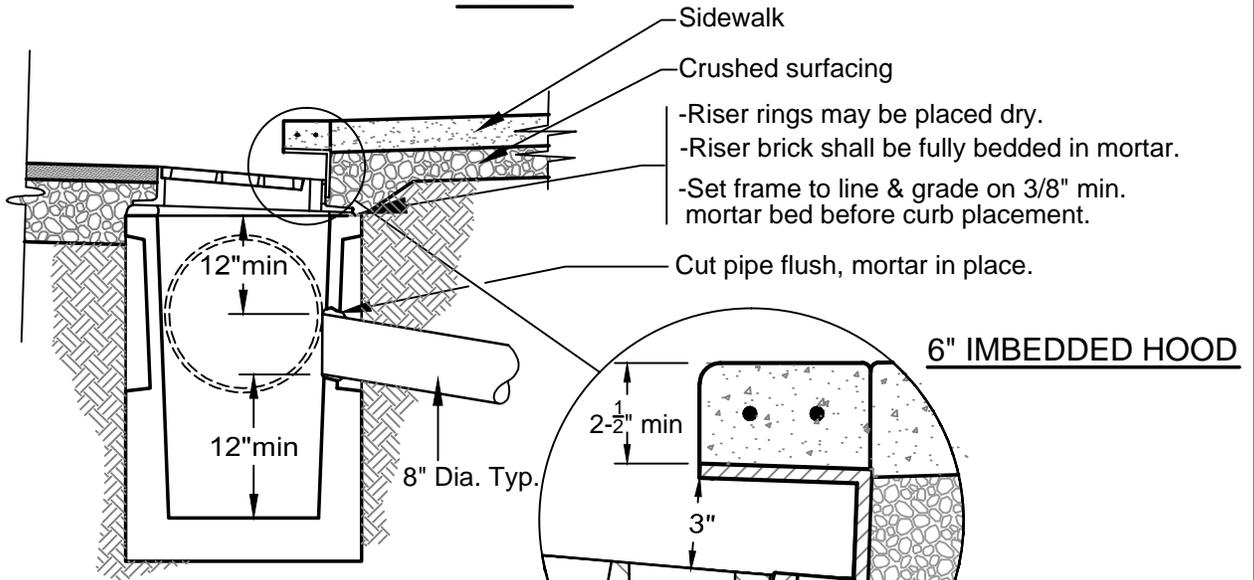
06 dwc
DRR

CATCH BASIN FRAME AND GRATE

PAGE NO:
13



PLAN



SECTION A-A

6" IMBEDDED HOOD

ALT. 9" HOOD

NOTES:

1. Frame and grate per Standard Drawing No. 13.
2. Depress back of lid 1 inch at flowline to provide a 2 - inch fall across the grate.
Gutter lip and top of curb are not depressed.
3. Use WSDOT Type 1 precast catch basin box.
4. Set the catch basin box on 2 inches (min) of crushed surfacing leveling course.
5. Set frame to provide 90% (min) clear drainage opening with reference to the box opening.
6. Storm drain catch basin leaders shall be installed with no less than 2 feet of cover as measured from finished grade at the catch basin.

AutoCAD: Catch Basin

06 dwc
DRR

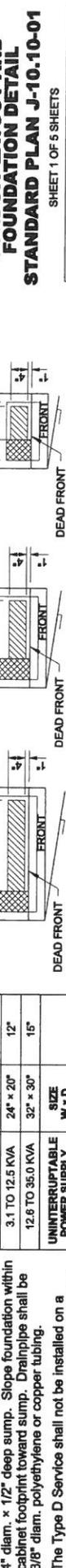
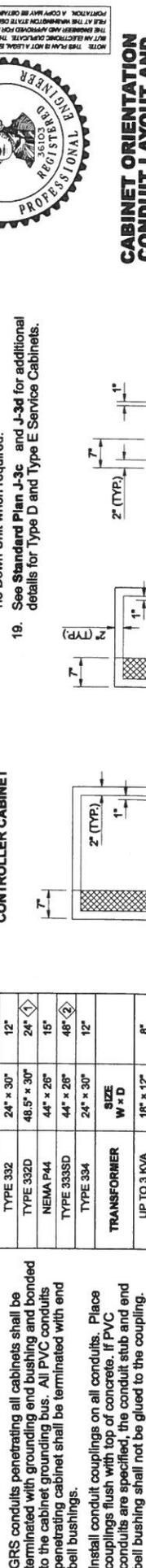
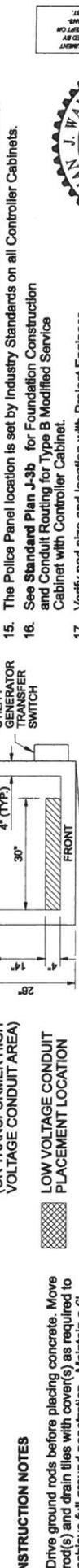
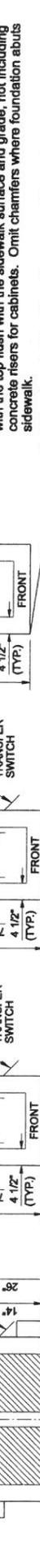
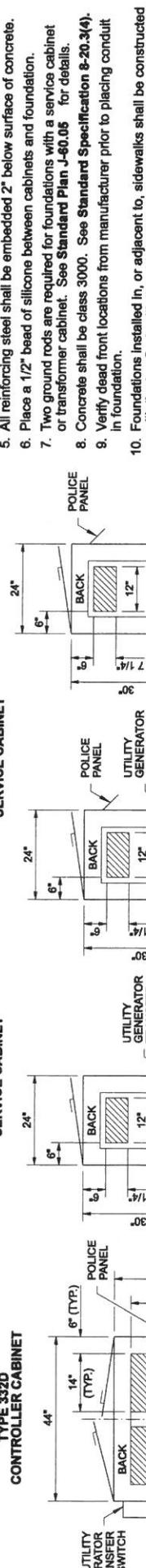
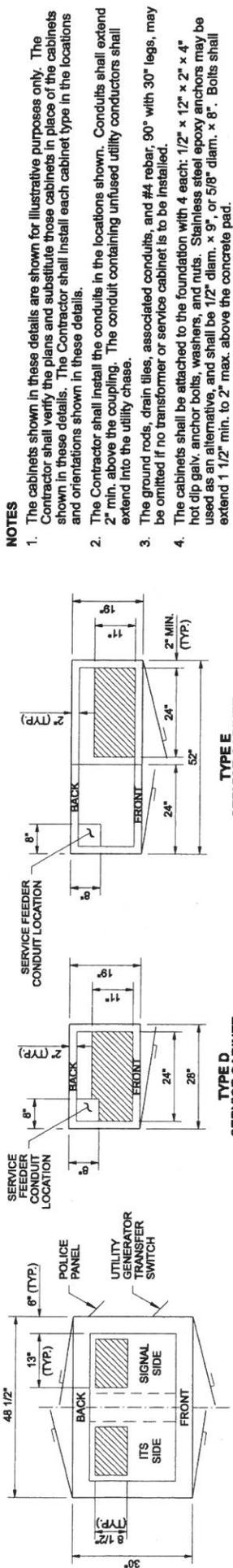
Install Hood Flush

Face of Curb

CATCH BASIN

PAGE NO:

22



NOTES

- The cabinets shown in these details are shown for illustrative purposes only. The Contractor shall verify the plans and substitute those cabinets in place of the cabinets shown in these details. The Contractor shall install each cabinet type in the locations and orientations shown in these details.
- The Contractor shall install the conduits in the locations shown. Conduits shall extend 2" min. above the coupling. The conduit containing unfused utility conductors shall extend into the utility chase.
- The ground rods, drain tiles, associated conduits, and #4 rebar, 90° with 30" legs, may be omitted if no transformer or service cabinet is to be installed.
- The cabinets shall be attached to the foundation with 4 each: 1/2" x 12" x 2" x 4" hot dip galv. anchor bolts, washers, and nuts. Stainless steel epoxy anchors may be used as an alternative, and shall be 1/2" diam. x 9", or 5/8" diam. x 8". Bolts shall extend 1 1/2" min. to 2" max. above the concrete pad.
- All reinforcing steel shall be embedded 2" below surface of concrete.
- Place a 1/2" bead of silicone between cabinets and foundation.
- Two ground rods are required for foundations with a service cabinet or transformer cabinet. See **Standard Plan J-40.05** for details.
- Concrete shall be class 3000. See **Standard Specification 8-20.3(4)**.
- Verify dead front locations from manufacturer prior to placing conduit in foundation.
- Foundations installed in, or adjacent to, sidewalks shall be constructed with the top flush with the sidewalk surface and grade, not including concrete risers for cabinets. Omit chamfers where foundation abuts sidewalk.
- If the slope is 3H : 1V or steeper, special considerations may be necessary for safety reasons. Coordinate with Maintenance and Project Engineer.

- For Type 333SD Controller Cabinet, the cabinet vendor shall allow the Utility Transfer Switch to be installed on either side of the cabinet. The Utility Transfer Switch unit shall be shipped inside the cabinet for field installation by Region Maintenance Personnel.
- Height of cabinet footings shall be adjusted to serve environmental needs. Adjust length of conduits and rebar accordingly.
- Use (1) #4 hoop for a 3 1/2" cabinet footing and (2) #4 hoops for a 9" cabinet footing.
- The Police Panel location is set by Industry Standards on all Controller Cabinets.
- See **Standard Plan J-3b** for Foundation Construction and Conduit Routing for Type B Modified Service Cabinet with Controller Cabinet.
- Verify pad size and location with Project Engineer prior to placing.
- Field bend #4 rebar around the Generator Anti-Theft The Down Unit when required.
- See **Standard Plan J-3c** and **J-3d** for additional details for Type D and Type E Service Cabinets.

CONSTRUCTION NOTES

- Drive ground rods before placing concrete. Move rod(s) and drain tiles with cover(s) as required to achieve full ground penetration. Maintain a 6" minimum clearance between ground rods and 6" from foundation edge as detailed on **Standard Plan J-40.05**.
- GRS conduits penetrating all cabinets shall be terminated with grounding end bushing and bonded to the cabinet grounding bus. All PVC conduits penetrating cabinet shall be terminated with end bell bushings.
- Install conduit couplings on all conduits. Place couplings flush with top of concrete. If PVC conduits are specified, the conduit stub and end bell bushing shall not be glued to the coupling.
- 4" diam. x 1/2" deep sump. Slope foundation within cabinet footprint toward sump. Drainpipe shall be 3/8" diam. polyethylene or copper tubing.
- The Type D Service shall not be installed on a raised section. All other cabinets shall be installed on 3 1/2" or 9" cabinet footing.
- Cabinet power supply conduit.
- Conduits for service grounding electrodes.



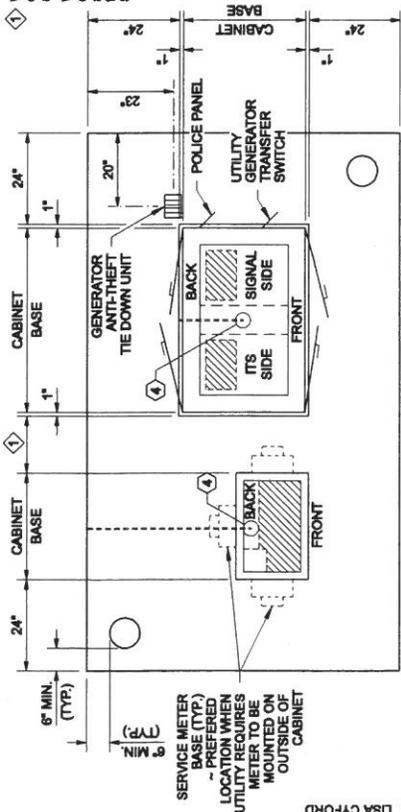
CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL STANDARD PLAN J-10.10-01

SHEET 1 OF 5 SHEETS
 APPROVED FOR PUBLICATION
Pasco Bakotch III 05-11-11
 STATE DESIGN ENGINEER DATE
 Washington State Department of Transportation

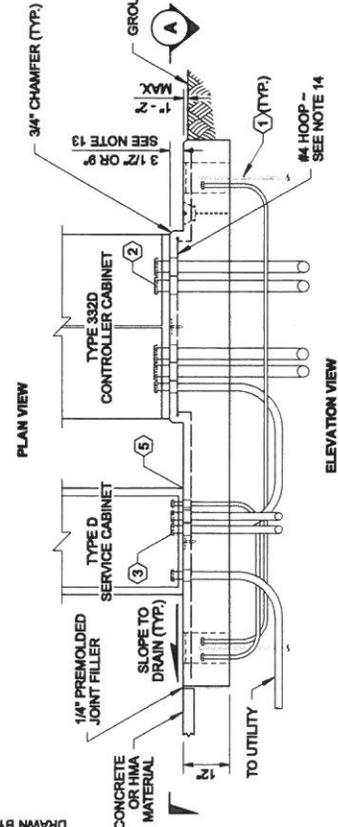
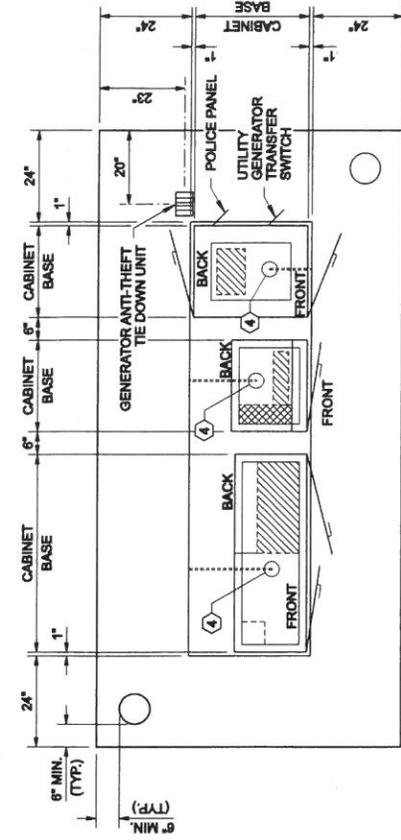
CONTROLLER OR CABINET BASE	SIZE W x D	CAPACITY CONDUIT DIAMETER
TYPE 332	24" x 30"	12"
TYPE 332D	48.5" x 30"	24"
NEIMA P44	44" x 28"	15"
TYPE 333SD	44" x 28"	48"
TYPE 334	24" x 30"	12"
TRANSFORMER	SIZE W x D	CAPACITY CONDUIT DIAMETER
UP TO 3 KVA	18" x 12"	8"
3.1 TO 12.5 KVA	24" x 20"	12"
12.6 TO 35.0 KVA	32" x 30"	15"
UNINTERRUPTIBLE POWER SUPPLY	SIZE W x D	CAPACITY CONDUIT DIAMETER
332 CABINET	16" x 16"	12"

- 12" OF CONDUIT IN EACH LOCATION SHOWN
- 24" OF CONDUIT IN EACH LOCATION SHOWN

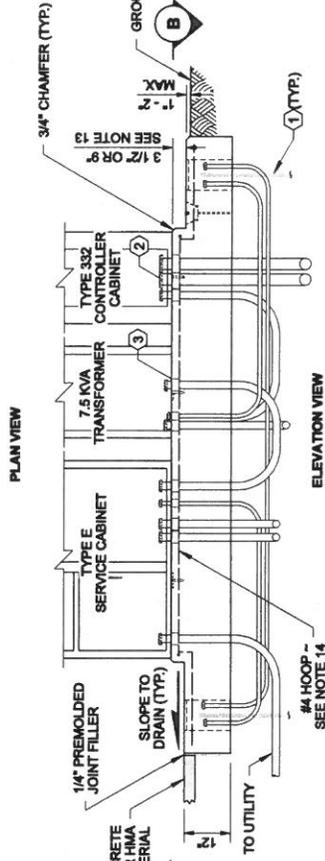
① With Meter Bases mounted on inside of Service Cabinets, allow 6" between Cabinets.
 With Meter Bases mounted on outside of Service Cabinet, allow 36" from face of meter to adjacent Cabinet. See Standard Plan J-3c.



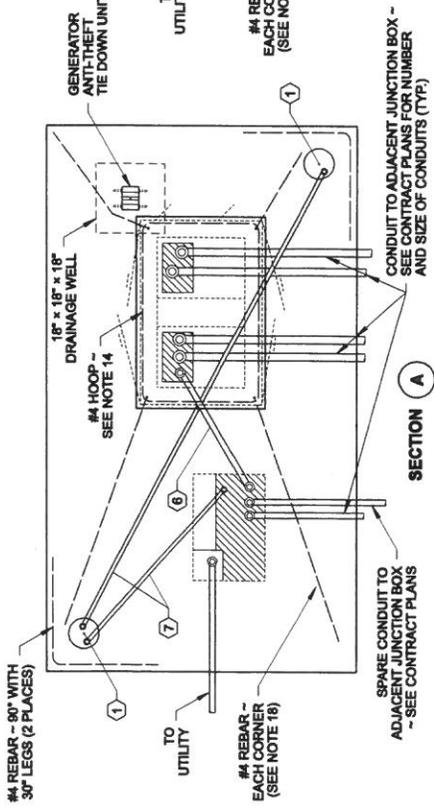
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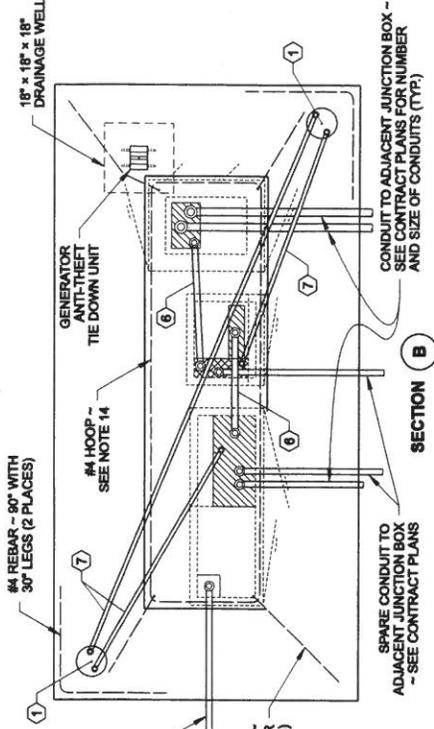
TWO CABINET FOUNDATION
 (TYPE D SERVICE AND TYPE 332D CONTROLLER CABINET SHOWN)



THREE CABINET FOUNDATION
 (TYPE E SERVICE, 7.5 KVA TRANSFORMER AND TYPE 332 CONTROLLER CABINET SHOWN)



SECTION A



SECTION B



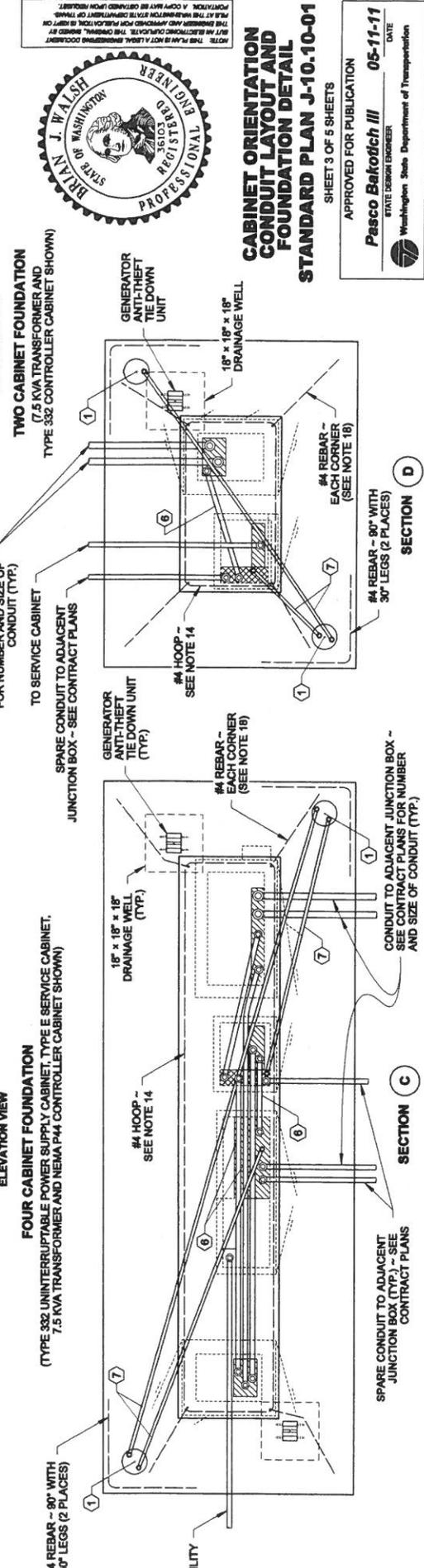
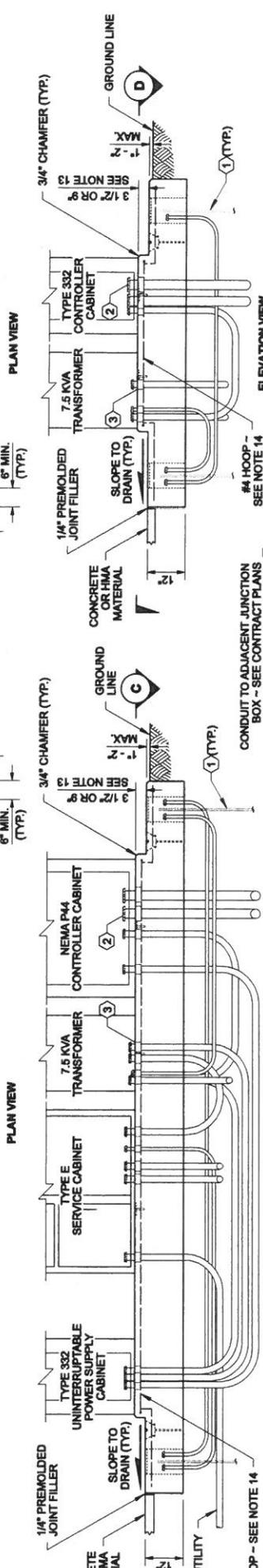
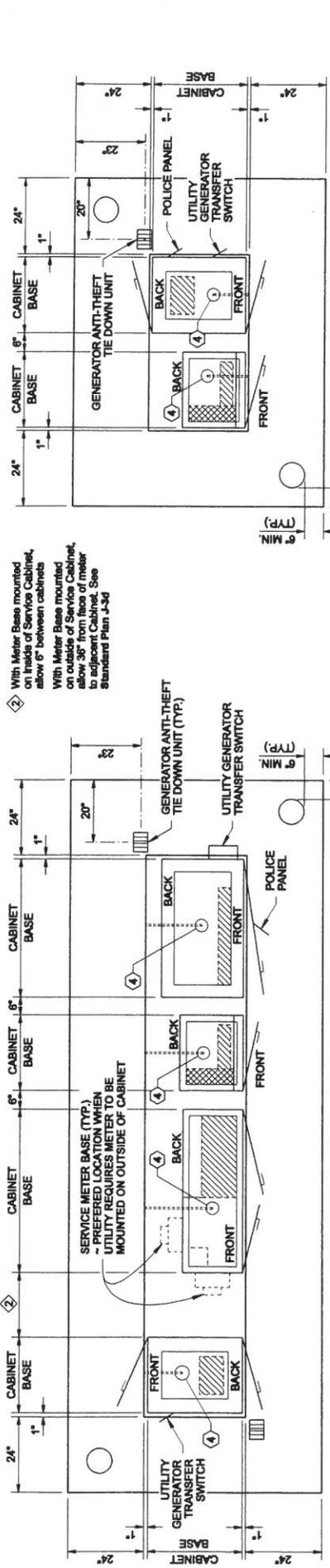
**CABINET ORIENTATION
 CONDUIT LAYOUT AND
 FOUNDATION DETAIL
 STANDARD PLAN J-10.10-01**

SHEET 2 OF 5 SHEETS

APPROVED FOR PUBLICATION

Pasco Bakofich III 05-11-11
 DATE
 SITE DESIGN ENGINEER
 Washington State Department of Transportation

NOTE: THIS PLAN IS A STANDARD DRAWING. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND CONDITIONS OF THE FOUNDATION AND CONDUIT LAYOUT BEFORE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL JURISDICTION.



With Meter Base mounted on inside of Service Cabinet, allow 6\"/>

With Meter Base mounted on outside of Service Cabinet, allow 36\"/>

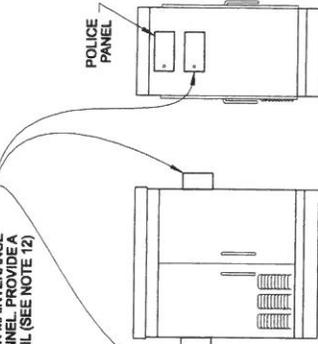


**CABINET ORIENTATION
CONDUIT LAYOUT AND
FOUNDATION DETAIL**
STANDARD PLAN J-10-10-01

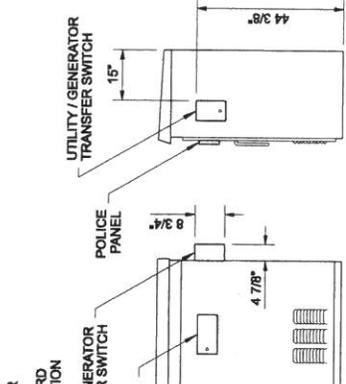
SHEET 3 OF 5 SHEETS
APPROVED FOR PUBLICATION
Pasco Bakofich III
STATE DESIGN ENGINEER
Washington State Department of Transportation
DATE: 05-11-11

NOTES: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT
IT IS THE ENGINEER'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS AND APPROVED FOR PUBLICATION IN ACCORDANCE WITH THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD DRAWING REQUIREMENTS.
A COPY MAY BE OBTAINED UPON REQUEST.

UTILITY / GENERATOR
TRANSFER SWITCH
TO BE INSTALLED BY
REGION MAINTENANCE
PERSONNEL. PROVIDE A
15" PIGTAIL (SEE NOTE 12)

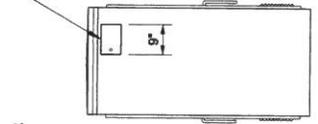


TYPE 333SD CONTROLLER CABINET



NEMA P44 CONTROLLER CABINET

UTILITY / GENERATOR
TRANSFER SWITCH
- INSTALL IN STANDARD
POLICE PANEL LOCATION



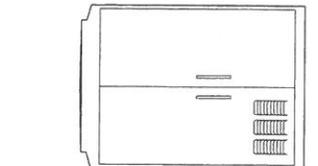
TYPE 332
UNINTERRUPTABLE
POWER SUPPLY
(UPS) CABINET



TYPE 332
CONTROLLER CABINET



TYPE 332D CONTROLLER CABINET

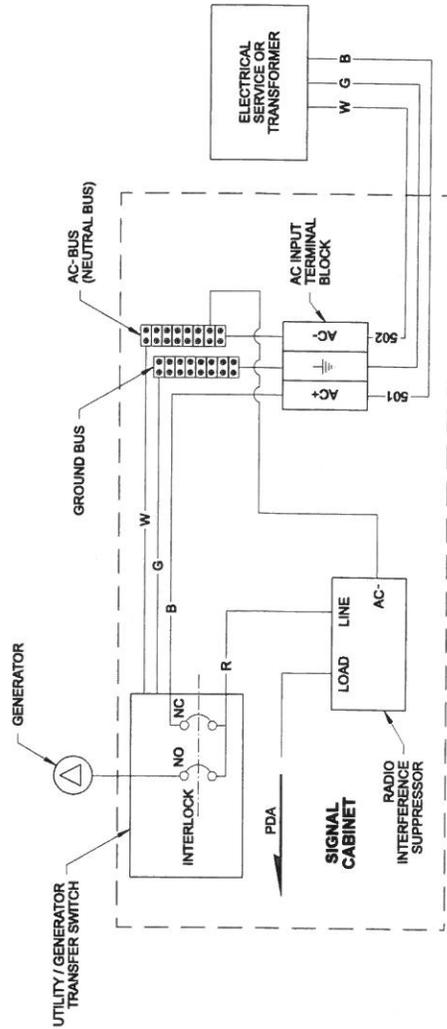


NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT
UNLESS IT IS APPROVED AND SIGNED BY THE ENGINEER AND
THE ENGINEER HAS BEEN LICENSED IN THE STATE OF WASHINGTON.
FOR FURTHER INFORMATION, CONTACT THE ENGINEER OR
FOR A COPY, PLEASE CONTACT THE ENGINEER OR
FOR A COPY, PLEASE CONTACT THE ENGINEER OR

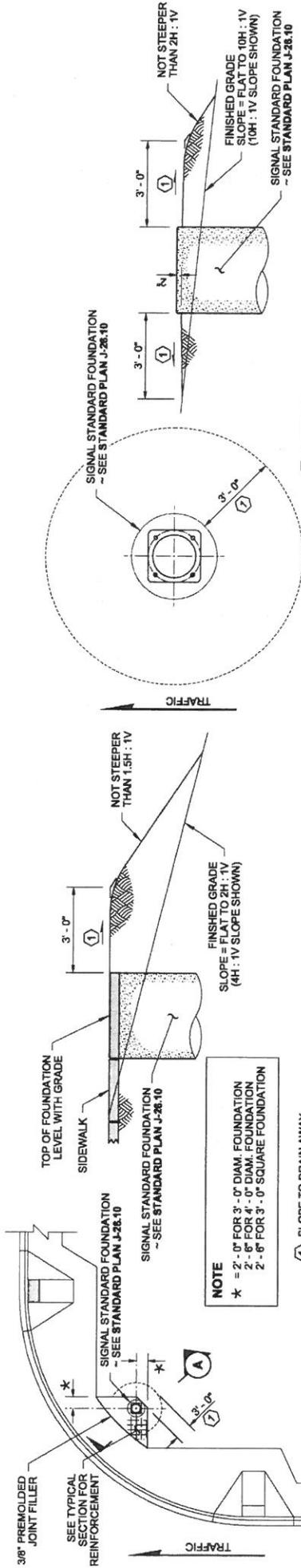
**CABINET ORIENTATION
CONDUIT LAYOUT AND
FOUNDATION DETAIL
STANDARD PLAN J-10.10-01**

SHEET 5 OF 5 SHEETS

APPROVED FOR PUBLICATION
Pasco Bakotich III
STATE DESIGN ENGINEER
DATE: 05-11-11
Washington State Department of Transportation



TRANSFER SWITCH CONNECTION
TYPICAL WIRING DIAGRAM



(SHOWN REDUCED)

PLAN

SECTION A

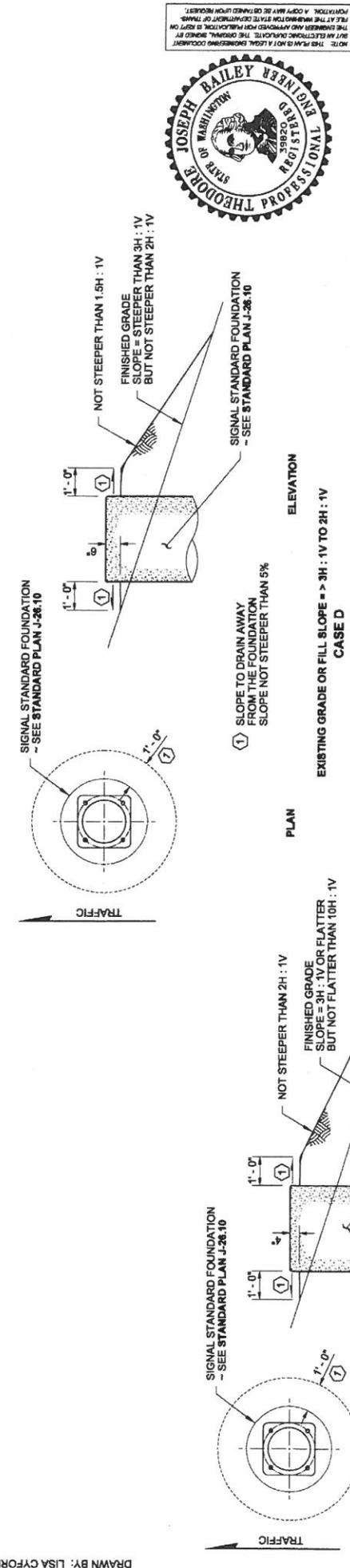
ELEVATION

FOUNDATION IN OR NEAR SIDEWALK

CASE A

EXISTING GRADE OR FILL SLOPE = FLAT TO 19H:1V

CASE B



FOUNDATION IN OR NEAR SIDEWALK

CASE A

EXISTING GRADE OR FILL SLOPE = FLAT TO 19H:1V

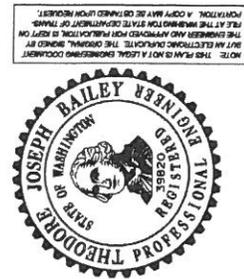
CASE B

EXISTING GRADE OR FILL SLOPE = 10H:1V TO ≤ 3H:1V

CASE C

EXISTING GRADE OR FILL SLOPE = 3H:1V TO 2H:1V

CASE D



SIGNAL STANDARD FOUNDATION PLACEMENTS

STANDARD PLAN J-26.15-01

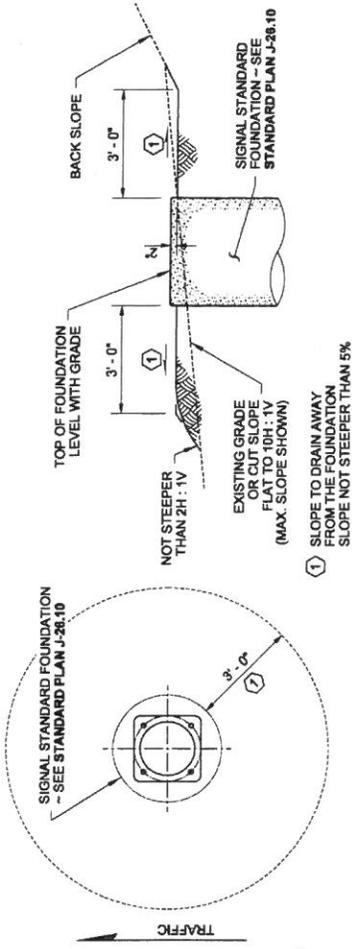
SHEET 1 OF 3 SHEETS

APPROVED FOR PUBLICATION

Pasco Bakotich III 05/17/12

DATE

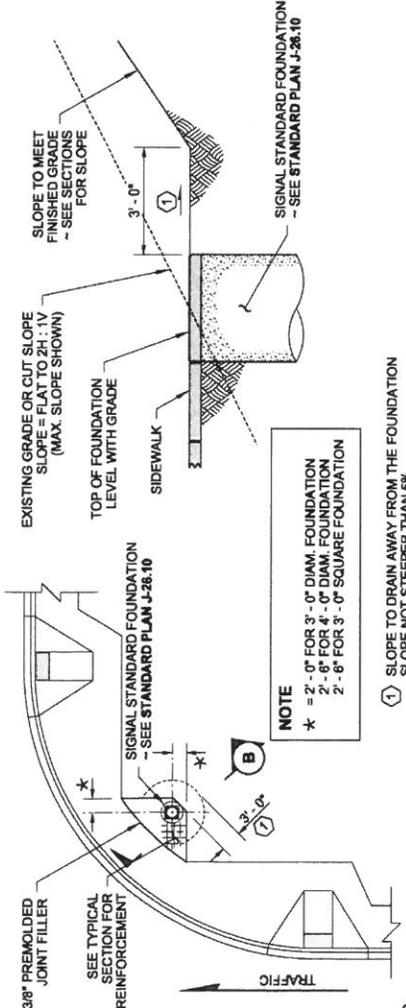
Washington State Department of Transportation



ELEVATION

PLAN

**EXISTING GRADE OR CUT SLOPE FLAT TO 10H : 1V
CASE F**



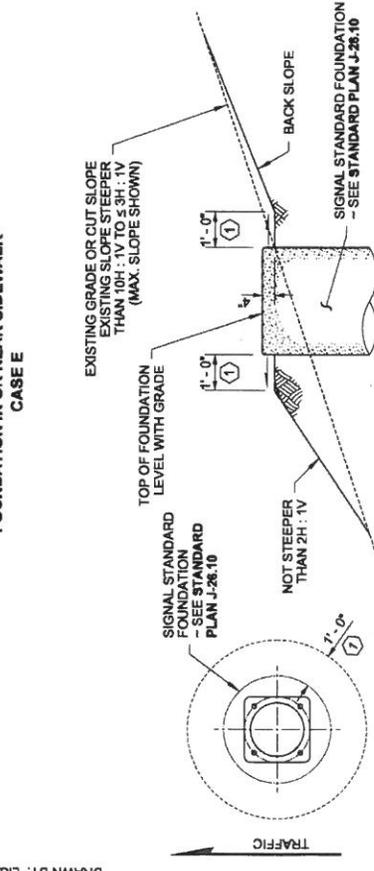
SECTION B

**FOUNDATION IN OR NEAR SIDEWALK
CASE E**

PLAN

(SHOWN REDUCED)

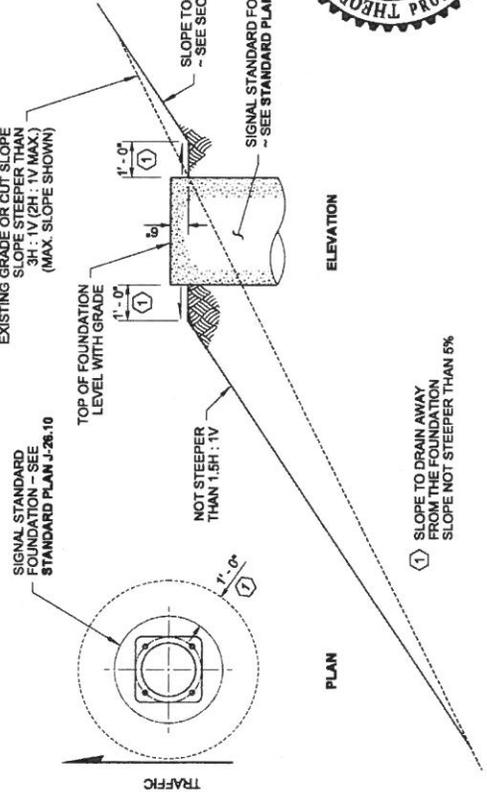
DRAWN BY: LISA CYFORD



ELEVATION

PLAN

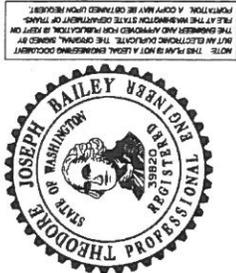
**EXISTING GRADE OR CUT SLOPE 10H : 1V TO $\le 3H : 1V$
CASE G**



ELEVATION

PLAN

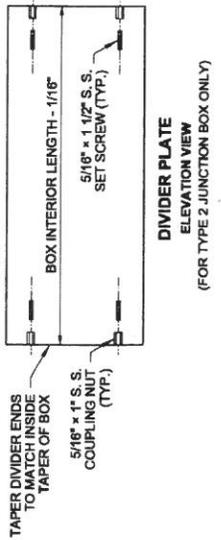
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CASE H**



**SIGNAL STANDARD
FOUNDATION PLACEMENTS**
STANDARD PLAN J-26.15-01

SHEET 2 OF 3 SHEETS

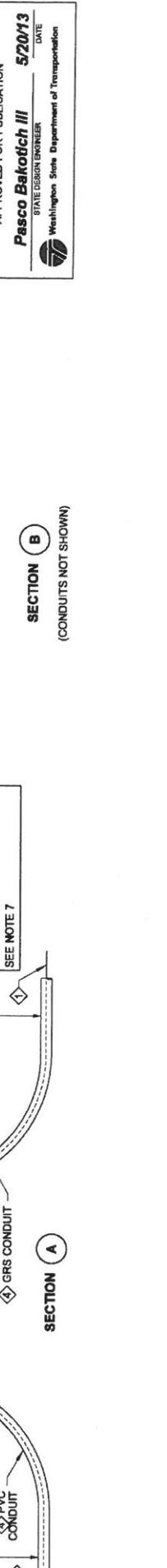
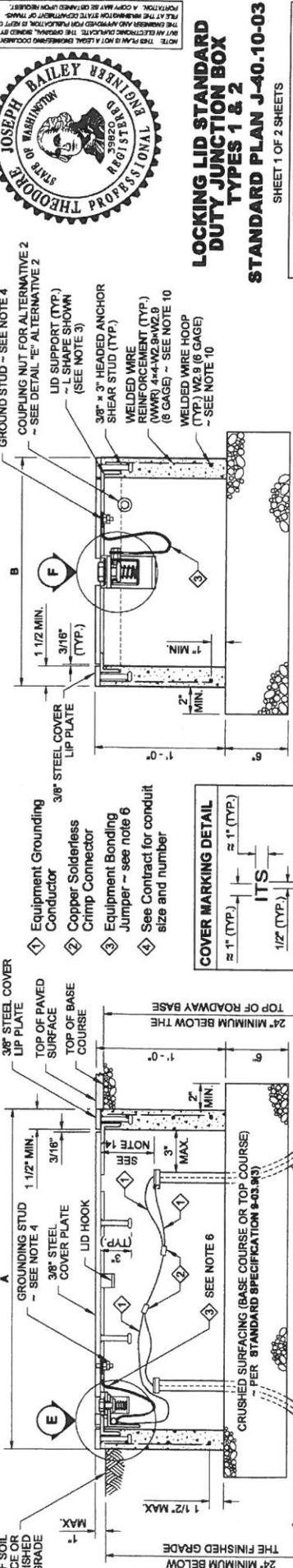
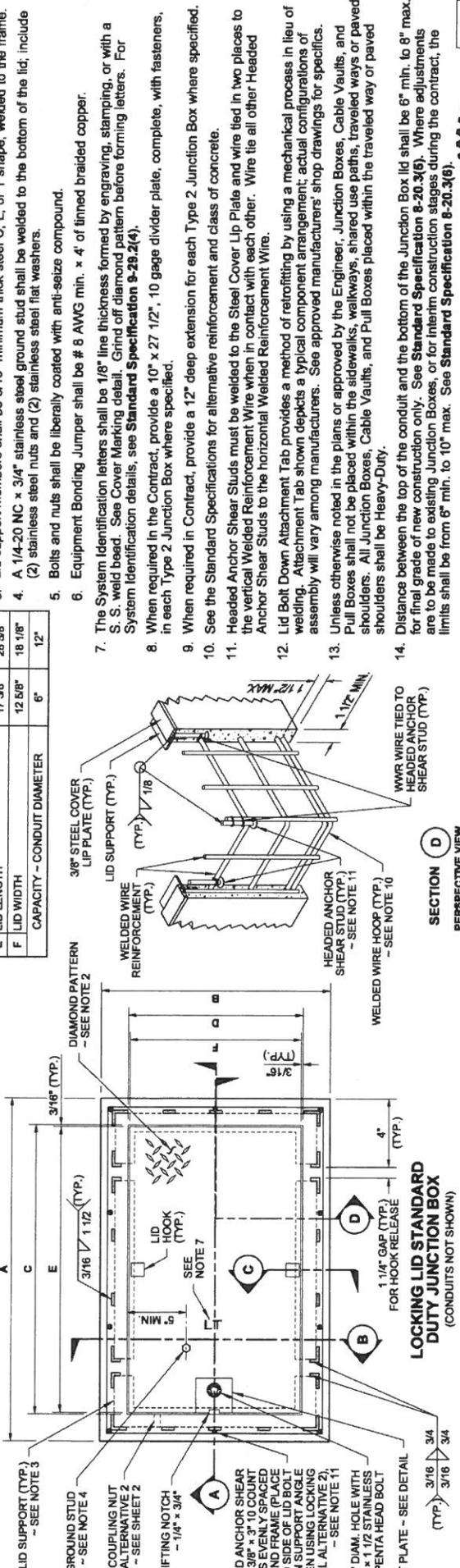
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JUNCTION BOX DIMENSION TABLE

MARK	ITEM	BOX TYPE	
		TYPE 1	TYPE 2
A	OUTSIDE LENGTH OF JUNCTION BOX	22"	33"
B	OUTSIDE WIDTH OF JUNCTION BOX	17"	22 1/2"
C	OUTSIDE LENGTH OF JUNCTION BOX	18" - 19"	28" - 29"
D	INSIDE LENGTH OF JUNCTION BOX	13" - 14"	17" - 18"
E	LID LENGTH	17 5/8"	28 5/8"
F	LID WIDTH	12 5/8"	18 1/8"
	CAPACITY - CONDUIT DIAMETER	6"	12"

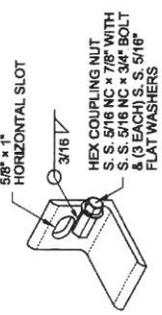
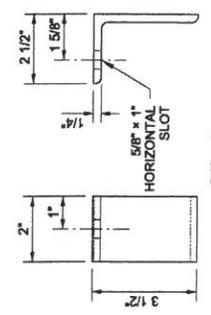
- NOTES**
- All box dimensions are approximate. Exact configurations vary among manufacturers.
 - Minimum lid thickness shown. The diamond pattern shall be a minimum of 28% of the overall thickness. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate, and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, or shared-use path. The non-slip lid shall be identified with permanent markings on the underside, indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" inch line thickness formed with a stainless steel weld bead and shall be placed prior to hot-dip galvanizing.
 - Lid support members shall be 3/16" minimum thick steel C, L, or T shape, welded to the frame.
 - A 1/4-20 NC x 3/4" stainless steel ground stud shall be welded to the bottom of the lid; include (2) stainless steel nuts and (2) stainless steel flat washers.
 - Bolts and nuts shall be liberally coated with anti-seize compound.
 - Equipment Bonding Jumper shall be # 8 AWG min. x 4' of tinned braided copper.
 - The System Identification letters shall be 1/8" line thickness formed by engraving, stamping, or with a S.S. weld bead. See Cover Marking detail. Grind off diamond pattern before forming letters. For System Identification details, see Standard Specification 8-29.2(4).
 - When required in the Contract, provide a 10" x 27 1/2", 10 gage divider plate, complete, with fasteners, in each Type 2 Junction Box where specified.
 - When required in Contract, provide a 12" deep extension for each Type 2 Junction Box where specified.
 - See the Standard Specifications for alternative reinforcement and class of concrete.
 - Headed Anchor Shear Studs must be welded to the Steel Cover Lip Plate and wire tied in two places to the vertical Welded Reinforcement Wire when in contact with each other. Wire tie all other Headed Anchor Shear Studs to the horizontal Welded Reinforcement Wire.
 - Lid Bolt Down Attachment Tab provides a method of retrofitting by using a mechanical process in lieu of welding. Attachment Tab shown depicts a typical component arrangement; actual configurations of assembly will vary among manufacturers. See approved manufacturers shop drawings for specifics.
 - Unless otherwise noted in the plans or approved by the Engineer, Junction Boxes, Cable Vaults, and Pull Boxes shall not be placed within the sidewalks, walkways, shared use paths, traveled ways or paved shoulders. All Junction Boxes, Cable Vaults, and Pull Boxes placed within the traveled way or paved shoulders shall be Heavy-Duty.
 - Distance between the top of the conduit and the bottom of the Junction Box lid shall be 6" min. to 8" max. for final grade of new construction only. See Standard Specification 8-20.3(5). Where adjustments are to be made to existing Junction Boxes, or for interim construction stages during the contract, the limits shall be from 6" min. to 10" max. See Standard Specification 8-20.3(6).



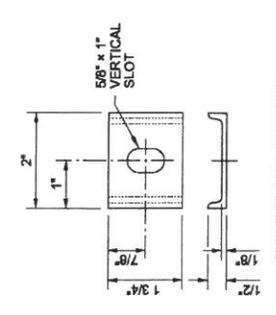
LOCKING LID STANDARD DUTY JUNCTION BOX TYPES 1 & 2
STANDARD PLAN J-40.10-03

SHEET 1 OF 2 SHEETS
 APPROVED FOR PUBLICATION
Pasco Bakotich III 5/20/13
 STATE DESIGN ENGINEER
 Washington State Department of Transportation

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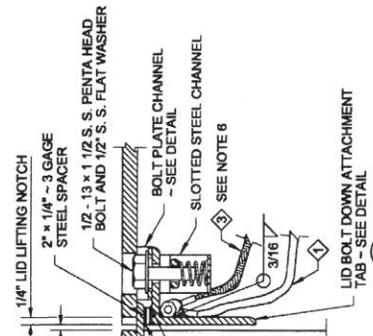
ALTERNATIVE 1
LID BOLT DOWN ATTACHMENT TAB
(SEE NOTE 12)



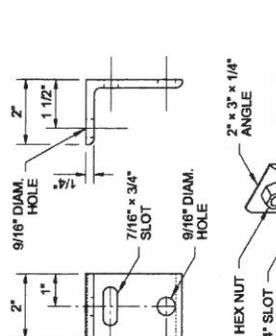
ALTERNATIVE 2
LID BOLT DOWN ATTACHMENT TAB
(SEE NOTE 12)



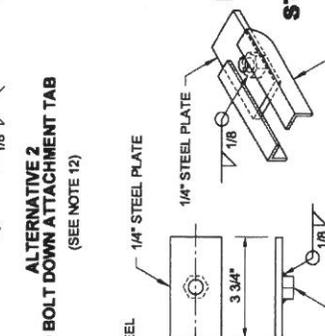
ALTERNATIVE 3
LID BOLT DOWN ATTACHMENT TAB
(SEE NOTE 12)



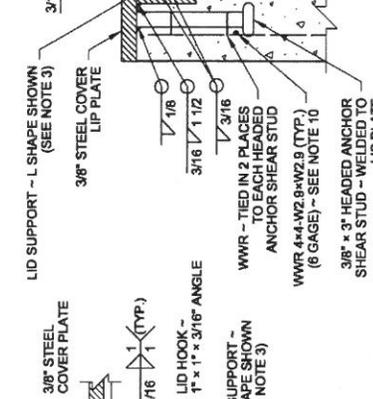
SECTION C



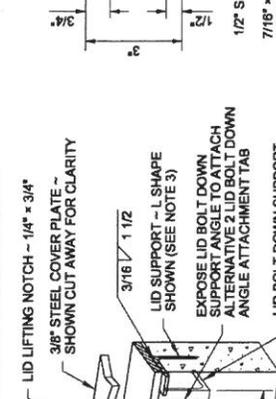
SECTION E



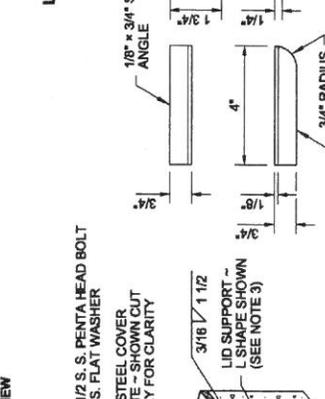
SECTION F



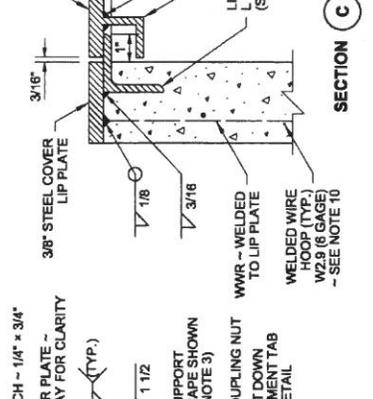
SECTION C



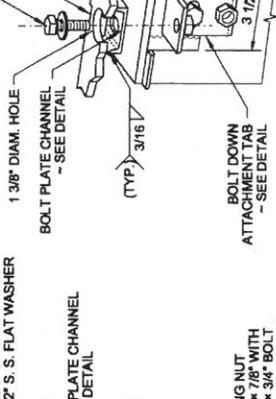
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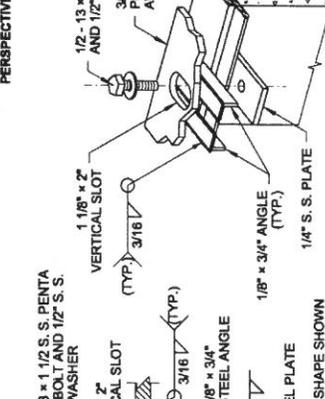
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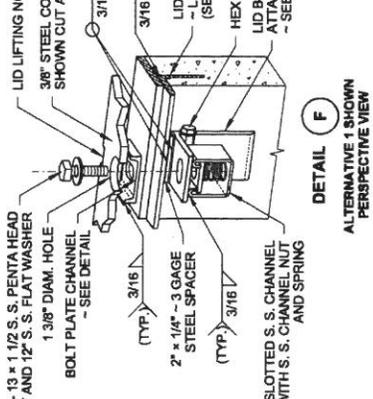
SECTION C



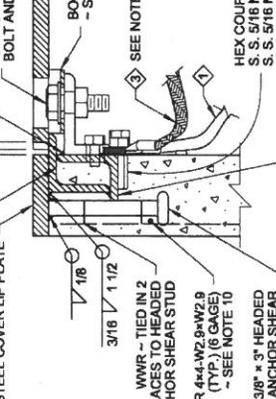
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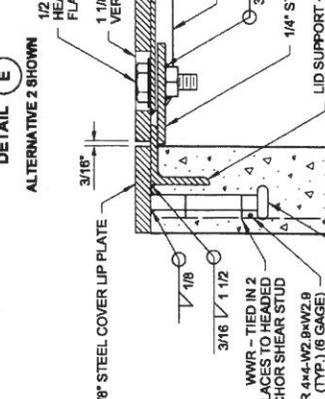
SECTION F



SECTION C



SECTION E



SECTION F



SECTION C



SECTION E



SECTION F

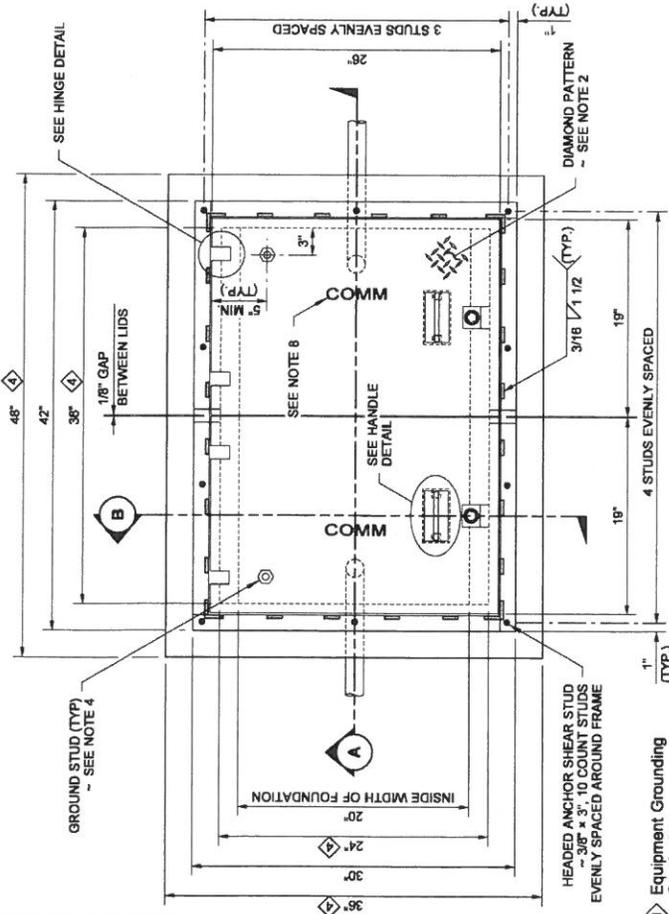


LOCKING LID STANDARD DUTY JUNCTION BOX TYPES 1 & 2
STANDARD PLAN J-40.10-03

SHEET 2 OF 2 SHEETS
APPROVED FOR PUBLICATION
Pasco Bakotch III
STATE DESIGN ENGINEER
Washington State Department of Transportation
DATE: 5/20/13

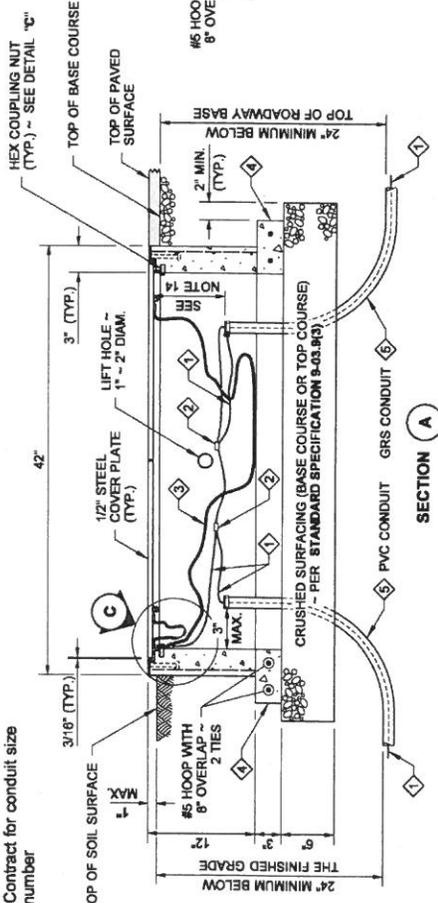
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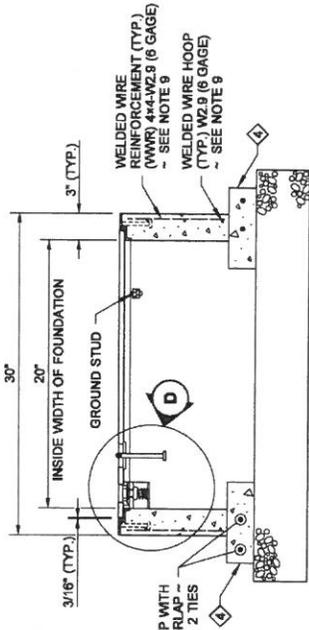


LOCKING LID STANDARD DUTY JUNCTION BOX
PLAN VIEW

- ① Equipment Grounding Conductor
- ② Copper Solderless Crimp Connector
- ③ Equipment Bonding Jumper
- ④ Foundation
- ⑤ See Contract for conduit size and number



SECTION A

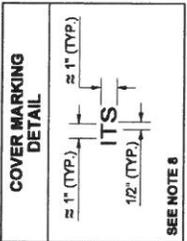


SECTION B

CONDUITS NOT SHOWN

NOTES

1. All box dimensions are approximate. Exact configurations vary among manufacturers.
2. Minimum lid thicknesses are shown. The diamond pattern shall be a minimum of 28% of the overall thickness. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, or shared-use path. The non-slip lid shall be identified with permanent markings on the underside, indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" inch line thickness formed with a stainless steel weld bead and shall be placed prior to hot-dip galvanizing.
3. Lid support members shall be 3/16" min. thick steel C, L, or T shape, welded to the frame. Exact configurations vary among manufacturers.
4. A 1/4-20 NC x 3/4" S. S. ground stud shall be welded to the bottom of each lid; include (2) S. S. nuts and (2) S. S. flat washers.
5. The hinges shall allow the lids to open 180°.
6. Bolts and nuts shall be liberally coated with anti-seize compound.
7. Connect Equipment Bonding Jumper to ground stud on lid. As an alternative to the ground stud connection, the Equipment Bonding Jumper shall be attached to the front face of the hinge pocket with a 5/16-20 NC x 3/4" S. S. bolt, (2) each S. S. nuts, and (2) each S. S. flat washers. Equipment Bonding Jumper shall be #8 AWG min. x 4' of tinned braided copper.
8. The System Identification letters shall be 1/8" line thickness formed by engraving, stamping, or with a S. S. weld bead. See Cover Marking detail. Grind off diamond pattern before forming letters. See **Standard Specification 8-29.2(4)** for details.
9. See the Standard Specifications for alternative reinforcement and class of concrete.
10. See **Standard Plan J-40.10** for Welded Wire Reinforcement and Headed Anchor Shear Stud attachment details.
11. Capacity ~ conduit diameter = 24"
12. Lid Bolt Down Attachment Tab provides a method of retrofitting by using a mechanical process in lieu of welding. Attachment Tab shown depicts a typical component arrangement; actual configurations of assembly will vary among manufacturers. See approved manufacturers' shop drawing for specifics.
13. Unless otherwise noted in the plans or approved by the Engineer, Junction Boxes, Cable Vaults and Pull Boxes shall not be placed within the sidewalk, walkway, shared use path, traveled way or paved shoulders. All Junction Boxes, Cable Vaults, and Pull Boxes placed within the traveled way or paved shoulders shall be Heavy-Duty.
14. Distance between the top of the conduit and the bottom of the Junction Box lid shall be 6" min. to 8" max. for final grade of new construction only. See **Standard Specification 8-20.3(6)**. Where adjustments are to be made to existing Junction Boxes, or for interim construction stages during the contract, the limits shall be from 6" min. to 10" max. See **Standard Specification 8-20.3(6)**.



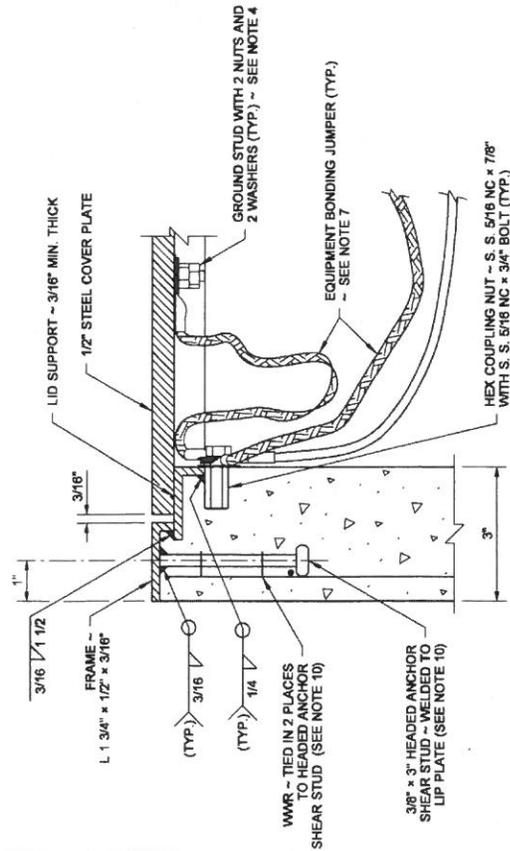
SEE NOTE 8



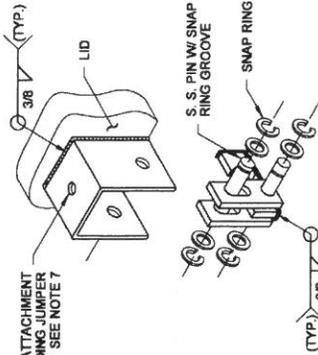
LOCKING LID STANDARD DUTY JUNCTION BOX TYPE 8
STANDARD PLAN J-40.30-03
 SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Pasco Bakotich III 5/20/13
 STATE DESIGN ENGINEER DATE
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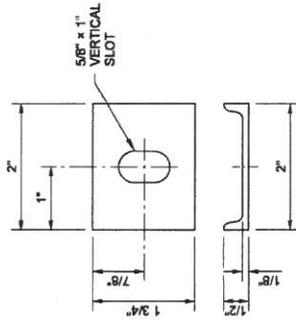
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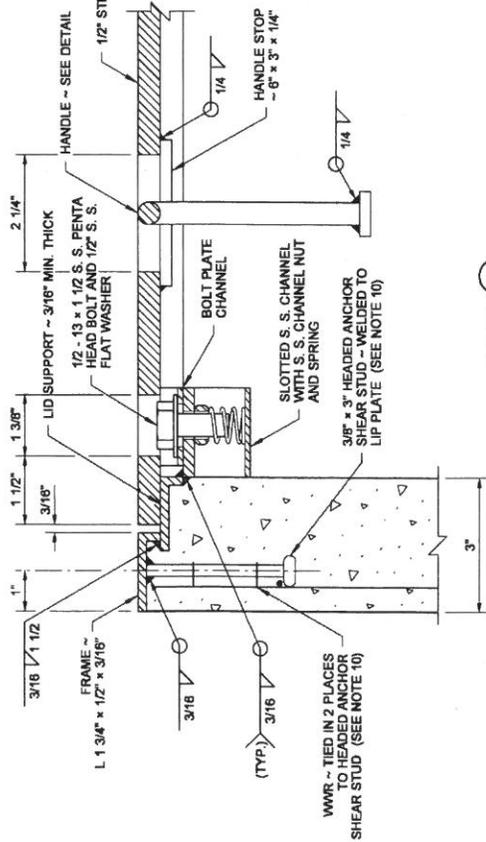
ALTERNATE LOCATION FOR ATTACHMENT OF EQUIPMENT BONDING JUMPER - SEE NOTE 7



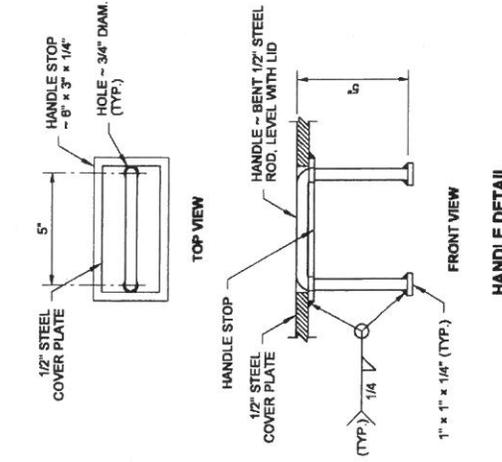
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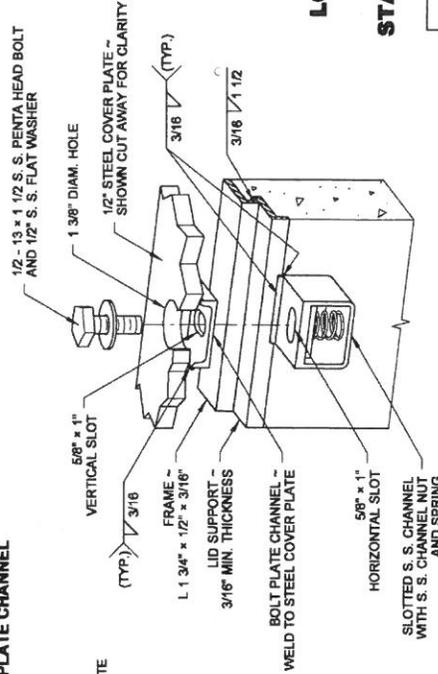
BOLT PLATE CHANNEL



DETAIL D



HANDLE DETAIL



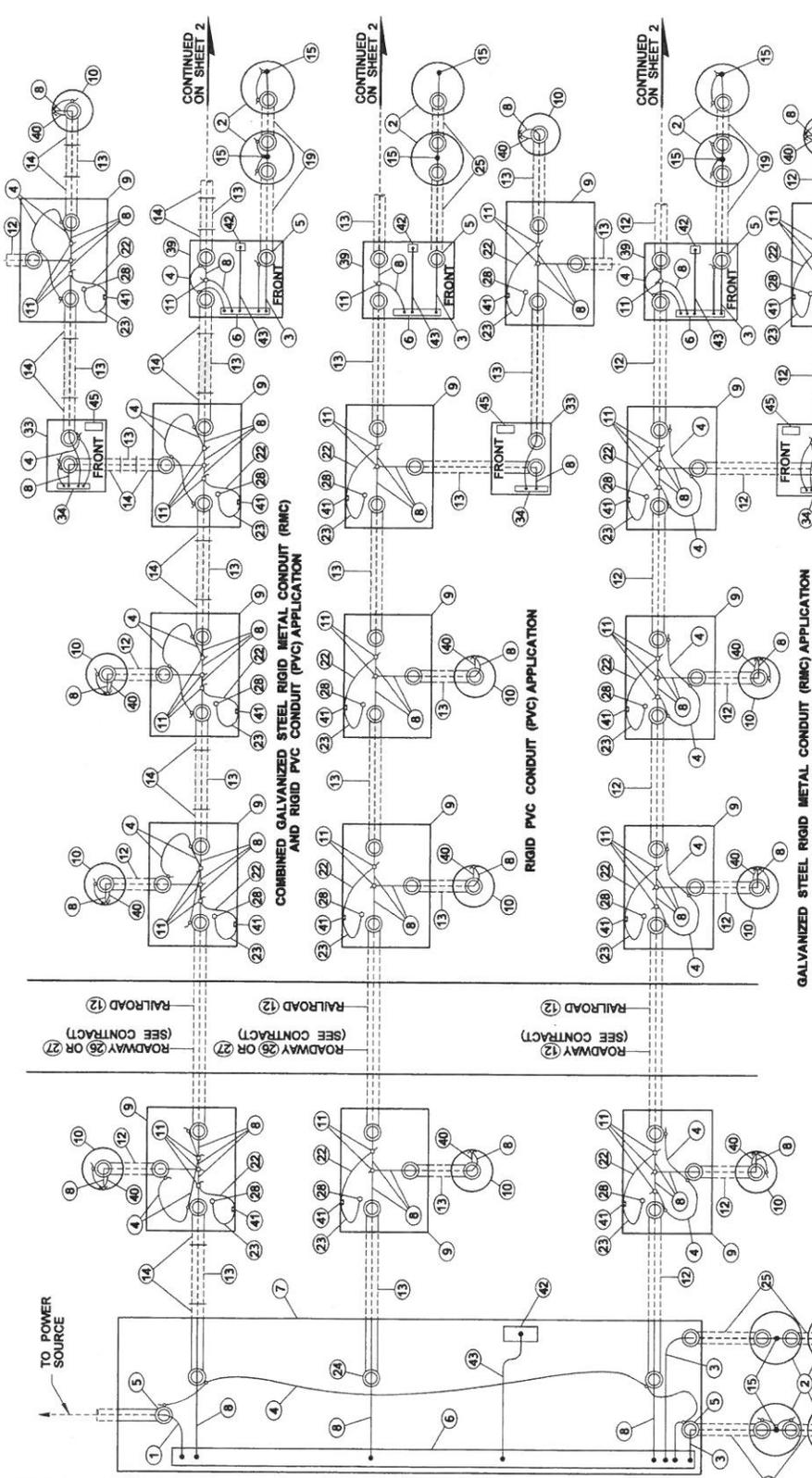
LOCKING LID STANDARD DUTY JUNCTION BOX TYPE 8

STANDARD PLAN J-40.30-03
SHEET 2 OF 2 SHEETS

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DRAWN BY: LISA CYFORD



- KEY**
- 1 SERVICE NEUTRAL
 - 2 SERVICE GROUND
 - 3 GROUNDING ELECTRODE CONDUCTOR
 - 4 GROUNDING JUMPER
 - 5 GROUNDING BUSHING (TYP. ALL RMC CONDUIT TERMINATIONS)
 - 6 GROUNDED NEUTRAL BUS (COPPER)
 - 7 SERVICE ENCLOSURE
 - 8 EQUIPMENT GROUNDING CONDUCTOR
 - 9 JUNCTION BOX
 - 10 ELECTRICAL LOAD SUPPORT (LUMINAIRE POLE AND TRAFFIC SIGNAL POLE)
 - 11 COPPER SOLDERLESS CRIMP CONNECTOR
 - 12 GALVANIZED STEEL RIGID METAL CONDUIT (RMC)
 - 13 RIGID PVC CONDUIT (PVC)
 - 14 OPTION A - 10' RMC WITH FIELD BEND
- APPROVED ADAPTER FITTING
- GROUNDING BUSHING
 - 15 GROUND ROD
 - 16 EDGE OF FOUNDATION, POLE OR SERVICE SUPPORT
 - 17 CLAMP
 - 18 JUNCTION BOX OR 8" DRAIN TILE WITH APPROVED COVER
 - 19 CODE SIZE RMC
 - 20 TO SERVICE NEUTRAL BUS
 - 21 TO GROUNDING TERMINAL OR CONNECTION TO EQUIPMENT GROUNDING SYSTEM
 - 22 BONDING JUMPER ATTACHED TO BOX WALL COUPLING NUT
 - 23 BONDING JUMPER ATTACHED TO BOX LID(S) GROUND STUD, # 8 AWG (MIN.) x 4" TINNED BRAIDED COPPER
 - 24 END BELL BUSHING
 - 25 CODE SIZED PVC
 - 26 HIGH-DENSITY POLYETHYLENE CONDUIT (HDPE)
 - 27 NON-METALLIC CONDUIT (PVC) SCHEDULE 80
 - 28 BOX LID(S) GROUND STUD
 - 29 CABLE VAULT
 - 30 PULL BOX
 - 31 ITS CABINET
 - 32 EDGE OF FOUNDATION
 - 33 TRAFFIC SIGNAL CABINET
 - 34 CABINET GROUNDING BUSS (COPPER)
 - 35 RIGID PVC OUTERDUCT WITH PVC OR PE INNERDUCT
 - 36 GALVANIZED STEEL RIGID METAL CONDUIT OUTERDUCT WITH PVC OR PE INNERDUCT
 - 37 LOCATE WIRE. COIL 10' INSIDE CABINET, CABLE VAULT, OR PULL BOX
 - 38 DETECTABLE UNDERGROUND WARNING TAPE. COIL 2' INSIDE CABINET, CABLE VAULT, OR PULL BOX
 - 39 TRANSFORMER CABINET
 - 40 GROUNDING CONDUCTOR NON-INSULATED (FROM REINFORCING CAGE)
 - 41 BOX FRAME BONDING ATTACHMENT POINT
 - 42 GROUND LUG WELDED TO CABINET WALL (W/ TINNED COPPER BUSS)
 - 43 CABINET MAIN BONDING JUMPER
 - 44 ITS CAMERA, RAMP METER, TRAFFIC DATA STATION, HIGHWAY ADVISORY RADIO
 - 45 UNGROUNDED CABINET NEUTRAL BUSS (COPPER)

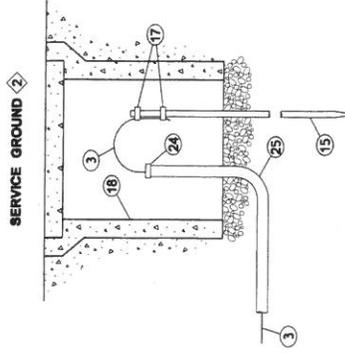
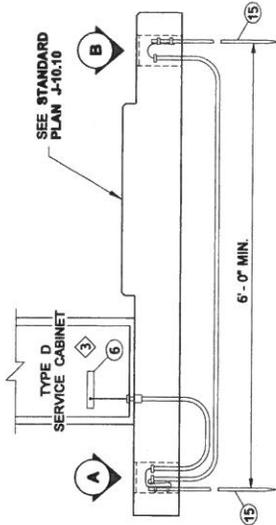
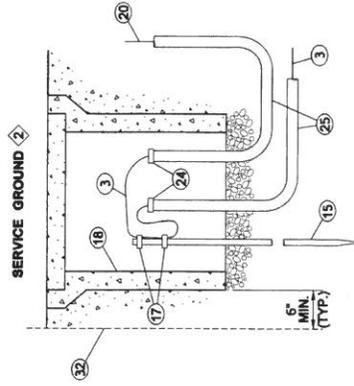
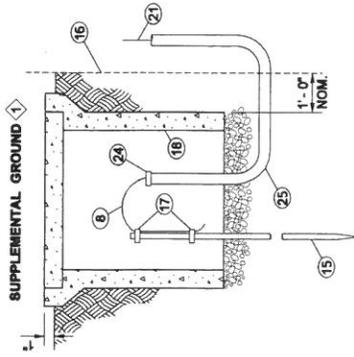
NOTES

1. If parallel circuits of different sizes are contained in one conduit, the size of the grounding conductor shall be determined on the basis of the largest conductor. Only one grounding conductor is required for each conduit, regardless of the number of circuits contained.
2. Service ground per serving utility requirement. If the utility uses aluminum service conductors, an approved Al-Cu pressure-type ground connector shall be used to secure the service neutral to the copper neutral bar in the service enclosure. Except for the above, all grounding conductors shall be copper.
3. Equipment grounding conductors and grounding electrode conductors shall be sized in accordance with the National Electric Code (No. 8 minimum).



**TYPICAL
GROUNDING DETAILS
STANDARD PLAN J-60.05-00**

SHEET 1 OF 4 SHEETS
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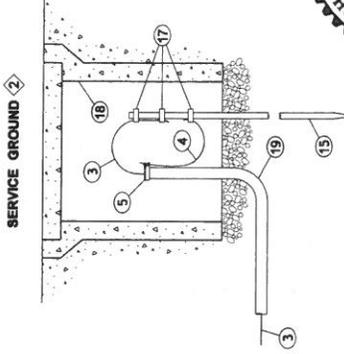
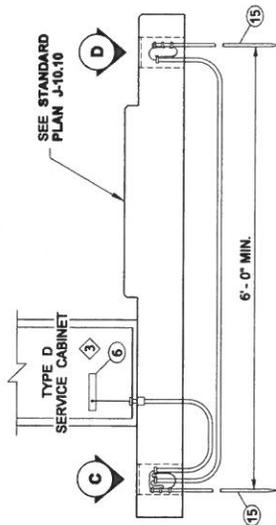
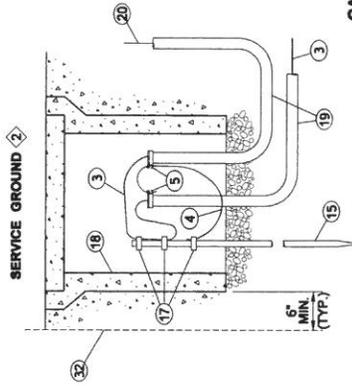
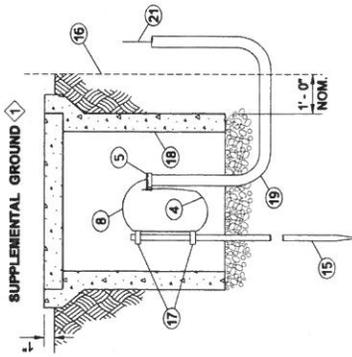


DETAIL A

RIGID PVC CONDUIT (PVC) APPLICATION

DETAIL B

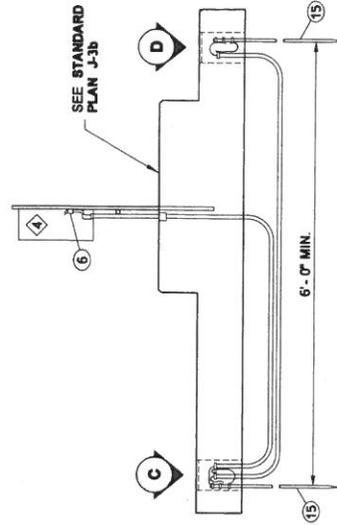
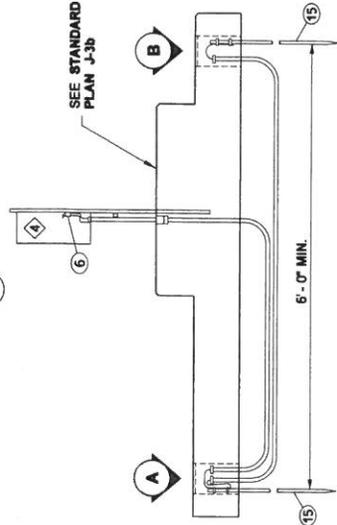
SEE KEY ON SHEET 1 FOR PARTS



DETAIL C

GALVANIZED STEEL RIGID METAL CONDUIT (RMC) APPLICATION

DETAIL D



RIGID PVC CONDUIT (PVC) APPLICATION

GALVANIZED STEEL RIGID METAL CONDUIT (RMC) APPLICATION

- 1 Required to supplement equipment grounding in future substations with direct burial cables, or where required in the plans
- 2 Required at all service and separately derived systems
- 3 Type D service cabinet shown. Use this concept for Type E cabinet or transformer. Type D service cabinet shall be installed on lower surface of foundation only. Type B service cabinet and transformer cabinet shall be installed on raised surface of foundation only.
- 4 Type B modified service cabinet
- 5 Grounding electrode conductor and equipment grounding conductor shall not be routed through lug on grounding bushing.



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**TYPICAL
GROUNDING DETAILS
STANDARD PLAN J-60.05-00**

SHEET 3 OF 4 SHEETS

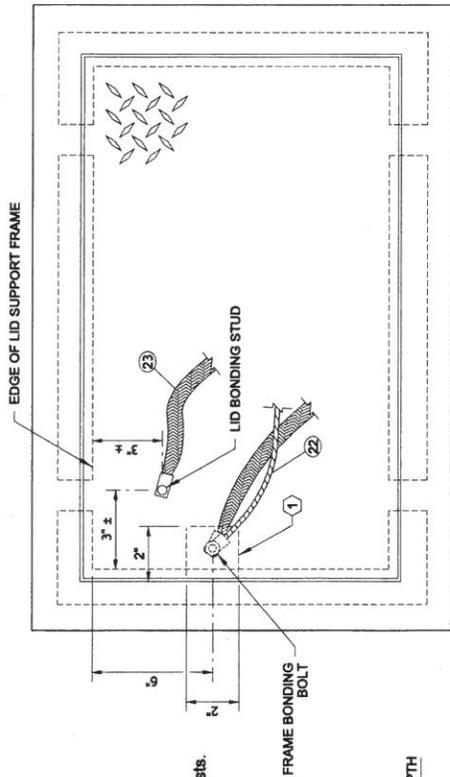
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Pasco Bakotich III 06-16-11
STATE DESIGN ENGINEER DATE

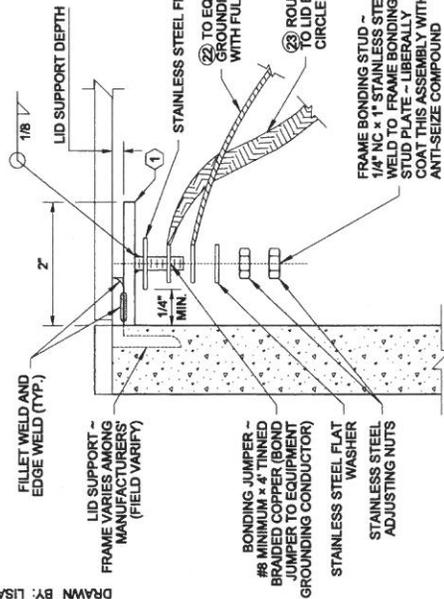
Washington State Department of Transportation

- ① 3/8" x 2" x 2" Frame Bonding Stud Plate with 1/4NC x 1" Stainless Steel Bonding Stud.
 - Weld Bonding Stud to Frame Bonding Plate.
 - Weld to lid support frame.
 - 1/4" weld ~ 3 sides.
 - Grind lid bearing surface flat after welding.
 - All corners rounded. Corners along exposed sheared or cut edges shall be broken by light grinding to achieve an approximate 1/16" (inch) chamfer or rounding.
 - Protect conductors with fireproof cloth prior to welding.
 - Omit Frame Bonding Stud Plate if the Frame Bonding point already exists.

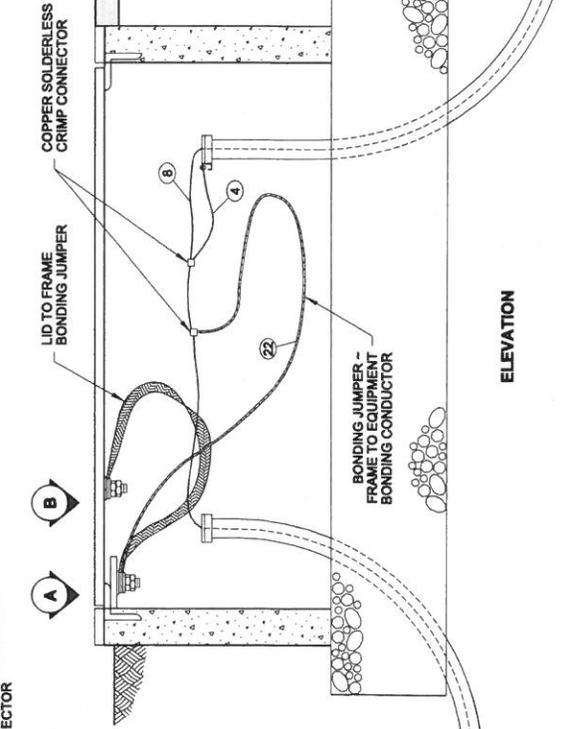
- ② Weld all around lid bonding stud ~ 1/4 NC x 1" stainless steel ~ liberally coat entire assembly w/ anti-seize compound.



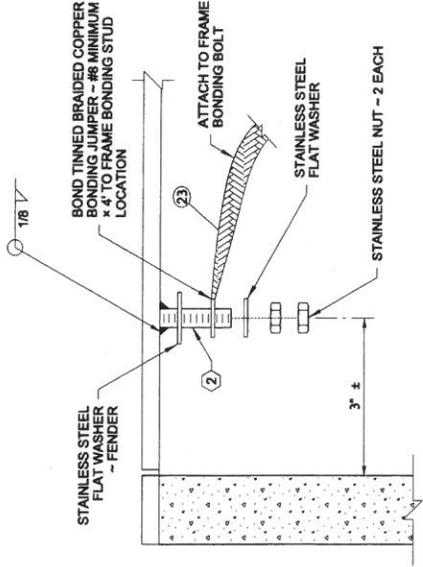
PLAN



FRAME BONDING DETAIL A



ELEVATION



LID BONDING DETAIL B

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TYPICAL GROUNDING DETAILS
STANDARD PLAN J-60.05-00
 SHEET 4 OF 4 SHEETS

APPROVED FOR PUBLICATION
 Pasco Bakotich III
 STATE DESIGN ENGINEER
 DATE 06-16-11
 Washington State Department of Transportation

NOTES

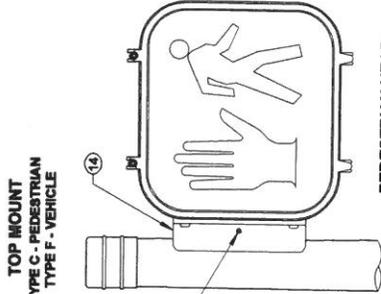
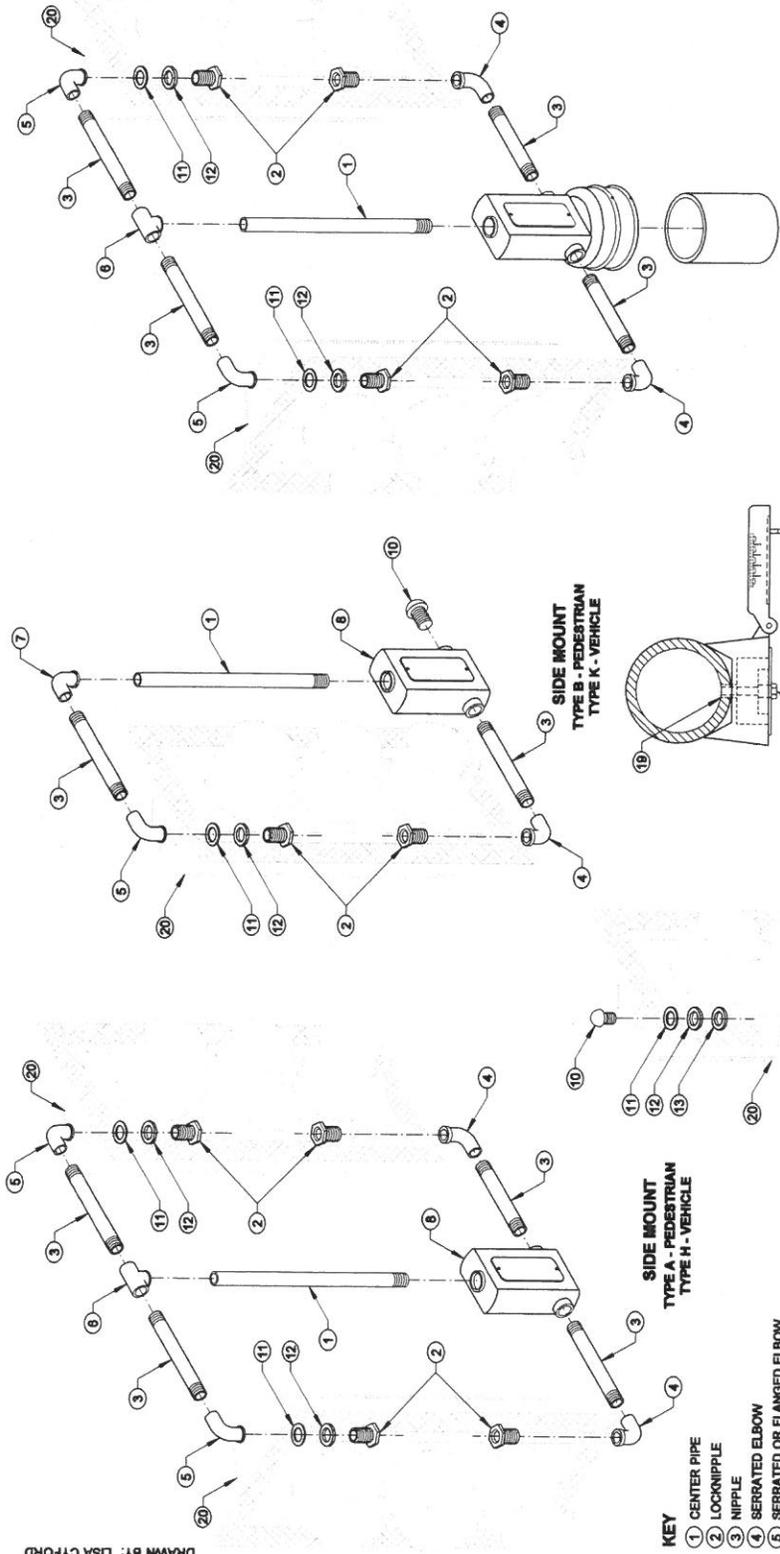
1. See Contract for head type, mounting height, and orientation.
2. All nipples, fittings, and center pipes shall be 1 1/2" diameter.
3. Install neoprene gasket inside head when flanged elbows are supplied.
4. Extend wire sheath a minimum of 1" inside all signal and sign housings and terminal compartments.
5. Apply bead of silicone to the serrated ring and around the perimeter of all top openings prior to installation of fittings.
6. Back plates shall be constructed of anodized aluminum and shall be mounted with stainless steel hardware. A 2-inch-wide strip of yellow retro-reflective, type IV prismatic sheeting, conforming to the requirements of Standard Specification 9-23.12, shall be applied in accordance with the manufacturer's recommendations. The application surface of the back plate shall be cleaned, degreased with isopropyl alcohol, and dried prior to application of the sheeting. See Standard Specification 9-23.16(2)D.
7. Drill a 1/4" drain hole in the bottom of each signal assembly, and one in the bottom of each pedestrian head. When signal assembly is mounted horizontally, drill a 1/4" drain hole at the lowest point of each section of the signal assembly.



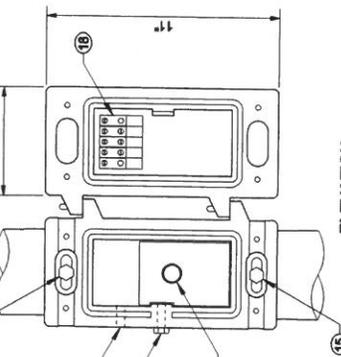
SIGNAL HEAD MOUNTING DETAILS ~ POLE AND POST TOP MOUNTINGS
STANDARD PLAN J-75.10-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotch III 05-11-11
 DATE
 STATE REGISTERED ENGINEER
 Washington State Department of Transportation



TOP MOUNT
TYPE C - PEDESTRIAN
TYPE F - VEHICLE



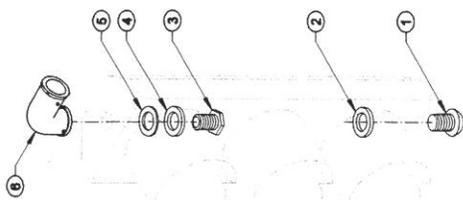
PEDESTRIAN HEAD SIDE MOUNT
(LEFT SIDE SHOWN)
TYPE E - NEON OR LED OR SIMILAR SIZE
LED PEDESTRIAN HEAD

ELEVATION
TYPE E
MOUNTING DETAILS

KEY

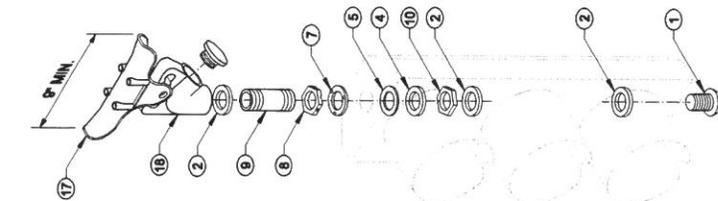
- 1 CENTER PIPE
- 2 LOCKNIPPLE
- 3 NIPPLE
- 4 SERRATED ELBOW
- 5 SERRATED OR FLANGED ELBOW
- 6 REAMED TEE WITH SET SCREW
- 7 REAMED ELBOW WITH SET SCREW
- 8 BRONZE TERMINAL COMPARTMENT WITH:
 - FASTENERS
 - WIRE LEADS
 - 1/2" DIA. DRAIN HOLE
 - 12 POSITION TERMINAL STRIP
 - WIREWAY FOR SIDE MOUNTS
- 9 BRONZE COLLAR - 4 1/4" I.D. OFFSET OPENING W/SET SCREWS
- 10 ORNAMENT CAP
- 11 NEOPRENE GASKET
- 12 WASHER
- 13 CONDUIT LOCKNUT
- 14 TYPE E HINGE MOUNT - LEFT OR RIGHT, SEE CONTRACT
- 15 FASTENER WITH SPACER ~
 - 1/2" LAG SCREWS ON WOOD POLE
 - 1/2" BOLTS TAPPED TO METAL POLE
- 16 FLATHEAD SOCKET BOLT
- 17 1/2" INSERT HOLE FOR EXTERNAL WIRE ENTRANCE (REQUIRED ON TIMBER POLE MOUNTING ONLY)
- 18 TERMINAL BLOCK AND PHENOLIC TAG
- 19 INSULINER - 1" MIN. DIAM. HOLE
- 20 SIGNAL HEAD WITH BACKPLATE

TOP MOUNT
TYPE D - PEDESTRIAN ~
OR VEHICLE (SHOWN) ~
OFFSET BRONZE COLLAR TO FRONT
OFFSET BRONZE COLLAR TO BACK

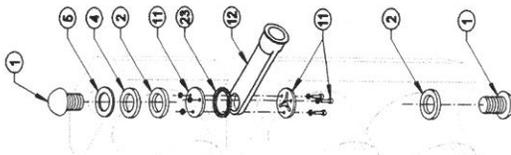


ARM MOUNT TYPE L

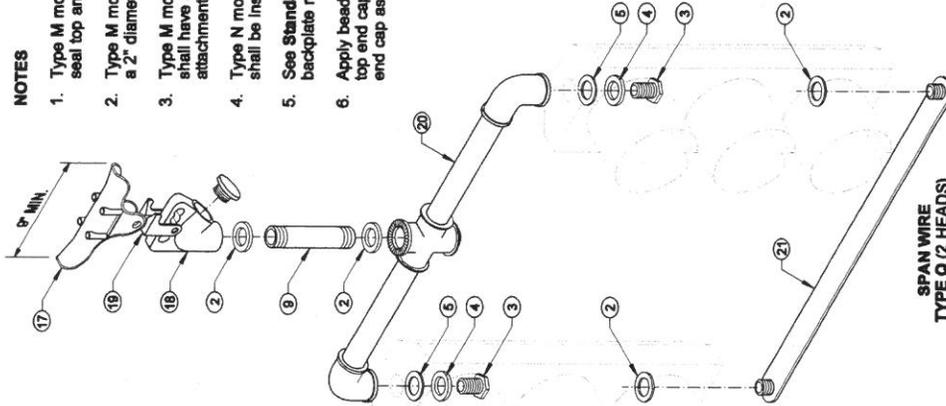
- KEY**
- 1 END CAP
 - 2 1 1/2" DIAM. CONDUIT LOCKNUT
 - 3 1 1/2" DIAM. LOCKNIPPLE
 - 4 STEEL WASHER
 - 5 NEOPRENE GASKET
 - 6 BRONZE SERRATED ELL FITTING WITH:
 - 3/8" STAINLESS STEEL THROUGH BOLT AND NUTS
 - THREE STAINLESS STEEL SET SCREWS AT SLIPFITTER CONNECTION
 - THREE ALLEN HEAD STAINLESS STEEL SET SCREWS AT CONDUIT NIPPLE CONNECTION
 - 7 SERRATED RING WITH PINS
 - 8 HEX LOCKNUT WITH:
 - TWO ALLEN HEAD STAINLESS STEEL SET SCREWS
 - PIN RECEPTACLES
 - 9 1 1/2" DIAM. CONDUIT NIPPLE
 - 10 1 1/2" DIAM. HEX LOCKNUT
 - 11 MOUNTING ASSEMBLY
 - 12 BRONZE ELEVATOR PLUMBIZER WITH 90° STAINLESS STEEL THROUGH BOLT, WASHERS, AND TWO NUTS
 - 13 ALUMINUM ARM WITH SET SCREW
 - 14 SLOTTED TUBE WITH CLOSURE STRIP
 - 15 2 1/2" I.D. MIN. TUBE CLAMP
 - 16 INTERNALLY THREADED CLAMP ASSEMBLY WITH:
 - TWO SET SCREWS
 - 1/2" x 0.045" STAINLESS STEEL BANDS
 - 7/16" SCREW BUCKLES, WITH SWIVELS, NUTS, AND WASHERS
 - BAND CLIPS WITH ALLEN HEAD STAINLESS STEEL SET SCREWS
 - 17 BRONZE MESSENGER HANGER WITH:
 - 1/2" DIAM. J-BOLTS
 - CABLE LOCK BAR
 - RIVET
 - COTTER KEY
 - 18 BRONZE INTERNALLY THREADED WIRE ENTRANCE WITH:
 - BUSHING INSERT
 - ALLEN HEAD STAINLESS STEEL SET SCREW
 - 19 BRONZE BALANCE ADJUSTER
 - 20 MULTI-HEAD MOUNTING ASSEMBLY
 - 21 SPIDER ASSEMBLY
 - 22 SERRATED RING WITH NO PINS
 - 23 SERRATED WASHER



ARM MOUNT TYPE P (1 HEAD)



ARM MOUNT TYPE M



ARM MOUNT TYPE N

**SPAN WIRE TYPE Q (2 HEADS)
TYPE R (3 HEADS)
TYPE S (4 HEADS)**

NOTES

1. Type M mounting shall have "O" ring groove and seal top and bottom of signal attachment.
2. Type M mounting for conventional heads shall have a 2" diameter opening at the signal attachment.
3. Type M mounting for optically programmed heads shall have a 3 1/2" diameter opening at the signal attachment.
4. Type N mounting with optically programmed heads shall be installed with 1/4" nominal arms.
5. See Standard Plan J-75.30 for tether wire, and backplate requirements.
6. Apply bead of silicone around the perimeter of all top end cap openings prior to installation of the end cap assembly.



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**SIGNAL HEAD MOUNTING
DETAILS MAST ARM AND
SPAN WIRE MOUNTINGS
STANDARD PLAN J-75.20-00**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

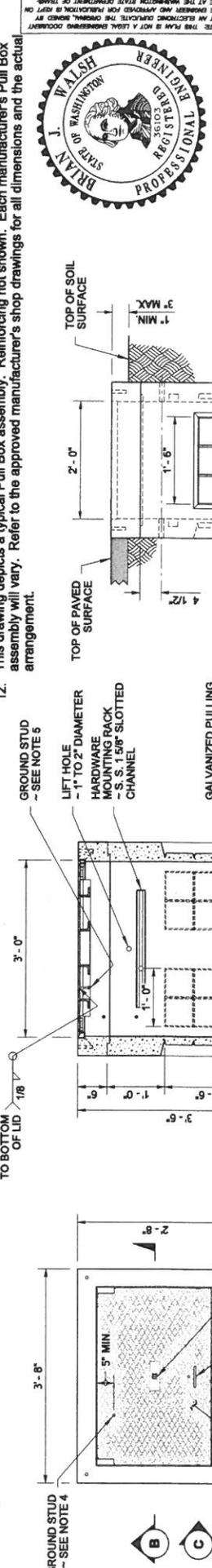
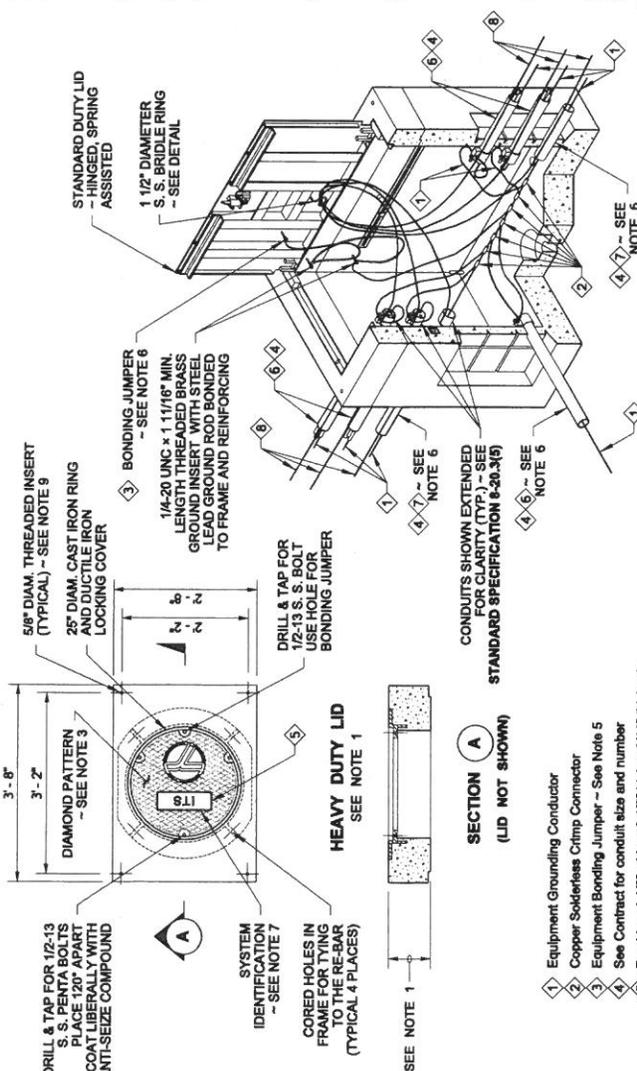
Pasco Bakofch III 02-10-09

STATE DESIGN ENGINEER DATE

Washington State Department of Transportation



- NOTES**
- The Heavy Duty Lid shall be used when a Pull Box is placed in the paved shoulder or the traveled way. Use a 9" thick lid for new Pull Box installations. Use a 6" thick Heavy Duty Lid when converting a Standard Duty Pull Box into a Heavy Duty Pull Box in the paved shoulder or the traveled way and no overlay is called for in the Contract. Otherwise, see Contract Plans for overlay depth and fabricate lid thickness to match overlay depth.
 - Use Standard Duty Pull Box and Lid when placed in unpaved areas. Use Standard Duty Pull Box in sidewalks, walkways, and shared-use paths.
 - Minimum lid thickness shown. The diamond pattern shall be a minimum of 3/32" thick.
 - Standard Duty Pull Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on lid and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, and shared-use paths. The non-slip lid shall be identified with permanent marking on the underside indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" inch line thickness formed with a stainless steel weld bead and shall be placed prior to hot-dip galvanizing.
 - A 1/4-20 UNC x 3/4" S. S. ground stud with (2) S. S. nuts and (2) S. S. flat washers shall be attached to the Standard Duty Lid and coated with anti-seize compound. Provide a 5/8" diameter cored hole in the ductile iron lid gusset (Heavy Duty Lid) with 1/2-13 UNC x 1 1/4" S. S. bolt, (3) S. S. flat washers, and (2) S. S. nuts for the Bonding Jumper.
 - Connect a Bonding Jumper to the steel conduit bushing for GRS conduit and connect the steel conduit bushing jumper to the equipment ground at the threaded brass ground insert. Connect the equipment grounding conductors in the PVC and/or GRS conduits to the brass ground insert. The Bonding Jumper shall be #8 min. x 4' (ft.) of tinned braided copper between the lid and the frame of the Heavy Duty tops and from the Heavy Duty top to the threaded brass ground insert. The Bonding Jumper shall be #8 min. x 4' (ft.) of tinned braided copper between the lid on a Standard Duty Pull Box and the threaded brass ground insert. See Contract Plan Sheets and Standard Plan J-60.05 for Bonding Jumper requirements.
 - The system identification letters shall be 1/8" line thickness formed by engraving, casting, stamping, or with a S. S. weld bead. See COVER MARKING DETAIL. See Standard Specification 5-29.2(4). Ductile iron lid lettering shall be recessed.
 - Cement concrete shall be Class 4000.
 - Plastic plugs shall be put into the lid inserts after fabrication and the lid installation.
 - Capacity - conduit diameter = 40" (in.).
 - Excavate material, place 6" crushed surfacing pad per Standard Specification Section 8-20.3(6). Field bend #3 reinforcing bar to allow conduit into the Pull Box. Field bend reinforcing bar back into place, wire tie in (2) places, and cast in commercial concrete (commercial concrete only allowed for box bottom/wall completion).
 - This drawing depicts a typical Pull Box assembly. Reinforcing not shown. Each manufacturer's Pull Box assembly will vary. Refer to the approved manufacturer's shop drawings for all dimensions and the actual arrangement.



PULL BOX

STANDARD PLAN J-90.10-01

SHEET 1 OF 2 SHEETS

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Pasco Bakotich III 06-27-11

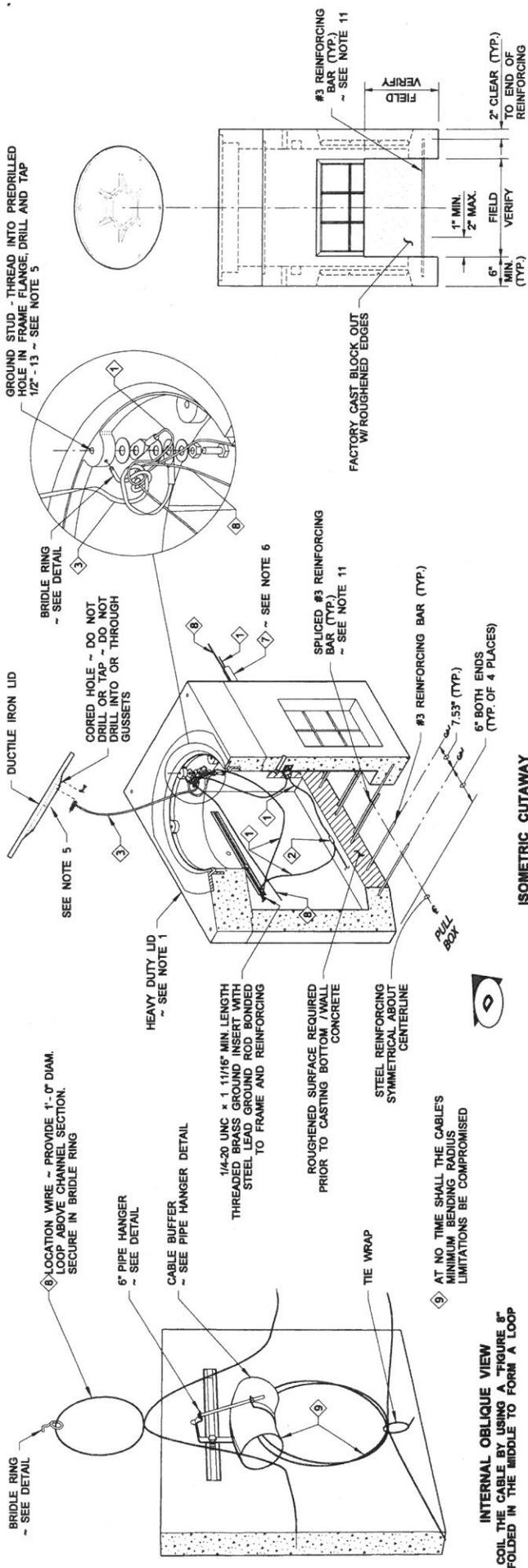
STATE DESIGN ENGINEER DATE

Washington State Department of Transportation

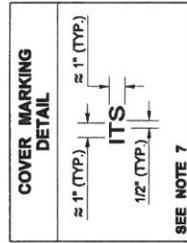
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BRAYN J. WALSH
REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
NO. 4000

DRAWN BY: USA CYFORO

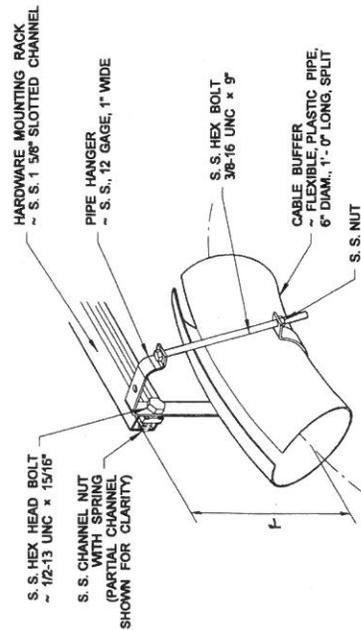


SPLIT PULL BOX ASSEMBLY
 (SHOWN WITH HEAVY DUTY LID)
 SEE PULL BOX SHEET 1, FOR DIMENSIONS NOT SHOWN

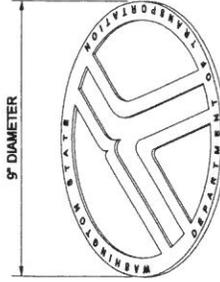


BRIDLE RING DETAIL

1 1/2" DIAM. BRIDLE RING
 - S.S. 1/4" DIAM. WIRE SIZE
 (FABRICATE IF NOT AVAILABLE COMMERCIALY)



PIPE HANGER DETAIL
 FABRICATE IF NOT AVAILABLE COMMERCIALY



LOGO DETAIL



PULL BOX

STANDARD PLAN J-90.10-01

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Pasco Bakotich III 06-27-11
 DATE

STATE DESIGN ENGINEER
 Washington State Department of Transportation

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BISHOP BOULEVARD / KLEMGARD AVENUE TRAFFIC SIGNAL PROJECT
INADVERTENT DISCOVERY PLAN
**A Plan and Procedure for Dealing with the Inadvertent Discovery
of Cultural Resources**

1.0 INTRODUCTION

The Bishop Boulevard / Klemgard Avenue Traffic Signal Project will unlikely impact important cultural resources in the project area. However, if archaeological or other cultural remains are discovered during the project construction, this inadvertent discovery plan must be followed.

The contractor, or subcontractors are required to halt construction if they observe or identify any archaeological or other cultural remains, and protect the find in place. Notice of the find must be given immediately to the City of Pullman, who will notify the concerned parties. Potentially concerned parties include: the Nez Perce Tribe and the Department of Archaeology and Historic Preservation (DAHP).

This document serves as the plan for dealing with any discoveries of human skeletal remains, artifacts, sites, or any other cultural resources eligible for listing in the National Register of Historic Places (NRHP). This plan is intended to provide guidance to City of Pullman personnel so they can:

- Comply with applicable Federal and State laws and regulations, particularly 36CFR 800 (as amended January 11, 2001) of the regulations that implements Section 106 of the National Historic Preservation Act of 1966, and Title 27 Revised Codes of Washington Chapter 27.44 Indian Graves and Records, Chapter 27.53 Archaeological Sites and Resources, and Title 68 Chapter 60.050 Protection of historic graves, and
- Describe to regulatory and review agencies the procedures that The City of Pullman will follow to prepare for and deal with inadvertent discoveries, and
- Provide direction and guidance to project personnel on the proper procedures to be followed should an inadvertent discovery occur.

2.0 INADVERTENT DISCOVERY OF HUMAN SKELETAL REMAINS ON NON-FEDERAL AND NON-TRIBAL LAND IN THE STATE OF WASHINGTON

If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity must cease that may cause further disturbance to those remains and the area of the find must be secured and protected from further disturbance. In addition, the finding of human skeletal remains must be reported to the county coroner and local law enforcement in the most expeditious manner possible. The remains should not be touched, moved, or further disturbed.

The county coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county coroner determines the remains are non-forensic, then they will report that finding to the DAHP who will then take jurisdiction over the remains and report them to the appropriate cemeteries and affected tribes. The State Physical Anthropologist will make a determination of whether the remains are Indian or non-Indian and report that finding to any appropriate cemeteries and affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

ADDITIONAL RESPONSIBILITIES AND INFORMATION

- A. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the skeletal remains, in accordance with Washington State law. The project's Project Engineer will be responsible for taking appropriate steps to protect the discovery. At a minimum, the immediate area will be secured to a distance of thirty (30) feet from the discovery. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site.
- B. The City of Pullman acknowledges that any find of human skeletal remains may be a burial of Native American ancestry. It is further acknowledged that the concerned Indian Tribes are extremely sensitive about ancestral burials, and that the find must be treated confidentially.
- C. Nothing in this agreement is intended or shall be construed to diminish or affect in any way the right of the Tribes to take any lawful action to protect Native American graves from disturbance or desecration, or to protect the Tribes' rights under cemetery and Native American graves protection laws, or other applicable laws.
- D. This information is covered by the Public Records Act (RCW 42.17.250) and specific components of the records are exempt from disclosure (RCW 42.17.310(1)(k)) to avoid the looting or depredation of such sites.

3.0 PROCEDURES FOR THE DISCOVERY OF ARCHAEOLOGICAL RESOURCES

- A. If any staff members of the City of Pullman, their contractors, or subcontractors, including archaeological monitors, believe that he or she has encountered cultural or archaeological remains of any kind, all work at and adjacent to the discovery shall immediately cease. He or she will inform the project's Project Engineer. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the archaeological discovery. A cultural resource discovery could be prehistoric-period or historic-period in age and consist of (but not limited to):
- areas of charcoal or charcoal-stained soil and stones;
 - stone, tools, or waste flakes (i.e., an arrowhead or stone chips);
 - bone, burned rock, or mollusk shell, whether or not seen in association with stone tools or chips;
 - clusters of tin cans, ceramics, flat glass, or bottles, concentrations of brick, or logging, mining, or agricultural equipment.
- B. The Project Engineer will contact the Nez Perce Tribe and DAHP to assist in the significance evaluation of all inadvertent discoveries. If the discovery is a cultural resource, the Project Engineer will determine the steps that will be taken to protect the discovery site. At a minimum, subsurface disturbances will stop and the area adjacent to the discovery will be secured. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Any newly discovered archaeological resource will be considered eligible to the NRHP until determined otherwise by the DAHP. Work in the immediate area will not resume until treatment of the discovery has been completed following the provisions for treating archaeological/cultural material.
- C. The Project Engineer will immediately the DAHP (Attachment A) for consultation regarding National Register eligibility of any new discovery. If they determine that the discovery is an eligible cultural resource, they and the concerned Indian Tribe(s), as appropriate, will consult to determine appropriate treatment to be presented and agreed upon in a Memorandum of Agreement (MOA) or other appropriate documentation. Mitigation measures will be developed in consultation with the DAHP, and the affected tribes (where appropriate), which could include avoidance through redesign, conducting data recovery and/or relocating materials or remains. Agreed upon treatment measures performed by the City of Pullman include protecting the resources in place, or data recovery such as mapping, photography, limited probing, and sample collection, or other measures.
- D. This information is covered by the Public Records Act (RCW 42.17.250) and specific components of the records are exempt from disclosure (RCW 42.17.310(1)(k)) to avoid the looting or depredation of such sites.

ATTACHMENT A

CONTACT INFORMATION

1. Primary Field Contacts

City of Pullman Project Engineer: Clayton Forsmann
509.338.3222

2. Cultural Resource Contacts

DAHP State Physical Anthropologist: Dr. Guy Tasa
360.586.3534

DAHP Transportation Archaeologist: Lance Wollwage
360.586.3536

State Historic Preservation Officer: Allyson Brooks
360.586.3066

3. Other Agency Contacts

Whitman County Sheriff's Office Sheriff: Brett Myers
509.397.6266

Whitman County Coroner: Peter Martin
509.284.2423

Pullman Police Department: 509.334.0802

4. Tribal Contacts

Nez Perce Tribe Patrick Baird
208.621.3851

State of Washington
 Department of Labor & Industries
 Prevailing Wage Section - Telephone 360-902-5335
 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 12/11/2014

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>
Whitman	Asbestos Abatement Workers	Journey Level	\$35.46	5D	1H	
Whitman	Boilermakers	Journey Level	\$64.44	5N	1C	
Whitman	Brick Mason	Journey Level	\$43.35	5A	1M	
Whitman	Building Service Employees	Janitor	\$9.32		1	
Whitman	Building Service Employees	Shampooer	\$11.14		1	
Whitman	Building Service Employees	Waxer	\$9.32		1	
Whitman	Building Service Employees	Window Cleaner	\$9.32		1	
Whitman	Cabinet Makers (In Shop)	Journey Level	\$12.00		1	
Whitman	Carpenters	Carpenters	\$40.20	5A	1B	8N
Whitman	Cement Masons	Journey Level	\$38.85	7B	1N	
Whitman	Divers & Tenders	Diver	\$85.18	5A	1B	8A
Whitman	Divers & Tenders	Diver on Standby	\$49.16	5A	1B	
Whitman	Divers & Tenders	Diver Tender	\$48.16	5A	1B	
Whitman	Divers & Tenders	Diving Master	\$57.86	5A	1B	
Whitman	Divers & Tenders	Surface RCV & ROV Operator	\$48.16	5A	1B	
Whitman	Divers & Tenders	Surface RCV & ROV Operator Tender	\$46.41	5A	1B	
Whitman	Dredge Workers	Assistant Engineer	\$53.00	5D	3F	
Whitman	Dredge Workers	Assistant Mate (Deckhand)	\$52.58	5D	3F	
Whitman	Dredge Workers	Boatmen	\$52.30	5D	3F	
Whitman	Dredge Workers	Engineer Welder	\$54.04	5D	3F	
Whitman	Dredge Workers	Leverman, Hydraulic	\$55.17	5D	3F	
Whitman	Dredge Workers	Mates	\$52.30	5D	3F	
Whitman	Dredge Workers	Oiler	\$52.58	5D	3F	
Whitman	Drywall Applicator	Journey Level	\$40.20	5A	1B	8N
Whitman	Drywall Tapers	Journey Level	\$21.03		1	
Whitman	Electrical Fixture Maintenance Workers	Journey Level	\$9.32		1	
Whitman	Electricians - Inside	Journeyman	\$46.25	7G	1E	
Whitman	Electricians - Motor Shop	Craftsman	\$15.37		1	

Whitman	Electricians - Motor Shop	Journey Level	\$14.69		<u>1</u>	
Whitman	Electricians - Powerline Construction	Cable Splicer	\$68.33	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Certified Line Welder	\$62.50	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Groundperson	\$42.56	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$62.50	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Journey Level Lineperson	\$62.50	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Line Equipment Operator	\$52.47	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Pole Sprayer	\$62.50	<u>5A</u>	<u>4A</u>	
Whitman	Electricians - Powerline Construction	Powderperson	\$46.55	<u>5A</u>	<u>4A</u>	
Whitman	Electronic Technicians	Journey Level	\$20.80		<u>1</u>	
Whitman	Elevator Constructors	Mechanic	\$80.14	<u>7D</u>	<u>4A</u>	
Whitman	Elevator Constructors	Mechanic In Charge	\$86.77	<u>7D</u>	<u>4A</u>	
Whitman	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$9.96		<u>1</u>	
Whitman	Fence Erectors	Fence Erector	\$17.29		<u>1</u>	
Whitman	Flaggers	Journey Level	\$33.01	<u>7B</u>	<u>1M</u>	
Whitman	Glaziers	Journey Level	\$15.63		<u>1</u>	
Whitman	Heat & Frost Insulators And Asbestos Workers	Journey Level	\$22.73		<u>1</u>	
Whitman	Heating Equipment Mechanics	Journey Level	\$22.34		<u>1</u>	
Whitman	Hod Carriers & Mason Tenders	Journey Level	\$36.34	<u>7B</u>	<u>1M</u>	
Whitman	Industrial Power Vacuum Cleaner	Journey Level	\$9.32		<u>1</u>	
Whitman	Inland Boatmen	Journey Level	\$9.32		<u>1</u>	
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$9.73		<u>1</u>	
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$11.48		<u>1</u>	
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$12.78		<u>1</u>	
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$9.32		<u>1</u>	
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$10.53		<u>1</u>	
Whitman	Insulation Applicators	Journey Level	\$40.20	<u>5A</u>	<u>1B</u>	<u>8N</u>
Whitman	Ironworkers	Journeyman	\$54.68	<u>7N</u>	<u>1O</u>	
Whitman	Laborers	Air And Hydraulic Track Drill	\$35.65	<u>7B</u>	<u>1M</u>	

Whitman	Laborers	Asphalt Raker	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Asphalt Roller, Walking	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Brick Pavers	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Brush Hog Feeder	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Brush Machine	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Caisson Worker, Free Air	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Carpenter Tender	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Cement Finisher Tender	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Cement Handler	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Chain Saw Operator & Faller	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Clean-up Laborer	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Compaction Equipment	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Concrete Crewman	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Concrete Saw, Walking	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Concrete Signalman	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Concrete Stack	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Confined Space Attendant	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Crusher Feeder	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Demolition	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Demolition Torch	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Dope Pot Fireman, Non-mechanical	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Driller Helper (when Required To Move & Position Machine)	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Drills With Dual Masts	\$35.93	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Dry Stack Walls	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Dumpman	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Erosion Control Laborer	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Final Detail Cleanup (i.e., Dusting, Vacuuming, Window Cleaning; Not Construction Debris Cleanup)	\$33.01	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Firewatch	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Form Cleaning Machine Feeder, Stacker	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Form Setter, Paving	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	General Laborer	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Grade Checker	\$37.64	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Grout Machine Header Tender	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Guard Rail	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Gunite	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Hazardous Waste Worker (level A)	\$35.93	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Hazardous Waste Worker (level B)	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Hazardous Waste Worker (level C)	\$35.38	<u>7B</u>	<u>1M</u>	

Whitman	Laborers	Hazardous Waste Worker (level D)	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Hdpe Or Similar Liner Installer	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	High Scaler	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Jackhammer Operator Miner, Class "b"	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Laser Beam Operator	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Miner, Class "a"	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Miner, Class "c"	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Miner, Class "d"	\$35.93	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Monitor Operator, Air Track Or Similar Mounting	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Mortar Mixer	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Nipper	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Nozzleman	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Nozzleman, Water (to Include Fire Hose), Air Or Steam	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Pavement Breaker, 90 Lbs. & Over	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Pavement Breaker, Under 90 Lbs.	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Pipelayer	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Pipelayer, Corrugated Metal Culvert And Multi-plate	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Pipewrapper	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Plasterer Tenders	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Pot Tender	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Powderman	\$37.30	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Powderman Helper	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Power Buggy Operator	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Power Tool Operator, Gas, Electric, Pneumatic	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Railroad Equipment, Power Driven, Except Dual Mobile	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Railroad Power Spiker Or Puller, Dual Mobile	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Remote Equipment Operator	\$35.93	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Remote Equipment Operator (i.e. Compaction And Demolition)	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Rigger/signal Person	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Riprap Person	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Rodder & Spreader	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Sandblast Tailhoseman	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Scaffold Erector, Wood Or Steel	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Stake Jumper	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Structural Mover	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Tailhoseman (water Nozzle)	\$35.11	<u>7B</u>	<u>1M</u>	

Whitman	Laborers	Timber Bucker & Faller (by Hand)	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Track Laborer (rr)	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Traffic Control Laborer	\$33.01	<u>7B</u>	<u>1M</u>	<u>8T</u>
Whitman	Laborers	Traffic Control Supervisor	\$34.01	<u>7B</u>	<u>1M</u>	<u>8S</u>
Whitman	Laborers	Trencher, Shawnee	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Trenchless Technology Technician	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Truck Loader	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Tugger Operator	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Vibrators, All	\$35.65	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Wagon Drills	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Water Pipe Liner	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Welder, Electric, Manual Or Automatic (hdpe Or Similar Pipe And Liner)	\$35.93	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Well-point Person	\$35.11	<u>7B</u>	<u>1M</u>	
Whitman	Laborers	Wheelbarrow, Power Driven	\$35.38	<u>7B</u>	<u>1M</u>	
Whitman	Laborers - Underground Sewer & Water	All Classifications	\$24.26		<u>1</u>	
Whitman	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	\$9.32		<u>1</u>	
Whitman	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	\$9.32		<u>1</u>	
Whitman	Landscape Construction	Landscaping Or Planting Laborers	\$9.32		<u>1</u>	
Whitman	Lathers	Journey Level	\$40.20	<u>5A</u>	<u>1B</u>	<u>8N</u>
Whitman	Marble Setters	Journey Level	\$43.35	<u>5A</u>	<u>1M</u>	
Whitman	Metal Fabrication (In Shop)	Fitter	\$12.76		<u>1</u>	
Whitman	Metal Fabrication (In Shop)	Laborer	\$9.32		<u>1</u>	
Whitman	Metal Fabrication (In Shop)	Machine Operator	\$12.66		<u>1</u>	
Whitman	Metal Fabrication (In Shop)	Painter	\$10.20		<u>1</u>	
Whitman	Metal Fabrication (In Shop)	Welder	\$12.76		<u>1</u>	
Whitman	Millwright	Journey Level	\$54.25	<u>5A</u>	<u>1B</u>	<u>8N</u>
Whitman	Modular Buildings	Journey Level	\$9.32		<u>1</u>	
Whitman	Painters	Journey Level	\$29.36	<u>6Z</u>	<u>1W</u>	
Whitman	Pile Driver	Journey Level	\$41.21	<u>5A</u>	<u>1B</u>	<u>8N</u>
Whitman	Plasterers	Journey Level	\$38.53	<u>7K</u>	<u>1N</u>	
Whitman	Playground & Park Equipment Installers	Journey Level	\$9.32		<u>1</u>	
Whitman	Plumbers & Pipefitters	Journey Level	\$58.35	<u>7E</u>	<u>1J</u>	
Whitman	Power Equipment Operators	Journey Level	\$17.00		<u>1</u>	
Whitman	Power Equipment Operators- Underground Sewer & Water	Journey Level	\$28.54		<u>1</u>	
Whitman	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$44.86	<u>5A</u>	<u>4A</u>	
Whitman	Power Line Clearance Tree Trimmers	Spray Person	\$42.58	<u>5A</u>	<u>4A</u>	

Whitman	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$44.86	<u>5A</u>	<u>4A</u>	
Whitman	Power Line Clearance Tree Trimmers	Tree Trimmer	\$40.08	<u>5A</u>	<u>4A</u>	
Whitman	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$30.20	<u>5A</u>	<u>4A</u>	
Whitman	Refrigeration & Air Conditioning Mechanics	Journey Level	\$17.34		<u>1</u>	
Whitman	Residential Brick Mason	Journey Level	\$43.35	<u>5A</u>	<u>1M</u>	
Whitman	Residential Carpenters	Journey Level	\$14.30		<u>1</u>	
Whitman	Residential Cement Masons	Journey Level	\$12.57		<u>1</u>	
Whitman	Residential Drywall Applicators	Journey Level	\$19.85		<u>1</u>	
Whitman	Residential Drywall Tapers	Journey Level	\$21.03		<u>1</u>	
Whitman	Residential Electricians	Journey Level	\$16.28		<u>1</u>	
Whitman	Residential Glaziers	Journey Level	\$16.04		<u>1</u>	
Whitman	Residential Insulation Applicators	Journey Level	\$9.32		<u>1</u>	
Whitman	Residential Laborers	Journey Level	\$19.74		<u>1</u>	
Whitman	Residential Marble Setters	Journey Level	\$43.35	<u>5A</u>	<u>1M</u>	
Whitman	Residential Painters	Journey Level	\$11.08		<u>1</u>	
Whitman	Residential Plumbers & Pipefitters	Journey Level	\$16.97		<u>1</u>	
Whitman	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$9.32		<u>1</u>	
Whitman	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$14.66		<u>1</u>	
Whitman	Residential Soft Floor Layers	Journey Level	\$15.50		<u>1</u>	
Whitman	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$9.32		<u>1</u>	
Whitman	Residential Stone Masons	Journey Level	\$43.35	<u>5A</u>	<u>1M</u>	
Whitman	Residential Terrazzo Workers	Journey Level	\$15.95		<u>1</u>	
Whitman	Residential Terrazzo/Tile Finishers	Journey Level	\$13.87		<u>1</u>	
Whitman	Residential Tile Setters	Journey Level	\$15.95		<u>1</u>	
Whitman	Roofers	Journey Level	\$35.79	<u>5I</u>	<u>1R</u>	
Whitman	Roofers	Using Irritable Bituminous Materials	\$37.79	<u>5I</u>	<u>1R</u>	
Whitman	Sheet Metal Workers	Journey Level (Field or Shop)	\$55.51	<u>6Z</u>	<u>1B</u>	
Whitman	Sign Makers & Installers (Electrical)	Journey Level	\$13.91		<u>1</u>	
Whitman	Sign Makers & Installers (Non-Electrical)	Journey Level	\$13.91		<u>1</u>	
Whitman	Soft Floor Layers	Journey Level	\$15.79		<u>1</u>	
Whitman	Solar Controls For Windows	Journey Level	\$9.32		<u>1</u>	
Whitman	Sprinkler Fitters (Fire Protection)	Journey Level	\$49.26	<u>7J</u>	<u>1R</u>	
Whitman	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		<u>1</u>	
Whitman	Stone Masons	Journey Level	\$43.35	<u>5A</u>	<u>1M</u>	

Whitman	Street And Parking Lot Sweeper Workers	Journey Level	\$14.00		<u>1</u>	
Whitman	Surveyors	Chain Person	\$9.32	<u>Null</u>	<u>1</u>	
Whitman	Surveyors	Instrument Person	\$12.05	<u>Null</u>	<u>1</u>	
Whitman	Surveyors	Party Chief	\$15.05	<u>Null</u>	<u>1</u>	
Whitman	Telecommunication Technicians	Journey Level	\$17.39		<u>1</u>	
Whitman	Telephone Line Construction - Outside	Cable Splicer	\$36.96	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$20.49	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Installer (Repairer)	\$35.40	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Special Aparatus Installer I	\$36.96	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Special Apparatus Installer II	\$36.19	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$36.96	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$34.34	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Telephone Lineperson	\$34.34	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Television Groundperson	\$19.45	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Television Lineperson/Installer	\$25.89	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Television System Technician	\$30.97	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Television Technician	\$27.77	<u>5A</u>	<u>2B</u>	
Whitman	Telephone Line Construction - Outside	Tree Trimmer	\$34.34	<u>5A</u>	<u>2B</u>	
Whitman	Terrazzo Workers	Journey Level	\$33.85	<u>5A</u>	<u>1M</u>	
Whitman	Tile Setters	Journey Level	\$33.85	<u>5A</u>	<u>1M</u>	
Whitman	Tile, Marble & Terrazzo Finishers	Journey Level	\$29.85	<u>5A</u>	<u>1M</u>	
Whitman	Traffic Control Stripers	Journey Level	\$43.11	<u>7A</u>	<u>1K</u>	
Whitman	Truck Drivers	Asphalt Mix Over 20 Yards (E.WA-690)	\$38.74	<u>5D</u>	<u>1V</u>	<u>8M</u>
Whitman	Truck Drivers	Asphalt Mix To 20 Yards (E. WA - 690)	\$38.57	<u>5D</u>	<u>1V</u>	<u>8M</u>
Whitman	Truck Drivers	Dump Truck	\$19.45		<u>1</u>	
Whitman	Truck Drivers	Dump Truck And Trailer	\$19.45		<u>1</u>	
Whitman	Truck Drivers	Other Trucks	\$27.84		<u>1</u>	
Whitman	Truck Drivers	Transit Mixer	\$17.75		<u>1</u>	
Whitman	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$13.92		<u>1</u>	
Whitman	Well Drillers & Irrigation Pump Installers	Oiler	\$9.32		<u>1</u>	

Whitman	Well Drillers & Irrigation Pump Installers	Well Driller	\$18.00		<u>1</u>	
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Benefit Code Key – Effective 8-31-2014 thru 3-3-2015

Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
 - B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
 - G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.
 - J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.
 - K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
 - M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

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1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.
- P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.
- R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.
- S. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays and all other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.
- W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
- Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
- Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

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2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
 - C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two times the hourly rate of wage.
 - F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
 - G. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
 - H. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
 - O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.
 - R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
 - U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.
 - W. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- A. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar (\$1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

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3.
 - C. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays shall be paid at double the hourly rate of wage. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
 - D. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 15% over the hourly rate of wage. All other hours worked after 6:00 am on Saturdays, shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.
 - F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
 - H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.
 - I. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions during a five day work week (Monday through Friday,) or a four day-ten hour work week (Tuesday through Friday,) then Saturday may be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
 - A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.
 - B. All hours worked over twelve (12) hours per day and all hours worked on holidays shall be paid at double the hourly rate of wage.
 - C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

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Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).
- C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
- H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).
- I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).
- K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).
- L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (8).
- N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.
- Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).
- S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).
- T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

Benefit Code Key – Effective 8-31-2014 thru 3-3-2015

- 6. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (8).
- E. Paid Holidays: New Year's Day, Day Before Or After New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, Christmas Day, And A Half-Day On Christmas Eve Day. (9 1/2).
- G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And Christmas Eve Day (11).
- H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).
- I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).
- T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

- 7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday And Saturday After Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

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7. F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

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7. S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- T. Paid Holidays: New Year's Day, The Day After Or Before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, and The Day After Or Before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Note Codes

8. A. In addition to the hourly wage and fringe benefits, the following depth premiums apply to depths of fifty feet or more:
Over 50' To 100' -\$2.00 per Foot for Each Foot Over 50 Feet
Over 100' To 150' -\$3.00 per Foot for Each Foot Over 100 Feet
Over 150' To 220' -\$4.00 per Foot for Each Foot Over 150 Feet
Over 220' -\$5.00 per Foot for Each Foot Over 220 Feet
- C. In addition to the hourly wage and fringe benefits, the following depth premiums apply to depths of fifty feet or more:
Over 50' To 100' -\$1.00 per Foot for Each Foot Over 50 Feet
Over 100' To 150' -\$1.50 per Foot for Each Foot Over 100 Feet
Over 150' To 200' -\$2.00 per Foot for Each Foot Over 150 Feet
Over 200' -Divers May Name Their Own Price
- D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
- M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: \$1.00, Levels C & D: \$0.50.
- N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- P. Workers on hazmat projects receive additional hourly premiums as follows -Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, And Class D Suit \$0.50.
- Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.
- R. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs 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. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

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- 8. S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

- T. Effective August 31, 2012 – A Traffic Control Laborer performs 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. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.